



**Federal Energy
Regulatory
Commission**

Office of Energy Projects

FERC/ EISX-019-20-000-1751972052

June 2026

MISSISSIPPI CROSSING PROJECT and SOUTH SYSTEM EXPANSION 4 PROJECT ENVIRONMENTAL IMPACT STATEMENT

Part 1 of 5

Tennessee Gas Pipeline Company, LLC
Southern Natural Gas Company, LLC &
Elba Express Company, LLC

CP25-514-000
CP25-517-000

Abstract:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) prepared a final Environmental Impact Statement (EIS) for the Mississippi Crossing Project proposed by Tennessee Gas Pipeline Company, LLC (TGP) and the South System Expansion 4 Project proposed by Southern Natural Gas Company, LLC (SNG) and Elba Express Company, LLC (EEC). TGP proposes to construct and operate approximately 208 miles of natural gas pipeline and pipeline laterals of various diameters, three new compressor stations, modifications to one existing compressor station, four new meter stations, and other appurtenant facilities in Mississippi and Alabama. SNG/EEC propose to construct and operate 22 natural gas pipeline loops totaling 291 miles, modifications to add compression at 14 existing compressor stations on SNG's South Main Line and the Elba Express Pipeline, three new meter stations, and modifications to seven existing meter stations in Mississippi, Alabama, and Georgia. The U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, National Park Service, the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, Alabama Department of Conservation and Natural Resources, and Mississippi Department of Wildlife, Fisheries, and Parks participated as cooperating agencies in the preparation of the EIS. With implementation of TGP, SNG, and EEC's avoidance, minimization, and mitigation measures, as well as adherence to Commission staff's recommendations, Commission staff conclude that effects from both projects would be less than significant.



U.S. Army Corps of
Engineers



U.S.
Environmental
Protection
Agency



U.S. Fish and
Wildlife Service



National Park
Service



National Oceanic &
Atmospheric
Administration



Mississippi Dept.
of Wildlife,
Fisheries & Parks



Alabama Dept. of
Conservation & Natural
Resources

**Contact: Office of Public Participation, (866) 208-FERC
Federal Energy Regulatory Commission
888 First Street NE, Washington, DC 20426**

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:

OEP/DG2E/Gas Branch 2
Southern Natural Gas Company, LLC, and
Elba Express Company, LLC
South System Expansion 4 Project
Docket No. CP25-517-000
Tennessee Gas Pipeline Company, LLC
Mississippi Crossing Project
Docket No. CP25-514-000

TO THE INTERESTED PARTY:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared a final environmental impact statement (EIS) for the Mississippi Crossing Project (MSX), proposed by Tennessee Gas Pipeline Company, LLC (TGP) and the South System Expansion 4 Project (SSE4), proposed by Southern Natural Gas Company, LLC (SNG) and Elba Express Company, LLC (EEC).¹ TGP requests authorization to construct and operate approximately 208 miles of natural gas pipeline and pipeline lateral facilities in Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties, Mississippi and Choctaw County, Alabama. MSX would also include three new compressor stations, modifications to one existing compressor station, four new meter stations, and other appurtenant facilities. SNG/EEC request authorization to construct and operate 22 natural gas pipeline loops totaling approximately 291 miles, modifications to add compression at 14 existing compressor stations on SNG's South Main Line and the Elba Express Pipeline, and three new meter stations and modifications to seven existing meter stations within Clarke and Lauderdale counties, Mississippi; Sumter, Marengo, Perry, Dallas, Autauga, Elmore, Tallapoosa, Macon, Hale, and Lee counties, Alabama; and, Clayton, Muscogee, Harris, Talbot, Upson, Crawford, Monroe, Bibb, Jones, Baldwin, Glascock, Jefferson, Richmond, Spalding, Henry, Lowndes, Burke, Screven, Cobb, Chatham, and Effingham counties, Georgia.

FERC is the lead federal agency for authorizing interstate natural gas transmission facilities under the Natural Gas Act of 1938 (NGA) and the lead federal agency for preparation of the final EIS. The final EIS assesses the potential environmental effects of the construction and operation of MSX and SSE4 (collectively referred to as "the Projects") in accordance with the requirements of the National Environmental Policy Act (NEPA)²

¹ For tracking purposes under the National Environmental Policy Act, the unique identification number for documents relating to this environmental review is FERC/EISX-019-20-000-1751972052.

² National Environmental Policy Act of 1969, as amended (Public Law [Pub. L.] 91-190. 42 U.S.C. 4321-4347, as amended by Pub. L. 94-52, July 3, 1975; Pub. L. 94-83, August 9, 1975; Pub. L. 97-258, §4(b), September 13, 1982; Pub. L. 118-5, June 3, 2023; Pub. L. 119-21, July 4, 2025).

and the Commission's implementing regulations.³ The principal purposes of the final EIS are to: identify and assess the potential effects on the natural and human environment; describe and evaluate reasonable alternatives; identify and recommend mitigation measures; and facilitate public involvement in the environmental review process. The EIS concludes that approval of the proposed Projects would have some limited adverse environmental effects; however, with implementation of TGP, SNG, and EEC's avoidance, minimization, and mitigation measures, as well as adherence to Commission staff's mitigation measures recommended in the EIS, these effects would be less than significant.

Three districts of the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the National Park Service, National Oceanic and Atmospheric Administration, the Alabama Department of Conservation and Natural Resources, and the Mississippi Department of Wildlife, Fisheries, and Parks participated as cooperating agencies in the preparation of the EIS. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by the proposal and participate in the NEPA analysis. The U.S. Army Corps of Engineers will adopt and use the EIS to consider the issuance of Section 404 of the Clean Water Act. Although the cooperating agencies provided input towards the conclusions and recommendations presented in the final EIS, the agencies will present their own conclusions and recommendations in their respective records of decision (where applicable) for the Projects.

The final EIS addresses the potential environmental effects of construction and operation in Mississippi and Alabama of the following MSX facilities:

- Approximately 177 miles of new 42-inch-diameter natural gas pipeline and 22 miles of 36-inch-diameter natural gas pipeline in Mississippi and Alabama;
- Five new lateral natural gas pipelines:
 - Seven-mile-long, 36-inch-diameter Columbia Gulf Transmission Lateral in Humphreys and Sunflower counties, Mississippi;
 - A 0.9-mile-long, 30-inch-diameter Texas Eastern Transmission, LP Lateral in Attala County, Mississippi;
 - A 0.7-mile-long, 30-inch-diameter Texas Gas Lateral in Attala County, Mississippi;
 - A 0.1-mile-long, 30-inch-diameter TGP 500 Lateral in Attala County, Mississippi;
 - A 0.5-mile-long, 36-inch-diameter Transcontinental Gas Pipe Line Company Lateral in Choctaw County, Alabama;
- Three new natural gas compressor stations:
 - Station 602 – 95,700 International Organization for Standardization (ISO) horsepower (hp) station in Humphreys County, Mississippi;

³ 18 Code of Federal Regulations (CFR) 380.

- Station 606A – 23,470 ISO hp station in Attala County, Mississippi;
- Station 610 – 63,800 ISO hp station in Lauderdale County, Mississippi;
- Modifications at existing compressor station 54 located in Washington County, Mississippi;
- Four new meter stations;
- Three new overpressure protection facilities; and
- Appurtenant facilities such as mainline valves, cathodic protection, and pipeline inspection gauge trap facilities throughout the MSX area.

The final EIS also addresses the potential environmental effects of construction and operation in Mississippi, Alabama, and Georgia of the following SSE4 facilities:

- 22 new gas pipeline loops, organized into 14 segments, totaling approximately 291 miles and located mainly parallel to SNG’s existing South Main Line in Mississippi, Alabama, and Georgia;
- Modifications and/or horsepower expansions to increase compression at 14 existing stations located along SNG’s South Main Line and EEC’s Elba Express Pipeline; and
- Three new meter stations and modifications to seven existing meter stations along the South Main Line and Elba Express Pipeline.

In addition, SSE4 would include abandonment of approximately 4.4 miles of SNG’s existing 16-inch-diameter K Gen Lateral in Clarke County, Mississippi.

The Commission mailed a copy of the *Notice of Availability* of the final EIS to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Native American tribes; potentially affected landowners and other interested individuals and groups; and newspapers and libraries in the project area. The final EIS is only available in electronic format. It may be viewed and downloaded from the FERC’s website (www.ferc.gov), on the natural gas environmental documents page (<https://www.ferc.gov/industries-data/natural-gas/environment/environmental-documents>). In addition, the final EIS may be accessed by using the eLibrary link on the FERC’s website. Click on the eLibrary link (<https://elibrary.ferc.gov/eLibrary/search>) select “General Search” and enter the docket number in the “Docket Number” field, excluding the last three digits (i.e. CP25-514 or CP25-517). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at (866) 208-3676, or for TTY, contact (202) 502-8659.

The final EIS is not a decision document. It presents Commission staff’s independent analysis of the environmental issues for the Commission to consider when addressing the merits of all issues in this proceeding. 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 of Public Convenience and Necessity to construct and operate them. 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. The Commission bases its decisions on both economic issues, including need, and environmental effects.

For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, contact the Office of Public Participation at (202) 502-6595 or OPP@ferc.gov. Additional information about the project is available from the FERC website (www.ferc.gov) using the [eLibrary](#) link. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to <https://www.ferc.gov/ferc-online/overview> to register for eSubscription.

Commission Staff Page Limit and Deadline Certifications

I certify that Commission staff has considered the factors mandated by the National Environmental Policy Act (NEPA) and that this environmental document represents a good-faith effort to disclose the most important considerations required by NEPA within the statutory page limit (42 U.S.C. § 4336a(e)) and the statutory deadline (42 U.S.C. § 4336a(g)). This certification reflects staff's expert judgment that the analysis contained within this environmental document is an accurate representation of the potential environmental effects of the proposed action and the analysis is substantially complete. In staff's judgment, any considerations addressed briefly or left unaddressed would not meaningfully inform the assessment of environmental effects.

Gertrude Fernandez Johnson
Director, Division of Gas - Environment &
Engineering

**MISSISSIPPI CROSSING PROJECT and
SOUTH SYSTEM EXPANSION 4 PROJECT**

FINAL ENVIRONMENTAL IMPACT STATEMENT

TABLE OF CONTENTS

| | | |
|----------|--|------------|
| 1 | INTRODUCTION..... | 1-1 |
| 1.1 | Projects Purpose and Need | 1-2 |
| 1.1.1 | Mississippi Crossing Project | 1-2 |
| 1.1.2 | South System Expansion 4 Project..... | 1-3 |
| 1.2 | Scope of the EIS | 1-3 |
| 1.3 | Public Review and Comment | 1-4 |
| 1.3.1 | Scoping Summary | 1-6 |
| 1.3.2 | Draft EIS Comment Period | 1-7 |
| 1.4 | Permits, Approvals, and Regulatory Requirements..... | 1-8 |
| 2 | PROJECT DESCRIPTIONS..... | 2-1 |
| 2.1 | Mississippi Crossing Project | 2-1 |
| 2.1.1 | Pipeline Facilities | 2-1 |
| 2.1.2 | Aboveground Facilities | 2-3 |
| 2.2 | South System Expansion 4 Project..... | 2-5 |
| 2.2.1 | Pipeline Facilities | 2-5 |
| 2.2.2 | Aboveground Facilities | 2-9 |
| 2.3 | Non-Jurisdictional Facilities..... | 2-12 |
| 2.3.1 | Mississippi Crossing Project | 2-12 |
| 2.3.2 | South System Expansion 4 Project..... | 2-12 |
| 2.4 | Land Requirements..... | 2-13 |
| 2.4.1 | Mississippi Crossing Project | 2-13 |
| 2.4.2 | South System Expansion 4 Project..... | 2-15 |
| 2.5 | Construction Procedures..... | 2-19 |
| 2.5.1 | General Pipeline Construction Procedures..... | 2-21 |
| 2.5.2 | Aboveground Facility Construction Procedures | 2-22 |
| 2.5.3 | Specialized Construction Procedures | 2-23 |
| 2.6 | Construction Schedule and Workforce..... | 2-28 |
| 2.6.1 | Mississippi Crossing Project | 2-28 |
| 2.6.2 | South System Expansion 4 Project..... | 2-29 |
| 3 | ALTERNATIVES..... | 3-1 |
| 3.1 | No-Action Alternative | 3-1 |
| 3.2 | Alternatives Evaluation Process | 3-1 |

| | | |
|----------|--|------------|
| 3.3 | System Alternatives..... | 3-2 |
| 3.3.1 | System Alternatives for MSX..... | 3-3 |
| 3.3.2 | System Alternatives for SSE4..... | 3-3 |
| 3.4 | Major Pipeline Route Alternatives..... | 3-3 |
| 3.4.1 | Major Pipeline Route Alternatives for MSX..... | 3-3 |
| 3.4.2 | Major Pipeline Route Alternatives for SSE4..... | 3-4 |
| 3.5 | Minor Route Variations..... | 3-6 |
| 3.5.1 | Minor Route Variations for MSX..... | 3-6 |
| 3.5.2 | Minor Route Variations for SSE4..... | 3-8 |
| 3.6 | Aboveground Facility Alternatives..... | 3-1 |
| 3.7 | Conclusions..... | 3-1 |
| 4 | ENVIRONMENTAL ANALYSIS..... | 4-1 |
| 4.1 | Geology..... | 4-1 |
| 4.1.1 | Geologic Setting..... | 4-1 |
| 4.1.2 | Mineral Resources..... | 4-1 |
| 4.1.3 | Paleontological Resources..... | 4-2 |
| 4.1.4 | Geologic Hazards..... | 4-3 |
| 4.1.5 | HDD Feasibility..... | 4-11 |
| 4.1.6 | Conclusion..... | 4-14 |
| 4.2 | Soils..... | 4-15 |
| 4.2.1 | Soil Characteristics..... | 4-15 |
| 4.2.2 | Inadvertent Spills or Discovery of Contaminants..... | 4-17 |
| 4.2.3 | Effects and Mitigation..... | 4-18 |
| 4.2.4 | Conclusion..... | 4-21 |
| 4.3 | Water Resources..... | 4-21 |
| 4.3.1 | Groundwater Resources..... | 4-21 |
| 4.3.2 | Surface Water Resources..... | 4-30 |
| 4.4 | Wetlands..... | 4-41 |
| 4.4.1 | Existing Wetlands..... | 4-41 |
| 4.4.2 | Wetland Effects and Mitigation..... | 4-42 |
| 4.4.3 | Conclusion..... | 4-46 |
| 4.5 | Vegetation..... | 4-47 |
| 4.5.1 | Existing Vegetation Resources..... | 4-47 |
| 4.5.2 | Noxious and Invasive Weeds..... | 4-48 |
| 4.5.3 | Vegetation Effects and Mitigation..... | 4-48 |
| 4.5.4 | Conclusion..... | 4-51 |

| | | |
|--------|--|-------|
| 4.6 | Wildlife and Fisheries..... | 4-52 |
| 4.6.1 | Existing Wildlife Resources..... | 4-52 |
| 4.6.2 | Sensitive or Managed Wildlife Habitats | 4-53 |
| 4.6.3 | General Wildlife Effects and Mitigation..... | 4-54 |
| 4.6.4 | Migratory Birds and Bald and Golden Eagles..... | 4-58 |
| 4.6.5 | Migratory Birds and Bald and Golden Eagles Effects and Mitigation..... | 4-60 |
| 4.6.6 | Fisheries and Aquatic Resources..... | 4-62 |
| 4.6.7 | Fisheries and Aquatic Resources Effects and Mitigation..... | 4-64 |
| 4.6.8 | Conclusion..... | 4-67 |
| 4.7 | Protected Species..... | 4-67 |
| 4.7.1 | Special Status Species | 4-67 |
| 4.7.2 | Conclusion..... | 4-71 |
| 4.8 | Land Use, Recreation, Special Interest Areas, and Visual Resources | 4-74 |
| 4.8.1 | Land Use | 4-74 |
| 4.8.2 | Public Land, Recreation, or Special Use Areas..... | 4-86 |
| 4.8.3 | Visual Resources | 4-94 |
| 4.9 | Socioeconomics..... | 4-99 |
| 4.9.1 | Population | 4-100 |
| 4.9.2 | Housing and Public Services..... | 4-102 |
| 4.9.3 | Property Values..... | 4-106 |
| 4.9.4 | Transportation and Traffic | 4-107 |
| 4.9.5 | Economy, Employment, and Tax Revenues | 4-111 |
| 4.9.6 | Conclusion..... | 4-115 |
| 4.10 | Cultural Resources..... | 4-116 |
| 4.10.1 | Cultural Resource Surveys..... | 4-116 |
| 4.10.2 | SHPO Consultation..... | 4-124 |
| 4.10.3 | Native American Consultations | 4-125 |
| 4.10.4 | Unanticipated Discoveries Plan | 4-128 |
| 4.10.5 | Conclusion | 4-129 |
| 4.11 | Air Quality..... | 4-130 |
| 4.11.1 | Existing Air Quality..... | 4-131 |
| 4.11.2 | Air Quality Regulations | 4-132 |
| 4.11.3 | Construction Emissions Effects and Mitigation..... | 4-136 |
| 4.11.4 | Operational Air Emissions Effects and Mitigation..... | 4-142 |
| 4.11.5 | Conclusion | 4-155 |
| 4.12 | Noise..... | 4-156 |

| | | |
|----------|---|------------|
| 4.12.1 | Existing Noise Environment..... | 4-156 |
| 4.12.2 | Federal Noise Regulations..... | 4-157 |
| 4.12.3 | Local Noise Regulations..... | 4-157 |
| 4.12.4 | Construction Noise Effects and Mitigation..... | 4-158 |
| 4.12.5 | Operational Noise Effects and Mitigation..... | 4-165 |
| 4.12.6 | Conclusion..... | 4-168 |
| 4.13 | Reliability and Safety..... | 4-169 |
| 4.13.1 | Safety Standards..... | 4-169 |
| 4.13.2 | Project Design Requirements..... | 4-173 |
| 4.13.3 | Emergencies..... | 4-173 |
| 4.13.4 | Pipeline Accident Data..... | 4-174 |
| 4.13.5 | Effect on Public Safety..... | 4-175 |
| 4.13.6 | Conclusion..... | 4-176 |
| 4.14 | Cumulative Effects..... | 4-176 |
| 4.14.1 | Geology and Soils..... | 4-179 |
| 4.14.2 | Water Resources..... | 4-180 |
| 4.14.3 | Wetlands..... | 4-181 |
| 4.14.4 | Vegetation..... | 4-182 |
| 4.14.5 | Wildlife, Fisheries, and Protected Species..... | 4-183 |
| 4.14.6 | Land Use, Recreation, Special Interest Areas, and Visual Resources..... | 4-184 |
| 4.14.7 | Socioeconomics..... | 4-186 |
| 4.14.8 | Cultural Resources..... | 4-188 |
| 4.14.9 | Air Quality..... | 4-189 |
| 4.14.10 | Noise..... | 4-189 |
| 4.14.11 | Climate Change..... | 4-191 |
| 4.14.12 | Conclusion..... | 4-195 |
| 5 | CONCLUSIONS AND RECOMMENDATIONS..... | 5-1 |
| 5.1 | Summary of Environmental Analysis..... | 5-1 |
| 5.2 | FERC Staff Recommended Mitigation..... | 5-1 |

List of Appendices

| | |
|-----------------|--|
| Appendix A | Final EIS Notice of Availability Distribution List |
| Appendix B | Comments Received During Scoping Periods |
| Appendix C | MSX Maps and Figures |
| Appendix D | SSE4 Maps and Figures |
| Appendix E.1 | FERC's <i>Upland Erosion Control, Revegetation, and Maintenance Plan</i> (with TGP's Requested Deviations) |
| Appendix E.2 | FERC's <i>Wetland and Waterbody Construction and Mitigation Procedures</i> (with TGP's Requested Deviations) |
| Appendix F.1 | FERC's <i>Upland Erosion Control, Revegetation, and Maintenance Plan</i> (with SNG and EEC's Requested Deviations) |
| Appendix F.2 | FERC's <i>Wetland and Waterbody Construction and Mitigation Procedures</i> (with SNG and EEC's Requested Deviations) |
| Appendix G | MSX Site-Specific Residential Drawings |
| Appendix H | SSE4 Site-Specific Residential Drawings |
| Appendix I | Tables |
| Table I.1.4-1: | Federally Required Environmental Permits, Approvals, or Consultations for MSX |
| Table I.1.4-2: | Federally Required Environmental Permits, Approvals, or Consultations for SSE4 |
| Table I.2.4-3: | Areas Where the SSE4 Proposed Permanent Easement Would be Greater than 50 Feet |
| Table I.4.1-4: | Shallow Bedrock along the MSX Project Pipeline Facilities |
| Table I.4.1-5: | Geologic Materials Crossed by SSE4 |
| Table I.4.1-6: | Depth to Bedrock and Slope along SSE4 Pipeline Loops |
| Table I.4.1-7: | Depth to Bedrock and Slope along SSE4 Aboveground Facilities |
| Table I.4.1-8: | Mineral Resources Within 0.25-Mile of SSE4 |
| Table I.4.1-9: | Karst Topography Crossed by SSE4 |
| Table I.4.1-10: | Flood Zone Acreage of MSX |
| Table I.4.1-11: | Flood Zone Acreage of SSE4 |
| Table I.4.2-1: | Summary of Affected Soil Characteristics (by acre) for MSX |
| Table I.4.2-2: | Summary of Affected Soil Characteristics (by acre) for SSE4 |
| Table I.4.3-1: | Identified Water Supply Wells within 150 feet of MSX |
| Table I.4.3-2: | Identified Water Supply Wells within 150 feet of SSE4 |
| Table I.4.3-3: | Watersheds Crossed by MSX |
| Table I.4.3-4: | Waterbodies Crossed by MSX |
| Table I.4.3-5: | Watersheds Crossed by SSE4 |
| Table I.4.3-6: | Waterbodies Crossed by SSE4 |
| Table I.4.3-7: | USEPA RCRA, TSCA, and TRI Facilities within 0.25-mile of MSX |
| Table I.4.3-8: | Sensitive Waterbodies and TMDL Pollutants for Waterbodies within 0.25-mile of MSX |
| Table I.4.3-9: | Impaired Surface Waters Crossed by SSE4 |
| Table I.4.3-10: | USEPA RCRA, TSCA, and TRI Facilities within 0.25-mile of SSE4 |
| Table I.4.3-11: | Potential Sources and Volumes of Water for MSX |

| | |
|-----------------|---|
| Table I.4.3-12: | Potential Discharge Locations of Water for MSX |
| Table I.4.3-13: | Volumes of Water for Hydrostatic Testing, Dust Control, and HDD Drilling of SSE4 |
| Table I.4.3-14: | Potential Water Sources for SSE4 |
| Table I.4.4-1: | Wetland Mitigation for MSX – USACE Vicksburg District |
| Table I.4.4-2: | Wetland Mitigation for MSX - USACE Mobile District |
| Table I.4.4-3: | Wetland Effect Summary for SSE4 |
| Table I.4.5-1: | Ecoregions Associated with MSX |
| Table I.4.5-2: | Ecoregions Associated with SSE4 |
| Table I.4.5-3: | Noxious Weeds Known to Occur in or Near MSX |
| Table I.4.5-4: | Noxious Weeds Observed During SSE4 Field Surveys |
| Table I.4.5-5: | Vegetation and Habitat Types Affected by Construction and Operation of MSX (acres) |
| Table I.4.5-6: | Vegetation and Habitat Types Affected by Construction and Operation of SSE4 (acres) |
| Table I.4.6-1: | Migratory Birds with the Potential to Occur in MSX/SSE4 Area |
| Table I.4.7-1: | Federally Threatened and Endangered Species, Candidate Species Occurring within the Projects’ Area |
| Table I.4.7-2: | State Threatened and Endangered Species, Candidate Species, and State Protected Species Occurring within the Projects’ Area |
| Table I.4.8-1: | Land Use Affected by Construction and Operation of MSX (acres) |
| Table I.4.8-2: | Land Use Affected by Construction and Operation of SSE4 (acres) |
| Table I.4.8-3: | Residences within 50 feet of the MSX Project Workspace |
| Table I.4.8-4: | Residences within 50 feet of the SSE4 Project Workspaces |
| Table I.4.8-5: | Public Lands, Conservation Lands, and other Special Use Areas Crossed by MSX |
| Table I.4.8-6: | Public Lands, Conservation Lands, and other Special Use Areas Crossed by SSE4 |
| Table I.4.9-1: | Existing Socioeconomic Conditions by County and State for MSX |
| Table I.4.9-2: | Existing Socioeconomic Conditions by County and State for SSE4 |
| Table I.4.9-3: | Available Housing in the Vicinity of MSX |
| Table I.4.9-4: | SSE4 Pipeline, Compressor Stations, and Meter Stations Jobs |
| Table I.4.9-5: | Housing Characteristics in the Vicinity of MSX |
| Table I.4.9-6: | Housing Characteristics in the Vicinity of SSE4 |
| Table I.4.9-7: | SSE4 Available Housing by County |
| Table I.4.9-8: | Available Lodging by SSE4 Facility |
| Table I.4.9-9: | SSE4 Existing Public Services and Facilities by County |
| Table I.4.9-10: | Annual Average Daily Traffic and Functional Classification for Roads Accessing SSE4 Aboveground Facilities |
| Table I.4.9-11: | Estimated Daily Round Trips by Pipeline Segment during Peak Construction of SSE4 |
| Table I.4.9-12: | SSE4 Sales and Use Tax Rates by County |
| Table I.4.9-13: | Estimated State and Local Sales Tax Revenues Generated During SSE4 Construction |
| Table I.4.9-14: | Anticipated Property Taxes for SSE4 |

| | |
|------------|--|
| | Table I.4.11-1: Summary of Climatological Data for the Projects |
| | Table I.4.11-2: National Ambient Air Quality Standards |
| | Table I.4.11-3: Ambient Air Quality Concentrations Representative of Station 602 |
| | Table I.4.11-4: Ambient Air Quality Concentrations Representative of Station 606A |
| | Table I.4.11-5: Ambient Air Quality Concentrations Representative of Station 610 |
| | Table I.4.11-6: Background Levels of Criteria Pollutants for Compressor Stations in Mississippi |
| | Table I.4.11-7: Background Levels of Criteria Pollutants for Compressor Stations in Alabama |
| | Table I.4.11-8: Background Levels of Criteria Pollutants for SNG Compressor Stations in Georgia |
| | Table I.4.11-9: Background Levels of Criteria Pollutants for EEC Compressor Stations in Georgia |
| | Table I.4.11-10: Meteorological Stations Used for Air Dispersion Modeling |
| | Table I.4.12-1: Summary of Identified MSX Compressor and Meter Station NSA Locations |
| | Table I.4.12-2: Summary of Nearest Identified MSX HDD and Contractor Yard NSA Locations |
| | Table I.4.12-3: Summary of Ambient Sound Levels at Identified MSX Compressor and Meter Station NSAs |
| | Table I.4.12-4: Summary of Ambient Sound Levels at Nearest Identified NSAs Associated with MSX HDD and Contractor Yard Locations |
| | Table I.4.12-5: Summary of NSA Locations at Identified SSE4 Compressor and Meter Stations and HDD Locations |
| | Table I.4.12-6: Summary of Ambient Sound Levels at Identified SSE4 Compressor and Meter Stations and HDD Locations |
| | Table I.4.12-8: Proposed Operational Equipment Total Sound Power Levels |
| Appendix J | Alternatives Analysis Tables and Maps |
| Appendix K | Cumulative Effects Analysis Supplemental Information |
| | Table K.4.14-1: Past, Present, and Reasonably Foreseeable Future Projects Evaluated for Potential Cumulative Effects |
| Appendix L | Comments on the Draft EIS and Staff's Responses |
| Appendix M | List of Preparers |
| Appendix N | References |
| Appendix O | Biological Assessment for the Mississippi Crossing Project |
| Appendix P | Biological Assessment for the South System Expansion 4 Project |

List of Tables within the EIS

| | | |
|---------------|---|-------|
| Table 1.3-1: | Environmental Issues and Concerns Raised During Public Scoping Periods | 1-6 |
| Table 2.1-1: | Proposed Mississippi Crossing Pipeline Facilities | 2-1 |
| Table 2.1-2: | Proposed Mississippi Crossing Aboveground Facilities | 2-3 |
| Table 2.2-1: | Proposed SSE4 New Pipeline Facilities..... | 2-6 |
| Table 2.2-2: | Proposed SSE4 Compressor Station Modifications | 2-9 |
| Table 2.2-3: | Proposed SSE4 New and Expanded Meter Stations | 2-10 |
| Table 2.2-4: | Potential Laydown Yards Under Consideration for SSE4 Construction..... | 2-10 |
| Table 2.4-1: | Summary of Land Requirements for MSX | 2-14 |
| Table 2.4-2: | Summary of Land Use Acreages for SSE4 Pipeline Loops | 2-16 |
| Table 2.4-3: | Summary of Land Use Acreages for SSE4 Aboveground Facilities..... | 2-17 |
| Table 2.5-1: | Project Plans for MSX and SSE4..... | 2-20 |
| Table 2.5-2: | Minimum Specifications for Depth of Cover (inches)..... | 2-22 |
| Table 2.5-3: | HDDs Proposed for the Mississippi Crossing Project..... | 2-24 |
| Table 2.5-4: | HDDs Proposed for the South System Expansion 4 Project | 2-25 |
| Table 2.6-1: | Anticipated Construction Schedule and Workforce for MSX..... | 2-28 |
| Table 2.6-2: | Anticipated Construction Schedule and Workforce for SSE4..... | 2-30 |
| Table 4.1-1: | Earthquakes with a Magnitude of 2.5 or Greater from 1800 – Present within 0.25-mile of SSE4..... | 4-4 |
| Table 4.1-2: | Geotechnical Investigation Results at HDD Crossings for MSX..... | 4-13 |
| Table 4.1-3: | Geotechnical Investigation Results at HDD Crossings for SSE4..... | 4-13 |
| Table 4.8-1: | Distance Between MSX Compressor and Meter Stations and Closest Residence | 4-82 |
| Table 4.8-2: | Summary of TGP Responses to Landowner Concerns | 4-83 |
| Table 4.8-3: | Potential Visual Effects of MSX Compressor Stations and Meter Stations | 4-95 |
| Table 4.8-4: | Potential Visual Effects of SSE4 Compressor Stations and Meter Stations..... | 4-97 |
| Table 4.9-1: | Baseline and Peak Workforce During Construction | 4-100 |
| Table 4.9-2: | Primary Access Roadways for MSX Aboveground Facilities | 4-108 |
| Table 4.9-3: | Population and Public Spending for MSX Counties | 4-112 |
| Table 4.9-4: | Income Tax Range by State | 4-112 |
| Table 4.9-5: | Estimated Ad Valorem Tax Rates (2025 – 2038) Generated by MSX | 4-114 |
| Table 4.10-1: | Summary of MSX Archaeological Survey Results..... | 4-118 |
| Table 4.10-2: | Summary of SSE4 Archaeological Survey Results..... | 4-122 |
| Table 4.11-1: | Total Construction-Related Estimated Emissions for MSX (tons) | 4-137 |
| Table 4.11-2: | Total Construction-Related Estimated Emissions for SSE4 (tons) | 4-138 |
| Table 4.11-3: | Estimated Operating Emissions, Station 602, Station 606A, Station 610..... | 4-143 |
| Table 4.11-4: | Estimated Operating Emissions for SSE4 Project..... | 4-144 |
| Table 4.11-5: | MSX Compressor Station AERMOD Results and Class II SIL Comparison | 4-147 |
| Table 4.11-6: | MSX Compressor Station AERMOD Results and NAAQS Comparison..... | 4-148 |
| Table 4.11-7: | SSE4 Compressor Station AERMOD Results and Class II SIL Comparison | 4-149 |

| | |
|--|-------|
| Table 4.11-8: SSE4 Compressor Station AERMOD Results and NAAQS Comparison | 4-152 |
| Table 4.12-1: MSX HDD Construction \ Noise at Closest NSA | 4-160 |
| Table 4.12-2: SSE4 Compressor Station Construction Noise at Closest NSA | 4-162 |
| Table 4.12-3: SSE4 Meter Station Construction Noise at Closest NSA | 4-163 |
| Table 4.12-4: SSE4 HDD Crossing Construction Noise at Closest NSA | 4-163 |
| Table 4.12-5: Operational Noise Effects at MSX Meter & Compressor Stations | 4-165 |
| Table 4.12-6: Operational Noise at NSAs from SSE4 Compressor Stations | 4-166 |
| Table 4.12-7: Operational Noise at NSAs from SSE4 Meter Stations | 4-167 |
| Table 4.13-1: PHMSA Class Locations Along the MSX Mainline and Lateral Routes | 4-171 |
| Table 4.13-2: PHMSA HCAs Along the MSX Mainline | 4-171 |
| Table 4.13-3: PHMSA Class Locations Along SSE4 Pipeline Loops | 4-172 |
| Table 4.13-4: PHMSA HCAs Along the SSE4 Pipeline Loops | 4-172 |
| Table 4.13-5: U.S. Gas Transmission Pipeline Significant Incident Summary by Cause (2010-2024) | 4-174 |
| Table 4.13-6: Equipment Failure Significant Incident Summary by Cause (2010-2024) | 4-174 |
| Table 4.14-1: Resource-Specific Cumulative Effects Assessment Areas | 4-177 |
| Table 4.14-2: Compressor Station 606A Cumulative Noise Effect Assessment | 4-191 |

List of Figures

| | |
|---|-----|
| Figure 2.1-1: MSX Overview Map | 2-2 |
| Figure 2.2-1: South System Expansion 4 Project Overview Map (1 of 2) | 2-7 |
| Figure 2.2-2: South System Expansion 4 Project Overview Map (2 of 2) | 2-8 |
| Figure 3.5-1: Minor Route Variation Options for Loop H1 Based on Public Comment | 3-1 |

Acronyms and Abbreviations

| | |
|-------------------|--|
| AADT | annual average daily traffic |
| ACS | American Community Survey |
| ADCNR | Alabama Department of Conservation and Natural Resources |
| ADEM | Alabama Department of Environmental Management |
| AFC | Alabama Forestry Commission |
| ALSHPO | Alabama State Historic Preservation Office |
| APE | area of potential effects |
| AQCR | Air Quality Control Regions |
| ATWS | additional temporary workspace |
| BCC | Birds of Conservation Concern |
| BCR | Bird Conservation Region |
| BGEPA | Bald and Golden Eagle Protection Act |
| Bgs | below ground surface |
| BMPs | best management practice |
| CAA | Clean Air Act |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CGT | Columbia Gulf Transmission |
| CH ₄ | Methane |
| CEAA | Cumulative Effects Assessment Area |
| CO | carbon monoxide |
| CO ₂ e | carbon dioxide equivalent |
| Commission | Federal Energy Regulatory Commission |
| Companies | referring to all three Applicants (TGP, SNG, and EEC) |
| CWA | Clean Water Act |
| dBA | decibels on the A-weighted scale |
| Dth/d | dekatherms per day |
| ECMP | Environmental Construction Management Plan |
| EEC | Elba Express Company, LLC |
| EI | Environmental Inspector |
| EIC | Environmental Inspection Coordinator |
| EIS | Environmental Impact Statement |
| EPA | U.S. Environmental Protection Agency |
| EQIP | Environmental Quality Incentives Program |
| ESA | Endangered Species Act |
| ESD | emergency shutdown |
| ESFO | Ecological Services Field Office |
| FEMA | Federal Emergency Management Agency |
| FERC | Federal Energy Regulatory Commission |
| FR | Federal Register |
| FWS | U.S. Fish and Wildlife Service |

| | |
|------------------|---|
| GAC | Georgia Administrative Code |
| GADNR | Georgia Department of Natural Resources |
| GAEPD | Georgia Environmental Protection Division |
| GAHPD | Georgia Historic Preservation Division |
| GASF | Georgia Archaeological Site File |
| GFC | Georgia Forestry Commission |
| GHGs | greenhouse gases |
| Gpm | gallons per minute |
| GSA | Geological Survey of Alabama |
| HAP | hazardous air pollutants |
| HCA | high-consequence areas |
| HDD | horizontal directional drill |
| HP | Horsepower |
| HUC | Hydrologic Unit Code |
| IPaC | Information for Planning and Consultation |
| ISO | International Organization for Standardization |
| MARIS | Mississippi Automated Resource Information System |
| MBTA | Migratory Bird Treaty Act |
| MCA | Moderate Consequence Area |
| MDAH | Mississippi Department of Archives and History |
| MDEQ | Mississippi Department of Environmental Quality |
| MDWFP | Mississippi Department of Wildlife, Fisheries, and Parks |
| MFC | Mississippi Forestry Commission |
| MLV | mainline valve |
| MP | Milepost |
| MSX | Mississippi Crossing Project |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NGA | Natural Gas Act |
| NHPA | National Historic Preservation Act |
| NLEB | Northern long-eared bat |
| NNSR | Nonattainment New Source Review |
| N ₂ O | nitrous oxide |
| NOAA | National Oceanic and Atmospheric Administration |
| NO ₂ | nitrogen dioxide |
| NO _x | nitrogen oxides |
| NOI | Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Mississippi Crossing Project and the South System Expansion 4 Project, Request for Comments on Environmental Issues, and Schedule for Environmental Review |
| NPS | National Park Service |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |

| | |
|---------------------------|---|
| NRI | Nationwide Rivers Inventory |
| NSPS | New Source Performance Standards |
| NSA | noise sensitive area |
| NSR | New Source Review |
| OEP | Office of Energy Projects |
| Oglethorpe | Oglethorpe Power Corporation |
| OPP | overpressure protection |
| ORV | Outstandingly Remarkable Values |
| PAR | permanent access road |
| PCB | polychlorinated biphenyl |
| PEM | palustrine emergent wetland |
| PFO | palustrine forested wetland |
| PGA | peak ground acceleration |
| PHMSA | Pipeline and Hazardous Materials Safety Administration |
| Pig | pipeline inspection gauge tool |
| Plan | Upland Erosion Control, Revegetation, and Maintenance Plan |
| PM _{2.5} | particulate matter with a diameter of 2.5 microns or less |
| PM ₁₀ | particulate matter with a diameter of 10 microns or less |
| Procedures | Wetland and Waterbody Construction and Mitigation Procedures |
| Projects | referring to both the Mississippi Crossing Project and South System Expansion 4 Project |
| PSS | palustrine scrub-shrub wetland |
| PTE | potential to emit |
| Public School Trust Lands | Mississippi 16th Section Public School Trust Lands |
| RA | route alternative |
| RCRA | Resource Conservation and Recovery Act |
| RV | recreational vehicle |
| SHPO | State Historic Preservation Officer |
| SIL | significant impact levels |
| SNG | Southern Natural Gas Company, LLC |
| SO ₂ | sulfur dioxide |
| SPCP | Spill Prevention and Control Plan |
| SSE4 | South System Expansion 4 Project |
| SSURGO | NRCS Soil Survey Geographic |
| TAR | temporary access road |
| Tetco | Texas Eastern Transmission, LP |
| Texas Gas | Texas Gas Transmission, LLC |
| TGP | Tennessee Gas Pipeline Company, LLC |
| THPO | Tribal Historic Preservation Officer |
| Transco | Transcontinental Gas Pipe Line Company |
| TRI | Toxics Release Inventory |
| Tpy | tons per year |

| | |
|-------------------|-----------------------------------|
| TSCA | Toxic Substance Control Act |
| µg/m ³ | micrograms per cubic meter |
| UDP | Unanticipated Discoveries Plan |
| UPS | Uninterruptible Power Supply |
| U.S. | United States |
| USACE | U.S. Army Corps of Engineers |
| USDA | U.S. Department of Agriculture |
| USDOT | U.S. Department of Transportation |
| USGS | U.S. Geological Survey |
| VOC | volatile organic compounds |
| WMA | Wildlife Management Area |

Executive Summary

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this Environmental Impact Statement (EIS) to assess the potential environmental effects that could result from the Mississippi Crossing Project (MSX), proposed by Tennessee Gas Pipeline Company, LLC (TGP) in Mississippi and Alabama; and the South System Expansion 4 Project (SSE4), proposed by Southern Natural Gas Company, LLC (SNG) and Elba Express Company, LLC (EEC) in Mississippi, Alabama, and Georgia (collectively referred to as “the Projects”). The EIS was prepared in compliance with the National Environmental Policy Act of 1969 (NEPA)⁴ and the Commission’s implementing regulations under Title 18 of the Code of Federal Regulations, Part 380 (18 Code of Federal Regulations 380).

TGP began FERC’s pre-filing process for MSX on December 6, 2024, in Docket No. PF25-2-000. On June 30, 2025, TGP filed a formal application with FERC in Docket No. CP25-514-000 pursuant to section 7(c) of the Natural Gas Act and Parts 157 of the Commission’s regulations. TGP filed supplemental information on September 23, 2025, which included minor route adjustments, and changes to workspaces and the locations of certain aboveground facilities. MSX would originate near Greenville, Mississippi, and connect to the existing TGP system and multiple third-party pipelines to provide access to natural gas sourced from multiple supply basins for delivery to SNG and Transcontinental Gas Pipe Line Company, LLC near Butler, Alabama. MSX would provide about 2.1 million dekatherms per day of firm natural gas transportation service.

SNG and EEC entered into FERC’s pre-filing process for SSE4 On December 6, 2024, in Docket No. PF25-1-000. On June 30, 2025, SNG/EEC filed a formal application with FERC in Docket No. CP25-517-000 pursuant to sections 7(b) and 7(c) of the Natural Gas Act and Parts 157 of the Commission’s regulations. SNG/EEC submitted supplemental information for a revised project scope on August 26, 2025, November 5, 2025, November 6, 2025, and February 17, 2026, which included changes to workspaces, minor route adjustments, and updates to additional temporary workspaces and access roads. SSE4 would provide about 1.3 million dekatherms per day of firm natural gas transportation service from interconnections with TGP near Rose Hill and Meridian, Mississippi, including an interconnection with MSX, to delivery points along the SNG South Main Line in Alabama, Georgia, and South Carolina and the Elba Express Pipeline in Georgia.

The purpose of the EIS is to inform the Commission, the public, and the permitting agencies about the potential environmental effects of the proposed Projects and their alternatives, as well as staff’s recommended mitigation measures that would reduce adverse effects to the extent practicable. We⁵ prepared our analysis based on information provided by TGP, SNG, and EEC (collectively referred to as, Companies) and further developed from data requests; field

⁴ National Environmental Policy Act of 1969 amended (Pub. L. 91-190. 42 U.S.C. §§ 4321–4347, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, Pub. L. 97-258, §4(b), September 13, 1982, Pub. L. 118-5, June 3, 2023, Pub. L. 119-21, July 4, 2025).

⁵ The pronouns “we,” “us,” and “our” refer to the environmental staff of the Federal Energy Regulatory Commission’s Office of Energy Projects.

investigations; scoping; literature research; and coordination with or comments from federal, state, and local agencies, Native American tribes, and individual members of the public.

FERC is the federal agency responsible for authorizing interstate natural gas transmission facilities under the Natural Gas Act and is the lead federal agency for the preparation of this EIS. The U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), the National Oceanic and Atmospheric Administration, Alabama Department of Conservation and Natural Resources, and Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) participated as cooperating agencies in the preparation of the EIS. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by a proposal and participate in the NEPA analysis. Although the agencies provided input to the conclusions and recommendations presented in the EIS, each agency may present its own conclusions and recommendations in any applicable Records of Decision or other documentation for the Projects.

Proposed Actions

MSX would consist of construction and operation of the following facilities in Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties, Mississippi and Choctaw County, Alabama:

- approximately 208 miles of new natural gas pipeline and pipeline lateral facilities ranging in diameter from 42 inches to 30 inches;
- 3 new natural gas-fired compressor stations and modifications to one existing compressor station;
- 4 new meter stations;
- 3 new overpressure protection facilities; and
- other appurtenant facilities such as mainline valves, cathodic protection systems, and pipeline inspection gauge tool launchers/receivers along the new pipeline.

SSE4 would consist of construction and operation of the following facilities in Clarke and Lauderdale counties, Mississippi; Sumter, Marengo, Perry, Dallas, Autauga, Elmore, Tallapoosa, Macon, Hale, and Lee counties, Alabama; and, Clayton, Muscogee, Harris, Talbot, Upson, Crawford, Monroe, Bibb, Jones, Baldwin, Glascock, Jefferson, Richmond, Spalding, Henry, Lowndes, Burke, Screven, Cobb, Chatham, and Effingham counties, Georgia:

- 22 new natural gas pipeline loops, organized into 14 segments, totaling approximately 291 miles, primarily located parallel to SNG's existing South Main Line in Mississippi, Alabama, and Georgia;
- modification of 14 existing compressor stations;
- 3 new meter stations;
- upgrades at 7 existing interconnects/meter stations; and
- abandonment of approximately 2.2 miles of SNG's existing 16-inch-diameter K Gen Lateral.

The Companies would construct the Projects using temporary and permanent rights-of-way, along with additional temporary workspace, contractor yards, and access roads. Subject to all necessary regulatory approvals and clearances, TGP proposes to begin construction of MSX as

early as October 2026, and place MSX into service in November 2028. SNG/EEC proposes to construct SSE4 in two phases, with phase I beginning in 4th quarter 2026 and in service by November 2028, and phase II facilities beginning in May 2028 and in service by November 2029.

Purpose of Projects

According to the Companies, the purpose of the Projects is to meet the growing demand for access to multiple, diverse supply basins by providing firm transportation of increased natural gas capacity to other third-party pipelines to markets in the southeastern U.S. This increase in capacity would allow gas providers in the southeast to compete for new commercial and industrial loads. This competition would help to lower energy costs in the southeastern U.S.

Public Involvement

During the pre-filing process, we worked with the Companies and interested stakeholders, including federal and state agencies, to identify and resolve issues during the early project planning phase. From mid-January to mid-March 2025, TGP conducted 10 open house meetings and SNG/EEC conducted 13 open house meetings. On March 3, 2025, we issued a notice that opened a public scoping period for the projects and invited interested stakeholders to 11 scoping sessions held at various locations across the projects' vicinity, conducted from late March to early April 2025. We issued a Notice of Application on July 15, 2025, that opened another public comment period and opportunity for stakeholders to intervene in the proceedings. On September 5, 2025, we issued a Notice of Intent to prepare the EIS, opening an additional public comment period. Notices were published in the Federal Register and mailed to potentially affected landowners and stakeholders on our environmental mailing list.

During the comment periods, we received 62 unique comments for MSX, 99 unique comments for SSE4, and 12 unique comment letters regarding both MSX and SSE4, from landowners, homeowners' associations, members of the public, the FWS, non-governmental organizations, local and state elected officials, utilities, and pipeline labor unions. The environmental comments received are addressed, as applicable, in relevant sections of the EIS. Non-environmental comments, such as those declaring general support or opposition for the Project, or those focused on general energy policy concerns were noted but are considered outside the scope of the EIS.

We issued a *Notice of Availability of the Draft Environmental Impact Statement for the Proposed Mississippi Crossing Project and South System Expansion 4 Project* (NOA) on January 30, 2026. The NOA was sent to our environmental mailing list. The draft EIS was filed with the EPA and a formal notice of availability was issued in the Federal Register on February 6, 2026. The comment period closed on March 23, 2026. We held 11 public comment sessions for the draft EIS in Mississippi, Alabama, and Georgia between February 23 – March 11, 2026. In response to our notice and at our comment sessions, we received over 400 comments from landowners, public officials, non-government organizations, and government agencies regarding the projects. Each comment, along with our response, is provided in appendix L and discussed, if applicable, in the corresponding EIS resource text.

Project Effects & Mitigation

We evaluated the effects of the Projects on environmental resources, including geology, soils, groundwater, surface water, wetlands, vegetation, wildlife, fisheries, special status species, land use, visual resources, socioeconomics, cultural resources, air quality, noise, and safety. Our analysis took into consideration the Companies' proposed avoidance, minimization, and mitigation measures, and their commitment to implement FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) (FERC, 2013a) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures)⁶ (FERC, 2013b), with certain proposed alternative measures. Section 4.0 of this EIS describes our analysis of the potential effects on environmental resources. A summary of the major environmental issues is provided below. Where necessary to reduce effects on specific resources, we recommend that the Commission include environmental conditions in any Order the Commission may issue authorizing these Projects. Section 5.2 of this EIS contains a compilation of our recommended environmental conditions.

Geology and Soils

Geologic features extend laterally for tens to hundreds of miles and effects from the Projects on geology would be minor and temporary given the Projects' range. Most effects would occur during excavation and grading, with contours and surface drainage restored to preconstruction conditions after construction. Both projects would cross areas of low seismicity, landslide incidence, and minimal potential for subsidence, karst formation, or sinkholes. SSE4 would cross about 101 miles of karst terrain and seven locations of high landslide incidence.

About 6.4 miles of the MSX Mainline and 4.7 miles of the SSE4 pipeline would be installed using horizontal directional drilling (HDD), reducing ground disturbance, minimizing sediment transport, and keeping surface waters hydrologically isolated. To evaluate HDD feasibility and identify subsurface conditions that could affect drilling performance, stability, or the risk of failure and inadvertent fluid release, we recommend that any Commission authorization for the Projects require the Companies to file the results of geotechnical and/or geophysical investigations along the proposed HDD alignments, prior to any HDD construction. Through implementation of project-specific Plans and Procedures and our recommendation, we conclude that the Projects would not likely be adversely affected by geologic hazards and geologic effects would not be significant.

MSX and SSE4 would temporarily disturb a variety of soil types across multiple counties in Mississippi, Alabama, and Georgia. Construction activities would temporarily affect soils through compaction, erosion, and topsoil mixing. There are approximately 2,455 acres of soils classified as prime farmland or farmland of statewide importance that would be temporarily disturbed by construction of MSX, 200 acres of which would be permanently affected by the new aboveground facilities. Approximately 2,880 acres of prime farmland soils would be temporarily disturbed by SSE4, and with only limited areas at SSE4 aboveground facility expansions would be permanently affected. Both projects would avoid or minimize effects on agricultural productivity by stripping and segregating topsoil, decompacting subsoil, and repairing any

⁶ The Plan and Procedures are a set of baseline construction and mitigation measures developed to minimize the potential environmental effects of construction on upland areas, wetlands, and waterbodies. The Plan and Procedures can be viewed on the FERC website at: <http://ferc.gov/industries/gas/enviro/plan.pdf> and <http://www.ferc.gov/industries/gas/enviro/procedures.pdf>.

damaged drainage tiles in coordination with landowners. We conclude that overall effects on soils would be moderate, but temporary and not significant.

Water Resources

MSX and SSE4 would cross numerous groundwater and surface water resources within Mississippi, Alabama, and Georgia. Construction and operation could temporarily affect groundwater through dewatering, trenching, and minor compaction near shallow aquifers. Groundwater depths would vary from less than 5 feet to over 80 feet below ground surface across both project areas. The Companies would implement best management practices to minimize groundwater disturbance, discharge water from dewatering into vegetated upland areas through filter bags, and adhere to applicable federal and state permits. Neither project would cross any sole source aquifers. There are 16 wellhead protection areas and 14 water protection areas would occur within 0.25-mile of MSX, while SSE4 would cross four community groundwater systems. The Companies would offer pre- and post-construction sampling for public and private wells within 150 feet of the construction workspace to verify water quality and yield. Although karst features would be present in portions of the SSE4 area, construction methods and mitigation measures would minimize potential effects on these groundwater systems.

The projects would cross extensive surface water networks. MSX would cross 869 waterbodies, including 115 perennial streams and four navigable rivers, one of which is a Nationwide Rivers Inventory (NRI) watercourse. SSE4 would cross 1,342 waterbodies, including 400 perennial streams, including three NRI rivers. Of these, MSX would include 17 major crossings and SSE4 would have seven. Both projects would use HDD for specific crossings, including the NRI river crossings to avoid direct contact with waterbodies and reduce turbidity. Where open-cut or dry crossing methods would be required, streambeds and banks would be restored to preconstruction conditions. Short-term increases in turbidity, sedimentation, and temperature would be possible, but these effects would be temporary and localized.

The Companies would each require substantial water volumes for hydrostatic testing and horizontal drilling; approximately 87 million gallons would be required for MSX and 108 million gallons for SSE4. Water withdrawals would occur under state and federal permits to ensure minimal disruption to aquatic life and downstream users. Withdrawal and discharge rates would be controlled to maintain flow conditions and prevent erosion. No chemicals would be added to test water, which would be filtered and returned to upland areas following testing. Final water withdrawal and discharge volumes would be provided prior to construction.

Potential adverse effects on impaired or sensitive waters would be minimized using best management practices such as silt fencing, sediment barriers, and staged clearing to control stormwater runoff. MSX would cross three impaired waters in Mississippi, and SSE4 would cross twenty in Mississippi, Alabama, and Georgia combined. The Companies would avoid refueling within 100 feet of a waterbody, store hazardous materials in upland areas, and operate under Spill Prevention and Control Plans to prevent contamination (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]). Where blasting would be required near surface waters, it would follow controlled procedures to minimize turbidity and streambed disturbance.

Floodplain crossings would occur at 881 acres for MSX and 500 acres for SSE4, primarily in Zone A and AE risk areas. Design measures such as elevated facilities and flood-resistant construction would minimize potential flood-related effects.

Overall, the Companies would mitigate potential water resource effects by adhering to their project-specific Plans and Procedures, state permitting requirements, and ongoing consultation with regulatory agencies to ensure water quality protection throughout construction and operation. Based on the proposed avoidance and mitigation measures, we conclude that effects on groundwater and surface water resources would be temporary and not significant. The Projects would not result in any long-term or irreversible effects on water quality or availability.

Wetlands

Construction and operation of MSX and SSE4 would affect multiple palustrine wetland types, including palustrine forested wetland, palustrine scrub-shrub wetland, and palustrine emergent wetlands. The majority of wetland effects would occur during construction from clearing, trenching, compaction, and temporary hydrologic alteration. These effects would generally be short term, with wetland vegetation expected to naturally revegetate following restoration.

For MSX, construction and operation would permanently convert approximately 66.9 acres of forested and scrub-shrub wetlands to emergent and scrub-shrub wetlands due to right-of-way clearing and ongoing vegetation maintenance within the permanent right-of-way. Additionally, TGP would permanently fill 0.1-acre of forested wetlands to construct Station 606A and 1.8 acres of wetlands for permanent access roads. Temporary wetland disturbance would also occur within and adjacent to the right-of-way. SSE4 would result in approximately 3.3 acres of permanent wetland fill, 46.4 acres of permanent wetland conversion, and 173.5 acres of temporary conversion. Permanent effects would primarily involve conversion of about 38.1 acres of palustrine forested wetland and 7.1 acres of palustrine scrub-shrub wetland wetlands to emergent types due to tree clearing and right-of-way maintenance.

Both projects would use open-cut installation methods for wetland crossings, with reduced construction corridors to minimize disturbance. Equipment mats and low-pressure ground vehicles would be used to reduce rutting and compaction in saturated areas. Excavated soils would be temporarily stockpiled outside wetland boundaries, and restoration would include grading and revegetation using native species. Refueling and fuel storage would occur at least 100 feet from wetlands (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]), and secondary containment would be used where closer siting is unavoidable.

The Companies would follow their project-specific Plans and Procedures, Clean Water Act Section 404 permits, and U.S. Army Corps of Engineers and state agency requirements to avoid, minimize, and mitigate effects. Temporary effects would be restored to preconstruction conditions, while permanent losses and conversions would be offset through compensatory mitigation, as required by the section 404 permit. The Companies would monitor wetlands for at least three years to ensure successful revegetation and hydrologic recovery, implementing adaptive management or additional mitigation if restoration performance standards are not met.

With the implementation of avoidance, minimization, and compensatory mitigation measures, we conclude that effects on wetland resources from MSX and SSE4 would not be significant. Temporary construction effects would be restored to preconstruction conditions through grading, stabilization, and revegetation, while permanent wetland losses and conversions would be compensated through the section 404 permit process. Over the long term, the Projects are expected to maintain wetland functions and values within the affected watersheds.

Vegetation

Construction and operation of MSX and SSE4 would temporarily and permanently affect vegetation across multiple ecoregions. Vegetation types in these areas include upland forests, agricultural and rangeland, open land, and developed areas. MSX would disturb about 4,202 acres of vegetated land, including approximately 1,589 acres of agricultural or rangeland and 822 acres of upland forest. SSE4 would affect about 6,851 acres of vegetated land, including roughly 1,404 acres of upland forest and 217 acres of agricultural or rangeland. Most effects would be temporary, resulting from clearing, grading, and construction traffic, while permanent effects would include conversion of forested lands to herbaceous or shrub-dominated communities within the maintained right-of-way.

Forested areas would experience the most substantial and lasting effects due to the time needed for mature tree canopy and structure to reestablish. Both projects would also result in localized losses of pollinator and wildlife habitat, and a temporary increase in erosion risk where groundcover is removed. In agricultural regions, disturbance to crops and grazing areas would be short term, with land restored following construction. Vegetation clearing could also increase susceptibility to invasive species.

To minimize vegetation effects, the Companies would adhere to their project-specific Plans and Procedures, Stormwater Pollution Prevention Plans, and project-specific Noxious and Invasive Weed Control Plans. These measures would include limiting clearing to the minimum area necessary for safe construction, segregating topsoil to support revegetation, applying temporary seed mixes where needed to control erosion, and using certified weed-free materials. Equipment would be cleaned before entering the construction area to prevent the spread of invasive species, and disturbed areas would be stabilized and seeded promptly after construction.

With implementation of these measures, we conclude that the vegetation effects from both projects would be short- to long-term, with some permanent effects that would be moderate in magnitude. Overall, the effects on vegetation would not be significant.

Wildlife and Fisheries

Construction and operation of MSX and SSE4 would affect a range of terrestrial and aquatic wildlife habitats, including upland forests, agricultural fields, wetlands, and open waters. Habitat loss, fragmentation, and temporary displacement of wildlife would occur primarily during construction due to vegetation clearing, excavation, and increased human activity. Both projects would temporarily disturb mobile species that would move to adjacent habitats, while smaller or less mobile species could experience mortality or injury. Forested areas would experience long-term effects where they are converted to open or scrub-shrub habitat for pipeline maintenance.

MSX and SSE4 would cross several sensitive habitats, including the Big Black, Tallapoosa, Flint, and Oconee rivers, as well as managed lands such as the Natchez Trace Parkway, Bartram Forest Wildlife Management Area, and Little Creek Community Preserve. These areas provide habitat for deer, wild turkey, waterfowl, and numerous fish species. Construction activities could temporarily affect wildlife corridors, pollinator habitats, and aquatic ecosystems, though most effects would be localized. Temporary lighting and noise during nighttime work could alter nocturnal behavior and migration patterns but would be minimized through light shielding and limiting activity to essential work areas.

Both projects would cross a combined total of more than 2,000 waterbodies, including perennial and intermittent streams that support warmwater fisheries. Short-term increases in turbidity and sedimentation could temporarily reduce dissolved oxygen and disturb aquatic species. However, the majority of sensitive waterbody crossings, including the Big Black, Tallapoosa, Flint, Ogeechee and Oconee rivers, would use HDD to avoid direct streambed disturbance. Smaller waterbodies would be crossed with dry or flume methods to maintain downstream flow and limit sediment transport. Minor and intermediate waterbodies may be crossed using a wet open cut method, or as otherwise permitted.

The Companies would minimize effects on wildlife and fisheries through implementation of their project-specific Plans and Procedures, state and federal permit conditions, and best management practices. These would include seasonal restrictions on clearing to protect nesting birds and bats, preconstruction wildlife surveys, use of escape ramps in open trenches, and coordination with the FWS for protected species. To prevent sedimentation, the Companies would stabilize streambanks, restore channels to preconstruction contours, and revegetate disturbed areas. Erosion and runoff controls such as silt fencing and filter barriers would be used, and crews would clean equipment to prevent the spread of invasive species.

Mitigation for effects on aquatic resources would also include limiting in-stream work to low-flow conditions, installing screened water intakes for hydrostatic testing, and discharging test water to upland vegetated areas. Long-term monitoring of restoration areas would ensure revegetation and habitat recovery. With these measures, the Companies would minimize temporary disturbance to wildlife, migratory birds, and fisheries while maintaining compliance with applicable federal and state conservation requirements.

Overall, wildlife and aquatic effects of MSX and SSE4 would be temporary, minor, and minimized effectively through the application of avoidance, mitigation, and restoration measures. We therefore conclude that no significant adverse effects on regional wildlife populations or habitat functions would be anticipated.

Protected Species

MSX and SSE4 would occur in areas that support numerous federally and state-listed threatened, endangered, and proposed species.⁷ TGP identified nine federally listed and four

⁷ Due to the current proposed status of tricolored bat, we are requesting formal conferencing with the FWS for both Projects. Should the remaining proposed species become listed before construction is complete, we request concurrence with our determination that the Projects *may affect, but are not likely to adversely affect* these species.

proposed species, with no critical habitat. For SSE4, SNG/EEC identified 28 federally listed and seven proposed species, including critical habitat for several species such as the Ocmulgee skullcap (GADNR, 2020c), finelined pocketbook, gulf moccasinshell (GADNR, 2019a), Alabama sturgeon (FWS, 2025a), and Atlantic sturgeon among others. State coordination across Mississippi, Alabama, and Georgia also identified additional species of concern that could occur within the project areas.

Potential effects on protected species would primarily result from temporary vegetation clearing, habitat alteration, construction noise, and ground disturbance. Aquatic species could be affected by sedimentation or turbidity during in-stream construction, while terrestrial species could experience habitat fragmentation or displacement. Forest clearing could affect roosting or nesting bats and birds, while trenching could pose a risk to ground-dwelling species. Construction through areas of critical habitat could affect aquatic mussels, fish, and riparian vegetation, although trenchless crossing methods would be used in certain locations to avoid direct disturbance.

The Companies would minimize effects on protected species through avoidance, timing restrictions, and habitat restoration measures developed in consultation with the FWS, the National Oceanic and Atmospheric Administration (NOAA), and state wildlife agencies. The Companies have initiated informal consultation with FWS and NOAA under section 7 of the Endangered Species Act and are coordinating with state agencies to refine conservation measures. Field habitat assessments have been completed on accessible parcels, and species-specific surveys are ongoing through 2026. To ensure compliance with the Endangered Species Act, we recommend that any Commission authorization for the Projects require that construction may not begin until Endangered Species Act consultations are complete.

In accordance with FWS informal consultation, TGP would limit tree clearing within 1.5 miles of northern long-eared bat to certain seasonal windows to protect the northern long-eared bat and tricolored bat (FWS, 2025d/e/f/g). Construction personnel would receive environmental training to identify and protect sensitive species, inspect open trenches daily, and implement right-of-way vegetation management to maintain habitat suitability. SNG and EEC would employ trenchless methods for crossings within certain designated critical habitat, direct lighting away from sensitive areas, and install erosion and sediment controls to prevent runoff into aquatic habitats.

Both projects would collocate new facilities along existing rights-of-way to reduce new habitat disturbance and fragmentation. Approximately 27 percent of the proposed MSX Mainline and more than 90 percent of SSE4 loops would be collocated with existing infrastructure. The Companies would continue consultation with FWS and state agencies until concurrence is reached on mitigation and effect determinations, ensuring that avoidance and minimization measures would be implemented before construction begins.

FERC has determined MSX is *likely to adversely affect* the northern long-eared bat and tricolored bat and *may affect, but is not likely to adversely affect* six federally listed species and three proposed species. MSX would have *no effect* on the remaining federally listed species. These determinations are based on existing presence or absence data, habitat surveys, and species-specific surveys completed by TGP, and a commitment by the applicant to implement conservation measures developed in consultation with state and federal agencies. To comply with section 7 of

the ESA, FERC is requesting that the FWS consider this final EIS and the MSX Biological Assessment (see appendix O) and enter into formal consultation for the northern long-eared bat, and conferencing for the tricolored bat. We also request FWS concurrence with the effect determinations in section 4.7.

FERC has determined that SSE4 is *likely to adversely affect* relict trillium and tricolored bat and *may affect, but is not likely to adversely affect* twenty-three federally listed species and four proposed species. In addition, FERC has determined SSE4 is *not likely to adversely affect* critical habitat for all federally listed species, except the Ocmulgee skullcap and Georgia rockcress, which would have *no effect* on critical habitat associated with those species. SSE4 would have *no effect* on the remaining federally listed species. FERC has also determined that SSE4 *may affect, but is not likely to adversely affect* the two species under NOAA's jurisdiction, the shortnose sturgeon and Atlantic sturgeon. Additionally, FERC has determined SSE4 is *not likely to adversely affect* critical habitat for the Atlantic sturgeon. These determinations are based on existing presence or absence data, habitat surveys, and site-specific species surveys completed by SNG and EEC, and their commitment to implement conservation measures developed in consultation with state and federal agencies. To comply with section 7 of the ESA, FERC is requesting that the FWS consider this final EIS and the SSE4 Biological Assessment (see appendix P) and enter into formal consultation for the relict trillium, and conferencing for the tricolored bat. We also request FWS concurrence with the effect determinations in section 4.7.

Land Use, Recreation, Special Interest Areas, and Visual Resources

Construction and operation of MSX and SSE4 would temporarily and permanently affect land use, recreation, special interest areas, and visual resources across multiple states. Both projects would cross agricultural, forested, and developed lands, as well as public and conservation areas. Most effects would occur within existing utility corridors, minimizing new disturbance and fragmentation. Some agricultural and silvicultural land would be restored after construction, however forested and silvicultural lands within the right-of-way would remain permanently converted to open land. Forested and silvicultural lands that would be temporarily affected during construction may take decades to revegetate to pre-construction conditions, resulting in long-term effects.

Effects on residential areas would be limited to temporary disturbances such as access restrictions and construction noise near identified dwellings. The Companies prepared site specific residential plans for the residences within 25 feet of Project workspaces. To ensure protection of residential properties and effective landowner coordination, we encourage the owners of each of these residences to provide us comments on the plan for their individual property.

Both projects would cross public and managed lands but would avoid long-term effects through the use of HDD and other low-impact construction techniques. MSX would cross the Natchez Trace Parkway and Big Black River (NRI listed), all managed by the NPS. TGP would install the pipeline using HDD beneath these features, avoiding surface disturbance and maintaining recreational access and scenic quality. SSE4 would cross three rivers listed on the NRI (the Tallapoosa, Flint, and Oconee rivers) using HDD to minimize disturbance. To ensure protection of NRI segments as well as the crossing of the Natchez Trace Parkway and the Natchez Trace National Scenic Trail, the Companies consulted with the NPS and agreed to certain

recommended construction practices. Consultations under Section 5(d) of the National Wild and Scenic Rivers Act are complete for MSX and SSE4.

The Projects would cross several state, conservation, and special use lands. The Companies would coordinate with the affected landowners and land managing agencies to avoid adverse effects on these properties. Areas temporarily disturbed would be restored and reseeded with native vegetation.

Overall, the Companies would mitigate land use, recreation, and visual effects by adhering to project-specific Plans and Procedures, consulting with affected agencies and landowners, restoring temporary workspaces, and implementing erosion control, revegetation, and aesthetic design measures. Through these practices, the Companies would limit permanent land conversion, maintain compatibility with existing land uses, and preserve the visual and recreational integrity of the Project corridors. We conclude that land use and visual effects would be minimized and remain compatible with existing conditions, and the Projects would not substantially alter the overall character or use of the affected areas.

Cultural Resources

MSX and SSE4 would occur within areas rich in prehistoric and historic cultural resources. Both projects would cross regions with long histories of Native American occupation and European settlement, containing archaeological sites, standing historic structures, and potential traditional cultural properties. For MSX, surveys across 208 miles of pipeline identified 146 new archaeological sites, revisited 38 previously recorded sites, and identified 92 potentially eligible within Mississippi and Alabama. For SSE4, investigations across Mississippi, Alabama, and Georgia identified 111 new archaeological resources, including 16 potentially eligible or unevaluated sites, as well as 19 to 196 historic structures depending on the state. Most resources were not eligible for listing in the National Register of Historic Places. A total of 102 sites with eligibility potential, such as prehistoric artifact scatters, mounds, and historic cemeteries, would be protected through avoidance measures, reroutes, or the use of trenchless construction techniques such as HDD. Based on the cultural resources investigations for the Projects, the State Historic Preservation Officers concurred with the Companies' recommendations that the Projects would have no adverse effect on historic properties. FERC agrees.

The Companies have developed and submitted Unanticipated Discoveries Plans for all affected states to guide contractors in identifying and treating cultural resources or human remains encountered during construction. These plans include procedures for halting work, notifying FERC, State Historic Preservation Officers, and Tribal Historic Preservation Officers or tribal representatives, and ensuring that any discoveries are evaluated by qualified cultural resource specialists.

The Companies have provided project information and contacted consulting parties under section 106 of the National Historic Preservation Act (NHPA) with the Mississippi, Alabama, and Georgia State Historic Preservation Officers, as well as with Tribal nations including the Alabama-Coushatta Tribe of Texas; the Alabama-Quassarte Tribal Town; the Catawba Indian Nation; the Cherokee Nation; the Choctaw Nation of Oklahoma; the Coushatta Tribe of Louisiana; the Eastern Band of Cherokee Indians; the Eastern Shawnee Tribe of Oklahoma; the Mississippi Band of Choctaw Indians; the Muscogee (Creek) Nation; the Quapaw Nation; and the Seminole Tribe of

Florida. FERC also contacted the above-mentioned Tribes along with additional Tribes that were identified as having interest in the two Project areas. Those Tribes include the Absentee Shawnee Tribe of Indians of Oklahoma; the Chickasaw Nation; the Chitimacha Tribe of Louisiana, the Jena Band of Choctaw Indians; the Kialegee Tribal Town; the Poarch Band of Creek Indians; the Quapaw Nation; the Thlopthlocco Tribal Town; and the Tunica-Biloxi Indians of Louisiana.

FERC has completed its compliance requirements under Section 106 of the NHPA for the MSX and SSE4 Projects.

Air Quality

MSX and SSE4 would result in temporary and long-term emissions that could affect local and regional air quality. Both projects would occur in areas classified as attainment or unclassified for all National Ambient Air Quality Standards pollutants, except for a small portion of Bibb County, Georgia, which is designated as a maintenance area for ozone and fine particulate matter (PM_{2.5}). During construction, short-term emissions would occur from fuel combustion in construction equipment and vehicles, fugitive dust from ground disturbance and traffic on unpaved roads, and limited emission releases. Construction emissions in Bibb County would not exceed thresholds that would require a general conformity determination.

Operational emissions would result primarily from compressor station turbines, heaters, generators, and occasional gas releases during maintenance or emergency blowdowns. For SSE4, facility upgrades and replacements would produce an overall decrease in major pollutant emissions. Air dispersion modeling for all compressor stations indicated that maximum predicted concentrations of all pollutants would remain below the EPA's Prevention of Significant Deterioration (PSD) Class II Significant Impact Levels and the National Ambient Air Quality Standards; therefore, operational emissions would not be expected to result in violations of federal or state air quality standards. The Companies have proposed high-efficiency turbines and would incorporate improved emission control technologies, which includes high-efficiency turbines, turbochargers, intercoolers, and pre-combustion chambers, to minimize air pollutant emissions. By constructing and maintaining modern emission controls and coordinating construction practices to reduce dust and exhaust, the Projects would effectively mitigate air quality effects during construction and operation.

The Projects would be required to comply with all applicable federal and state air quality standards. We conclude that the air quality effects from construction and operation would be minor and would not result in significant effects on air quality.

Noise

Construction and operation of MSX and SSE4 would temporarily and permanently increase noise levels in areas near compressor stations, meter stations and HDD sites. Noise sensitive areas (NSAs) identified within one-mile of these locations include homes, schools, churches, and recreation sites. Most construction-related noise would occur during daytime hours between 7:00 a.m. and 7:00 p.m., but certain HDD activities and specialized operations could extend into nighttime hours. During construction, short-term increases in ambient sound levels would result from the operation of heavy machinery, material handling, and vehicle traffic. HDD activities, pile driving at select compressor station foundations, and generator use at contractor yards would

be the primary contributors to temporary elevated noise levels. The largest temporary noise increases would occur at HDD crossings. Unmitigated construction noise levels for the Belmont Road HDD crossing on MSX and Oconee River HDD on SSE4 are predicted to exceed the Commission's nighttime sound level limit of 55 decibels on the A-weighted scale (dBA) on a day-night average (L_{dn}). TGP proposed noise mitigation for the Belmont Road HDD including an acoustical barrier and relocation of the mud system to reduce predicted noise levels to no more than 55 dBA L_{dn} . Because the barrier layout and equipment used in the modeling study are preliminary, we recommend that any Commission authorization for the Projects require TGP to file a Belmont Road HDD noise mitigation plan to outline the specific noise controls it would use to ensure compliance with the Commission's noise threshold, and that TGP monitor and document the noise levels in its construction status reports. Additionally, we recommend that any Commission authorization for the Projects require SNG and EEC to file noise mitigation plans for the Oconee River HDD crossing.

The Companies would mitigate construction noise by confining work to daytime hours where feasible, maintaining equipment in good working order, installing temporary acoustical barriers, and using equipment with manufacturer-approved noise control devices. SNG and EEC propose nighttime construction during the peak construction phase of the compressor and meter stations. To minimize the effects of noise on nearby NSAs, we recommend that any Commission authorization for the Projects require SNG and EEC to file a mitigation plan to reduce nighttime construction noise at certain compressor and meter stations, to ensure noise levels do not exceed 55 dBA L_{dn} at NSAs.

Operational noise would primarily originate from compressor station turbines, motors, and auxiliary equipment. Noise mitigation would include installation of high-performance silencers on compressor intake and exhaust systems, acoustic insulation for piping and building structures, and the use of sound-rated doors and walls. Station ventilation systems would be designed to maintain interior sound isolation while allowing safe operation. MSX predicted L_{dn} at nearby NSAs would range from 36.7 to 53.0 decibels at compressor stations and from 44.3 to 54.9 decibels at meter stations after mitigation. For SSE4, modeled L_{dn} values at NSAs would range from 32.9 to 52.0 decibels for compressor stations and from 15.3 to 51.2 decibels for meter stations. Additionally, we recommend that any Commission authorization for the Projects require the Companies to file post-construction noise surveys within 60 days of placing the compressor stations and certain meter stations in service, verify that noise levels do not exceed an L_{dn} of 55 dBA at nearby sensitive areas, and implement and document additional noise controls within one year if exceedances occur. With the implementation of these mitigation measures, both projects would minimize short-term construction noise and ensure that operational sound remains within acceptable limits for surrounding communities.

With the implementation of the proposed and recommended mitigation measures, we conclude that MSX and SSE4 would not result in significant effects from noise generated during construction and operation. Overall, temporary construction noise would be minimized and operational sound would remain within FERC's noise threshold, and effects on surrounding communities would be minor and not significant.

Cumulative Effects

The Projects could incrementally contribute to minor cumulative effects on geology, soils, water resources, wetlands, vegetation, wildlife, air quality, noise, and socioeconomics. Disturbance from ground clearing, trenching, grading, and installation of aboveground facilities could temporarily alter topography, increase erosion, or reduce habitat quality. The overlapping construction schedules of nearby infrastructure, transportation, or industrial projects could intensify these short-term effects. However, because most of these activities would be confined to existing disturbed corridors or developed areas, their potential to contribute to broader cumulative effects would remain limited.

Cumulative land use and visual effects would arise where new facilities cluster with other industrial or infrastructure developments, resulting in localized changes in landscape character and visual contrast. Recreational access and experience could be temporarily affected by construction-related traffic and noise, but the use of trenchless crossing methods and coordination with land managers would protect sensitive areas.

The Projects would mitigate adverse effects through established regulatory compliance and site-specific management plans including project-specific Plans and Procedures, Erosion Control and Mitigation Plans, and Spill Prevention and Contingency Plans to minimize erosion, sedimentation, and spills. Wildlife and vegetation would be protected through timing restrictions, avoidance buffers, and habitat restoration. Air quality and noise would be controlled through equipment standards, limited idling, dust suppression, and compressor station noise attenuation. Through these measures, MSX and SSE4 would substantially avoid or minimize adverse effects. Residual cumulative effects would be minor, temporary, and confined to areas immediately surrounding construction and operation activities. We conclude that when added to other past, present, and reasonably foreseeable actions, the cumulative effects of the Projects on environmental resources would not be significant.

Alternatives Considered

We considered and evaluated alternatives to the proposed Projects, including the no-action alternative, system alternatives, and route variations to determine whether other configurations would meet project objectives while reducing environmental effects. Each option was compared to the proposed action based on whether it would meet the Projects' purpose, be technically and economically feasible, and offer an environmental advantage. Alternatives that failed any of these criteria were dismissed.

The no-action alternative would avoid all environmental effects of the Projects but would not satisfy the purpose of providing additional natural gas capacity (2.1 million Dth per day for MSX and 1.3 million Dth per day for SSE4) to meet energy needs in the Southeast. This alternative would not meet the contracted demand for firm transportation delivery. The Commission will ultimately determine the Projects' needs in its Order for the Projects and could select the no-action alternative.

System alternatives for MSX and SSE4 were reviewed to identify whether existing pipeline systems could provide comparable capacity. For MSX, rerouting through existing infrastructure would require significantly greater pipeline mileage and an increase in adverse effects on

residential and environmental resources. For SSE4, we did not identify any other existing systems that have both sufficient unsubscribed capacity and the necessary geographic reach to provide firm natural gas service to the proposed delivery points as required by the project shippers. Therefore, neither project's objectives could be met through existing systems.

Major and minor route alternatives were developed to avoid sensitive resources and respond to landowner input. MSX major route options were rejected because they would have increased total length or due to constructability issues. For SSE4, alternatives for several loops were found to affect more residences or developed areas. Minor modifications to routing or construction techniques on SSE4 may further address landowner concerns. SNG/EEC is continuing consultations on Loop D1 and L1 and would file updates on landowner negotiations along with submission of its Implementation Plan. We did not receive comments regarding alternative locations for any of the new or expanded above ground facilities. We did not identify any significant environmental issues with any of the proposed facility sites and did not evaluate aboveground facilities further.

We conclude that the preferred configurations for MSX and SSE4 would best achieve the intended purpose while minimizing environmental effects. Some alternatives could offer localized environmental advantages; however, none would achieve the same overall balance of technical feasibility, operational practicality, and environmental considerations as the proposed configuration. Minor modifications to routing or construction techniques may further address landowner concerns. The proposed action (the preferred alternative) would not result in significant adverse effects on the human environment.

Major Conclusions

We determined that construction and operation of MSX and SSE4 would result in some adverse effects on existing environmental conditions; however, effects would be avoided, minimized, or mitigated to less than significant levels through the Companies' proposed and our recommended mitigation measures. These determinations are based on extensive review of environmental data, site-specific analyses, coordination with federal and state agencies, consultation with Native American tribes, and comments received from the public during scoping and review periods.

Although many factors were considered in these determinations, the principal reasons are:

- The Companies would minimize effects on natural, cultural, and human resources through implementation of approved plans and procedures, including the project-specific Plans and Procedures; Erosion and Sediment Control Plans; Spill Prevention, Control, and Countermeasure Plans; Wetland and Waterbody Mitigation Plans; Blasting Plans; HDD Contingency Plans; Fugitive Dust Control Plans; Invasive Species Management Plans; Site-Specific Residential Construction Plans; and Visual Screening and Lighting Plans.
- The Companies would collocate new pipeline segments along existing utility and transportation corridors to the greatest extent practicable, thereby reducing new disturbance and long-term fragmentation of forested lands.

- FERC staff would complete consultation under section 7 of the Endangered Species Act and section 106 of the NHPA, prior to start of construction, ensuring compliance with federal requirements for protected species and cultural resources.
- The Companies would be required to comply with all applicable federal and state air quality regulations.
- An environmental inspection and monitoring program would be implemented to verify that the Companies and their contractors adhere to all required mitigation measures and environmental commitments throughout construction and operation.

In addition, we recommend that any Commission order approving the Projects include the project-specific mitigation measures presented in section 5.2 of the EIS as mandatory conditions. These measures are necessary to further reduce or avoid environmental effects and to ensure that the Projects are constructed and operated in a manner that protects the surrounding natural and human environment. We conclude that with the successful implementation of these measures, MSX and SSE4 would not result in significant long-term adverse environmental effects.

1 INTRODUCTION

The vertical line in the margin identifies text that is new or modified in the final EIS and differs materially from corresponding text in the draft EIS. Changes were made to address comments from the Applicants, agencies, and other stakeholders on the draft EIS.

The Federal Energy Regulatory Commission (FERC or Commission) staff prepared this final Environmental Impact Statement (EIS) to assess the potential environmental effects that could result from the construction and operation of interstate natural gas pipeline facilities proposed by Tennessee Gas Pipeline Company, LLC (TGP), Southern Natural Gas Company, LLC (SNG), and Elba Express Company, LLC (EEC).

On June 30, 2025, TGP filed an application under Docket No. CP25-514-000 to construct, operate, and maintain interstate natural gas pipeline facilities in Mississippi and Alabama. TGP's proposal, referred to in this EIS as the Mississippi Crossing Project (MSX), would involve the construction and operation of approximately 208 miles⁸ of new natural gas pipeline and laterals as well as multiple aboveground facilities, as follows:

- Approximately 199 miles of new 42-inch (177 miles) and 36-inch-diameter (22 miles) natural gas pipeline in Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties, Mississippi and Choctaw County, Alabama;
- Five new natural gas laterals:
 - Seven-mile-long, 36-inch-diameter Columbia Gulf Transmission (CGT) Lateral in Humphreys and Sunflower counties, Mississippi;
 - one 0.7-mile-long, 30-inch-diameter Texas Gas Transmission, LLC (Texas Gas) Lateral in Attala County, Mississippi;
 - one 0.9-mile-long, 30-inch-diameter Texas Eastern Transmission, LP (Tetco) Lateral in Attala County, Mississippi;
 - one 0.1-mile-long, 30-inch-diameter TGP 500 Lateral in Attala County, Mississippi;
 - one 0.5-mile-long, 36-inch-diameter Transcontinental Gas Pipe Line Company (Transco) Lateral in Choctaw County, Alabama;
- Three new natural gas compressor stations:
 - Station 602: a 95,700 International Organization for Standardization (ISO) horsepower (HP) station in Humphreys County, Mississippi;
 - Station 606A: a 23,470 ISO HP station in Attala County, Mississippi;
 - Station 610: a 63,800 ISO HP station in Lauderdale County, Mississippi;
- Modifications at existing Compressor Station 54 in Washington County, Mississippi
- Four new meter stations;

⁸ Pipeline length obtained from TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

- Three new overpressure protection (OPP) facilities;⁹ and
- Appurtenant facilities such as mainline valves (MLVs), cathodic protection, and pipeline inspection gauge (pig)¹⁰ trap facilities throughout the MSX area.¹¹

Also on June 30, 2025, SNG and EEC filed an application in Docket No. CP25-517-000 to construct, operate, and maintain interstate natural gas pipeline facilities in Mississippi, Alabama, and Georgia. SNG and EEC’s proposal, referred to in this EIS as the South System 4 Expansion Project (SSE4), would interconnect with MSX and involve the construction and operation of the following:

- 22 natural gas pipeline loops, organized into 14 segments, totaling approximately 291 miles, primarily parallel to SNG’s existing South Main Line in Clarke and Lauderdale counties, Mississippi; Sumter, Marengo, Perry, Dallas, Autauga, Elmore, Tallapoosa, Macon, Hale, and Lee counties, Alabama; and, Clayton, Muscogee, Harris, Talbot, Upson, Crawford, Monroe, Bibb, Jones, Baldwin, Glascock, Jefferson, Richmond, Spalding, Henry, Lowndes, Burke, Screven, Cobb, Chatham, and Effingham counties, Georgia;
- Modification of 12 existing compressor stations along SNG’s existing South Main Line;
- 2 new meter stations along SNG’s existing South Main Line;
- Upgrades at 7 existing meter stations along SNG’s existing South Main Line;
- Modification of 2 existing compressor stations along EEC’s Elba Express Pipeline;
- One new meter station on EEC’s Elba Express Pipeline; and,
- Abandonment of approximately 4.4 miles of SNG’s existing 16-inch-diameter K Gen Lateral in Clarke County, Mississippi.¹²

We¹³ issued a Notice of Application for each project (collectively referred to as “the Projects”) on July 15, 2025, and the notices appeared in the *Federal Register* (FR) on July 18, 2025.¹⁴

1.1 PROJECTS PURPOSE AND NEED

1.1.1 Mississippi Crossing Project

According to TGP, the purpose of MSX is to meet the growing demand for access to multiple, diverse supply basins by providing firm transportation from TGP’s existing system and other third-party pipelines to markets in the southeast region, which would enable gas providers in the southeast to compete for new commercial and industrial loads, thus helping to lower energy

⁹ An OPP facility is a critical safety installation that uses a combination of specialized equipment to prevent pressure in a pipeline from exceeding safe limits.

¹⁰ A “pig” is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes.

¹¹ Project description obtained from the MSX September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

¹² Project description obtained from the SSE4 August 26, 2025, Supplemental Filing (Accession no.: 20250826-5140).

¹³ The pronouns “we,” “us,” and “our” refer to the environmental staff of FERC’s Office of Energy Projects.

¹⁴ *Federal Register* / Vol. 90, No. 136 / Friday, July 18, 2025 / Notices (2025-13534).

costs. MSX would help meet the increasing market demand of residential, commercial, and industrial customers and new electric generation fueled by reliable natural gas supplies. The MSX Project would receive natural gas from TGP's existing pipeline system and third-party pipeline connections and deliver it to multiple delivery points along TGP's existing system, as well as at new interconnections with SNG near Meridian, Mississippi and Transco's Station 85 near Butler, Alabama. To meet this growing energy demand, TGP designed MSX to provide approximately 2.1 billion cubic feet per day (Bcf/d) (equivalent to 2,060,000 dekatherms per day [Dth/d]) of firm natural gas transportation capacity by November 1, 2028. TGP has entered into binding agreements for 90 percent of the long-term transportation capacity that MSX would provide.

1.1.2 South System Expansion 4 Project

According to SNG/EEC, the primary purpose of the SSE4 is to expand its capacity and increase reliability on existing natural gas systems by providing up to 1.3 million Dth/d of firm transportation service from receipt points with TGP near Rose Hill and Meridian, Mississippi (which would include an interconnect with TGP's proposed MSX) to points of delivery in the Southeast U.S. The SSE4 would help meet the increasing market demand of residential, commercial, and industrial customers and new electric generation fueled by natural gas. SNG has executed six commercial agreements for long-term transportation with shippers that, collectively, represent 100 percent of SSE4's proposed capacity along the South Mainline System. EEC has entered into two commercial agreements for 100 percent of the proposed capacity increase on the Elba Express System.

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 of Public Convenience and Necessity (Certificate) to construct and operate them. 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. The Commission may accept the application in whole or in part and can attach engineering and environmental conditions to the Order that would be enforceable actions to assure that the proper mitigation measures are implemented. The Commission bases its decisions on economic issues, including need, and environmental effects. The Commission developed a "Certificate Policy Statement"¹⁵ that established criteria for determining whether there is a need for a proposed project and whether the proposed project would serve the public interest. For each project, the Commission decision, in its Order, would review the need for that project.

1.2 SCOPE OF THE EIS

The topics addressed in this EIS include project alternatives; geology; soils; water resources; wetlands; vegetation; wildlife and aquatic resources; special status species; land use; recreation, special interest areas, and visual resources; socioeconomics; cultural resources; air quality and noise; reliability and safety; and reasonably foreseeable future effects. This EIS describes the affected environment as it currently exists. Our description of the affected environment is based on a combination of data sources, including desktop resources such as

¹⁵ See Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227 (1999), clarified in 90 FERC ¶ 61,128, and further clarified in 92 ¶ 61,094 (2000).

scientific literature and regulatory agency reports, information from resource and permitting agencies, scoping comments, field data collected by the Companies, and our own site visits.

FERC is the lead federal agency for authorizing interstate natural gas transmission facilities under the Natural Gas Act (NGA) and the lead federal agency for preparation of this EIS. This effort was undertaken with the participation and assistance of seven “cooperating agencies” as defined by the National Environmental Policy Act of 1969 (NEPA)¹⁶: the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), the National Oceanic and Atmospheric Administration (NOAA), Alabama Department of Conservation and Natural Resources, and Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP). This EIS provides a basis for coordinated federal decision making in a single document, avoiding duplication among federal agencies in the NEPA environmental review process. In addition to the lead and cooperating agencies, other federal, state, and local agencies may use the EIS in approving or issuing permits for all or parts of the proposed Projects. Federal, state, and local permits, approvals, and consultations for the Projects are described below.

1.3 PUBLIC REVIEW AND COMMENT

On October 31, 2024, SNG/EEC submitted their request to enter into the Commission’s pre-filing process. On November 8, 2024, TGP filed its request also to enter into the Commission’s pre-filing process. At that time, the Companies were in the preliminary stages of design and had not filed a formal application for either project. FERC established its pre-filing process to encourage early involvement of interested stakeholders, facilitate interagency cooperation, and identify and resolve environmental issues before an application is filed and facility locations are formally proposed. On December 6, 2024, the Commission approved SNG/EEC’s and TGP’s request to use the pre-filing process and established pre-filing Docket Nos. PF25-1-000 for SSE4 and PF25-2-000 for MSX. The Companies met with federal, state, county, and local elected officials, as well as county Chambers of Commerce in the project areas as part of community outreach. SNG/EEC hosted 13 in-person open house meetings within the SSE4 project area and one virtual open house between January 14 and March 13, 2025. TGP hosted 10 in-person open house meetings within the MSX project area between January 27 and February 27, 2025. Representatives from FERC were present at these meetings to answer questions regarding the FERC pre-filing process and how to submit comments on the dockets.

On March 3, 2025, we issued a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Planned South System Expansion 4 Project, Mississippi Crossing Project, and Notice of Public Scoping Sessions* which opened a formal public scoping period and announced the date, time, and locations of 11 in-person scoping sessions conducted by FERC staff in areas located near the two projects. These scoping sessions were conducted at the following locations:

- Decatur, Mississippi (3/24/2025);
- Butler, Alabama (3/25/2025);

¹⁶ NEPA of 1969 amended (Pub. L. 91-190, 42 U.S.C. §§ 4321–4347, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, Pub. L. 97-258, §4(b), September 13, 1982, Pub. L. 118-5, June 3, 2023, Pub. L. 119-21, July 4, 2025)

- Selma, Alabama (3/26/2025)
- Tuskegee, Alabama (3/27/2025);
- Belzoni, Mississippi (3/31/2025);
- Hamilton, Georgia (3/31/2025);
- Kosciusko, Mississippi (4/1/2025);
- Macon, Georgia (4/1/2025);
- Meridian, Mississippi (4/2/2025);
- Sandersville, Georgia (4/2/2025); and
- Griffin, Georgia (4/3/2025).

The notices were mailed to our environmental mailing list, which included federal and state resources agencies, elected officials, environmental groups and non-governmental organizations, Native American Tribes, potentially affected landowners (as defined in the Commission's regulations at Title 18 of the Code of Federal Regulations [CFR] Part 157.6), local libraries and newspapers, and other stakeholders who had indicated an interest in the Project. The scoping period closed on April 7, 2025. However, we continued to consider comments received after the close of the scoping period, up until the time we completed our reviews of the application and finalizing this EIS.

On June 30, 2025, the Companies filed their formal FERC applications in Docket Nos. CP25-514-000 for MSX and CP25-517-000 for SSE4. As part of the development phases of each project, the Companies contacted federal, state, and local governmental agencies to inform them about the Projects and to discuss project-specific issues. The Companies also contacted affected landowners to inform them about the Projects and to obtain permission to perform environmental surveys on their land. On July 15, 2025, FERC issued a *Notice of Application and Establishing Intervenor Deadline* for the Projects, which described ways to become involved in the Commission's review of the Projects. The comment periods to intervene or respond to the Notice of Application closed on August 5, 2025. Several companies, organizations, and individuals filed for intervenor status.

On September 5, 2025, FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Mississippi Crossing Project and South System Expansion 4 Project, Request for Comments on Environmental Issues, and Schedule for Environmental Review (NOI)*. The NOI was published in the *Federal Register* on September 10, 2025. The notice was mailed to our environmental mailing list which includes all affected landowners, elected officials, regulatory agencies, and any individuals or groups who have submitted comments to the project dockets or signed up in person during one of our public scoping meetings. Issuance of the NOI opened another 30-day formal scoping period, which expired on October 6, 2025. TGP filed supplemental information for MSX on September 23, 2025, which included minor route adjustments, changes to workspaces and the locations of certain aboveground facilities, updated field survey reports and copies of agency consultations.

SNG/EEC filed supplemental information for SSE4 on August 26, 2025, which included changes to workspaces, minor route adjustments, updated field survey reports, and copies of agency consultations. A second supplemental filing was submitted to FERC on November 5 and 6, 2025. A third supplement was filed on December 16, 2025, and a fourth supplement was filed

on February 17, 2026, which included updates on additional temporary workspaces (ATWS), access roads, and submission of protected species reports and subsequent agency consultation letters.

1.3.1 Scoping Summary

During the scoping periods, we received 62 unique comments for MSX, 99 unique comments for SSE4, and 12 unique comment letters regarding both MSX and SSE4. Comment letters regarding MSX received during the scoping periods included correspondence from landowners, members of the public, the FWS, environmental non-governmental organizations, local and state elected officials, utilities, and pipeline labor unions. Comment letters regarding SSE4 received during the scoping periods included correspondence from landowners, labor unions, non-governmental organizations, homeowners’ associations, and utilities. The environmental comments received are addressed, as applicable, in relevant sections of this EIS, as shown in table 1.3-1. Non-environmental comments, such as those declaring general support or opposition to the Projects, were noted but are considered outside the scope of the EIS. All filed comments are available for public review on the Commission’s website as outlined in the cover letter to this EIS. In addition, appendix B includes a table of comments received during the scoping process for the Projects.

Table 1.3-1: Environmental Issues and Concerns Raised During Public Scoping Periods

| Issue/Concern | SSE4 | MSX | EIS Section Addressing Comment |
|--|------|-----|--------------------------------|
| Landowners are concerned that their land would not be returned to its pre-construction condition, future agricultural use may be limited, property value would decrease, and land would be disturbed | ✓ | ✓ | 4.0 |
| Adverse effect on air quality from potential leaks or compressor stations | ✓ | ✓ | 4.11 |
| Expressed concerns that the pipeline route did not take into consideration the presence of residences and communities in proximity and wanted to know what alternative routes were considered. | ✓ | ✓ | 3.0 |
| Individuals expressed concern regarding the potential degradation of soil and water quality. | ✓ | ✓ | 4.2, 4.3.2.4 |
| Effects from noise pollution in sensitive areas from construction to the clearing of trees and destroying a natural sound barrier | ✓ | ✓ | 4.12 |
| Long term and irreversible effects on wetlands from soil degradation to negative effects on water quality | ✓ | ✓ | 4.4.2.1, 4.4.2.2 |
| Landowners indicated there are protected species and migratory birds’ habitat on their property. | ✓ | ✓ | 4.6, 4.7 |
| Many comments were submitted that simply wanted details on the scope, purpose, and need of the Projects. | ✓ | ✓ | 1.0, 2.0 |
| There are reliability and safety concerns about the pipeline, both when it’s being built and in use | ✓ | ✓ | 4.13 |
| The Projects’ planned routes intersect historical sites and preserved lands with risks of potential destruction | ✓ | ✓ | 4.10 |

Table 1.3-1: Environmental Issues and Concerns Raised During Public Scoping Periods

| Issue/Concern | SSE4 | MSX | EIS Section Addressing Comment |
|--|------|-----|--------------------------------|
| Identified recreational areas that may be affected and worried about restoration practices | ✓ | ✓ | 4.8 |
| Several comments were received concerning the clearing of vegetation which may lead to disruptions of the existing wildlife and other problems | ✓ | ✓ | 4.5 |
| Comments were received regarding water resources concerning the effect Projects may have on groundwater (drinking wells) and surface water. | ✓ | ✓ | 4.3.1.4, 4.3.2.1 |
| Disruption to wildlife from the removal of their habitat to polluting the ecosystem that they rely on for survival | ✓ | ✓ | 4.6 |

1.3.2 Draft EIS Comment Period

On January 30, 2026, we issued a *Notice of Availability of the Draft Environmental Impact Statement for the Proposed Mississippi Crossing Project and South System Expansion 4 Project* (NOA). The NOA was sent to all parties on our environmental mailing list. The draft EIS was filed with the EPA and a formal notice of availability was issued in the Federal Register on February 6, 2026. The official comment period closed on March 23, 2026. We held 11 public comment sessions for the draft EIS between February 23 – March 11, 2026, at the following locations:

- Decatur, Mississippi (2/23/2026);
- Butler, Alabama (2/24/2026);
- Selma, Alabama (2/25/2026)
- Tuskegee, Alabama (2/26/2026);
- Belzoni, Mississippi (3/2/2026);
- Kosciusko, Mississippi (3/3/2026);
- Meridian, Mississippi (3/4/2026);
- Hamilton, Georgia (3/5/2026);
- Macon, Georgia (3/9/2026);
- Sandersville, Georgia (3/10/2026); and
- Griffin, Georgia (3/11/2026).

In response to our notice and at our comment sessions, we received over 400 comments from landowners, public officials, non-government organizations, and government agencies regarding the projects. Each comment, along with our response, is provided in appendix L and all substantive comments received are addressed in the relevant resource sections of the EIS. If a landowner suggested a specific variation to one of the proposed Project routes, it is discussed in section 3.5 and table J.3.0-1.

This EIS has been filed with the EPA, and the Notice of Availability of the EIS is being mailed to the environmental mailing list as described above, including individuals who provided scoping comments or asked to be placed on the mailing list. The distribution list for the Notice of Availability of the EIS is provided in appendix A. A formal notice indicating that this EIS is available will be published in the Federal Register.

1.4 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

Tables I.1.4-1 and I.1.4-2 list the state and federal environmental permits, approvals, and consultations the Companies have identified for construction and operation of the Projects. The tables also provide the dates or anticipated dates when the Companies commenced or anticipate commencing formal permit and consultation procedures. Each of these statutes were considered in the preparation of this EIS, as discussed below. The Companies are responsible for all federal, state, and local permits and approvals required to implement the proposed Projects prior to construction, regardless of whether these permits and approvals appear in the tables.

Based on information provided by the Companies, there may be some areas of the projects that would be located within close enough proximity to existing or future airports, that consultations with the Federal Aviation Administration would be required. SNG/EEC plans to submit FAA Form 7460 for SSE4 work near protected airspace as required under 14 CFR Part 77 prior to the start of construction at the following airports: Perry County Airport, Wetumpka City Airport, South Tallapoosa County Airport, and Griffin-Spalding County Airport.¹⁷

¹⁷ SSE4's April 23, 2026, response to the Commission's April 9, 2026, Environmental Information Request (Accession no.: 20260423-5197).

2 PROJECT DESCRIPTIONS

Sections 2.1 and 2.2 describe MSX and SSE4, respectively. Both projects include the proposed construction and operation of pipelines, compressor stations, meter stations, and other appurtenant facilities.

2.1 MISSISSIPPI CROSSING PROJECT

2.1.1 Pipeline Facilities

According to TGP, the proposed MSX Mainline and the bi-directional laterals would be designed for a maximum allowable operating pressure of 1,440 pounds per square inch. Table 2.1-1 provides a list of proposed MSX pipeline facilities and figure 2.1-1 provides the general locations.

Approximately 52.8 miles¹⁸ (26.5 percent) of the proposed MSX Mainline would be collocated with existing pipeline and electric transmission line rights-of-way, minimizing the creation of new utility rights-of-way. Approximately 6.4 miles¹⁹ of the proposed pipeline would be installed via 12 horizontal directional drills (HDD). TGP proposes a 125-foot-wide construction right-of-way for installation of the pipeline and ATWS of various sizes would be used at the entry and exit points for the HDDs. Approximately 1.9 miles²⁰ (27.7 percent) of the proposed CGT Lateral would be collocated with existing pipeline rights-of-way. TGP proposes a 125-foot-wide construction right-of-way for installation of the CGT Lateral.

Table 2.1-1: Proposed Mississippi Crossing Pipeline Facilities

| Pipeline Name | Diameter (inches) | County, State | Approx. or nearest MP | Description |
|-------------------|-------------------|--|--------------------------------|---|
| MSX Mainline | 42 | Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke, MS | MP 0 - 177 | Install 177 miles of new pipeline. |
| | 36 | Clarke, MS and Choctaw, AL | MP 177 – 199 | Install 22 miles of new pipeline. |
| CGT Lateral | 36 | Humphreys and Sunflower, MS | CGT Lateral MP 0.0 – 7.0 | Install 7 miles of new pipeline lateral. The lateral begins at approx. MP 32 of the MSX Mainline. |
| Texas Gas Lateral | 30 | Attala County, MS | Texas Gas Lateral MP 0.0 – 0.7 | Install 0.7-mile of new pipeline lateral. |
| Tetco Lateral | 30 | Attala County, MS | Tetco Lateral MP 0.0 – 0.9 | Install 0.9-mile of new pipeline lateral. |
| TGP 500 Lateral | 30 | Lauderdale County, MS | TGP 500 Lateral MP 0.0 – 0.1 | Install 0.1-mile of new pipeline lateral. |
| Transco Lateral | 36 | Choctaw County, AL | Transco Lateral MP 0.0 – 0.5 | Install 0.5-mile of new pipeline lateral. |

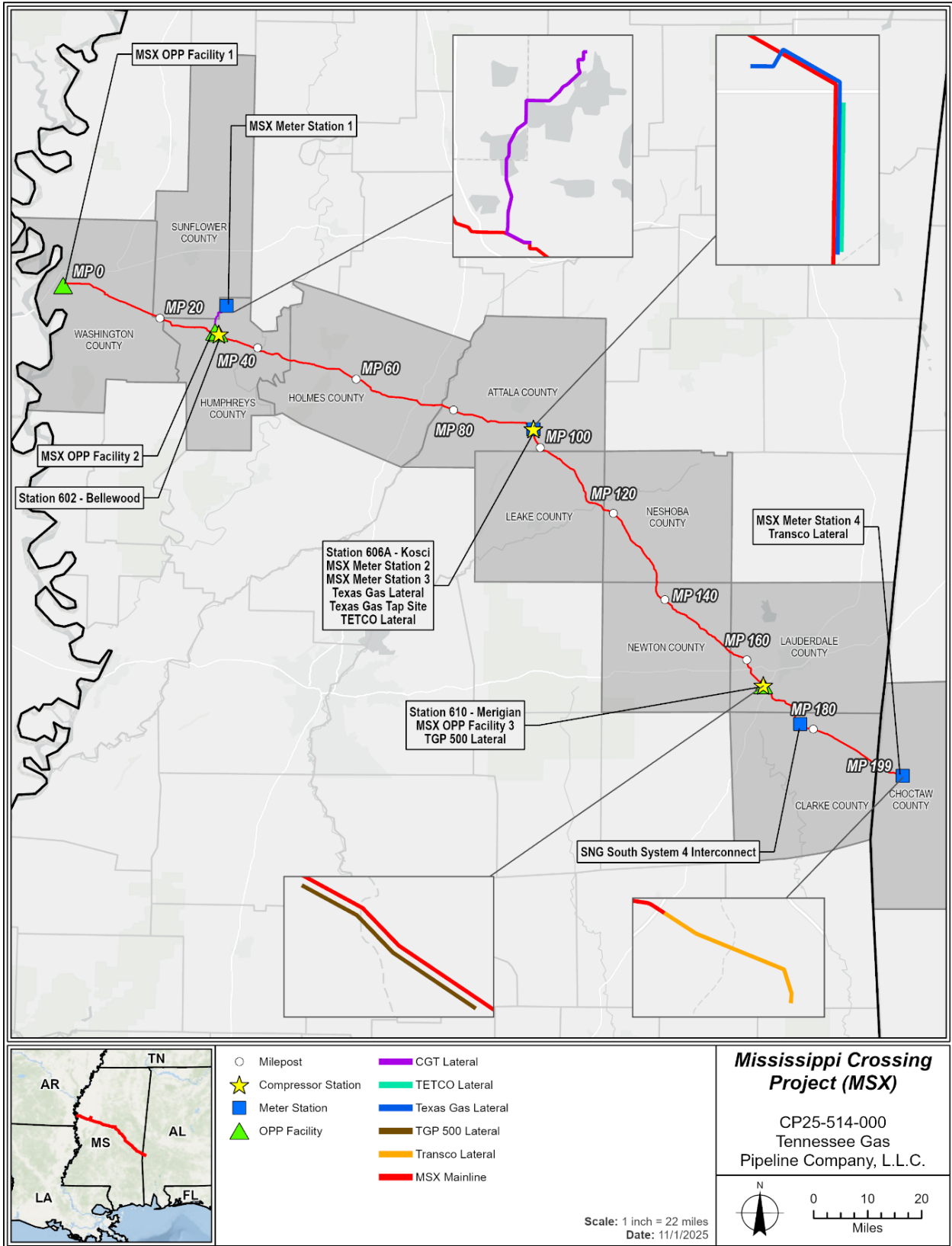
Source: TGP's September 23, 2025, Supplemental Filing (Accession no. 20250923-5058)

¹⁸ Collocation miles obtained from table 1.2-5 of TGP's September 23, 2025, Supplemental Filing. Accession no.: 20250923-5058.

¹⁹ HDD miles obtained from table 1.4-6 of TGP's September 23, 2025, Supplemental Filing. Accession no.: 20250923-5058.

²⁰ Collocation miles obtained from table 1.2-5 of TGP's September 23, 2025, Supplemental Filing. Accession no.: 20250923-5058.

Figure 2.1-1: MSX Overview Map



2.1.2 Aboveground Facilities

TGP proposes to construct three new compressor stations, four new meter stations, three new OPP facilities, 16 new MLVs, eight new pig traps, and other appurtenant facilities as part of MSX. To facilitate the construction of the Project facilities, TGP identified 17 temporary contractor yards that would be used during construction of MSX and returned to previous use after construction. Additionally, TGP would use both temporary and permanent access roads (PAR) to access the Project's construction workspace and permanent easement for construction and operation purposes. Table 2.1-2 provides a detailed list of proposed aboveground facilities associated with MSX.

Table 2.1-2: Proposed Mississippi Crossing Aboveground Facilities

| Facility Name | County, State | Nearest Pipeline MP | Description |
|---|----------------|--------------------------|---|
| Compressor Stations | | | |
| Existing Station 54 | Washington, MS | 0 | New discharge piping would be installed within this existing station yard from the discharge of the existing compressor Building D to the new 42-inch pig traps for the proposed MSX pipeline. |
| Station 602 | Humphreys, MS | 32 | Installation of 3 new Titan 250 centrifugal compressor units (95,700 HP ISO approximately) at the new station along with appurtenant facilities including gas cooling, exhaust stack, air intake, emergency safety system, transformer, uninterruptible power supply (UPS), battery system, and switchgear, and control panels. |
| Station 606A | Attala, MS | 96 | Installation of 1 new Titan 130 centrifugal compressor unit (23,470 HP ISO approximately) at the new station along with appurtenant facilities including gas cooling, exhaust stack, air intake, emergency safety system, transformer, UPS, battery system, switchgear, and control panels. |
| Station 610 | Lauderdale, MS | 166 | Installation of 2 new Titan 250 centrifugal compressor units (63,800 HP ISO approximately) at the new station along with appurtenant facilities including gas, cooling, exhaust stack, air intake, emergency safety system, transformer, UPS, battery system, switchgear, and control panels. A 0.25-mile 30-inch-diameter collocated lateral would be required from TGP 500 easement to Station 610. |
| Meter Station and OPP Facilities | | | |
| MSX Meter Station 1 (CGT) | Humphreys, MS | CGT Lateral MP 7.0 | Installation of a new meter station at the end of the proposed CGT Lateral. |
| MSX Meter Station 2 (Tetco) | Attala, MS | Tetco Lateral MP 0.0 | Installation of a new meter station at an interconnection with Tetco |
| MSX Meter Station 3 (Texas Gas) | Attala, MS | Texas Gas Lateral MP 0.1 | Installation of a new meter station on the new Texas Gas Lateral, approximately 600 feet east of the interconnect with Texas Gas. |
| MSX Meter Station 4 (Transco) | Choctaw, AL | 199 | Installation of a new meter station at the interconnection with Transco. |
| MSX OPP Facility 1 (TGP 100 System) | Washington, MS | 0 | Installation of a new OPP facility at an interconnect with the existing TGP 100 System inside the existing TGP Station 54. |
| MSX OPP Facility 2 (TGP 800 System) | Humphreys, MS | 31 | Installation of a new OPP facility at an interconnect with the existing TGP 800 System inside the proposed TGP Station 602. |

Table 2.1-2: Proposed Mississippi Crossing Aboveground Facilities

| Facility Name | County, State | Nearest Pipeline MP | Description |
|--|----------------|--------------------------|--|
| MSX OPP Facility 3 (TGP 500 System) | Lauderdale, MS | 166 | Install a new OPP facility at an interconnect with the existing TGP 500 System inside of the proposed Station 610. |
| Texas Gas Tap Site | Attala, MS | Texas Gas Lateral MP 0.0 | Install a flange and valve connection on the Texas Gas system. |
| Other Aboveground Facilities | | | |
| SNG South System 4 Interconnection | Clarke, MS | 177 | Installation of a new interconnection with the existing SSE4 pipeline. |
| MLV* 600-1 | Washington, MS | 0 | Installation of a new MLV on the proposed MSX Mainline inside of the existing TGP Station 54. |
| MLV 601-1 | Washington, MS | 16 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 602-1 | Humphreys, MS | 32 | Installation of a new MLV on the proposed MSX Mainline inside of proposed Station 602. |
| MLV 603-1 | Holmes, MS | 49 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 604-1 | Holmes, MS | 63 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 605-1 | Attala, MS | 81 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 606-1 | Attala, MS | 96 | Installation of a new MLV on the proposed MSX Mainline inside the proposed Station 606A. |
| MLV 607-1 | Leake, MS | 115 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 608-1 | Neshoba, MS | 134 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 609-1 | Newton, MS | 148 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 610-1 | Lauderdale, MS | 166 | Installation of a new MLV on the proposed MSX Mainline within the proposed Station 610. |
| MLV 611-1 | Clarke, MS | 176 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 612-1 | Clarke, MS | 188 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 613-1 | Choctaw, AL | 199 | Installation of a new MLV on the proposed MSX Mainline. |
| MLV 601-101 | Humphreys, MS | CGT Lateral MP 0 | Installation of a new MLV on the proposed CGT Lateral. |
| MLV 601-102 | Humphreys, MS | CGT Lateral MP 7 | Installation of a new MLV on the proposed CGT Lateral. |
| MSX Mainline Pig Trap | Washington, MS | 0 | Installation of a new pig trap on the proposed MSX Mainline inside the existing TGP Station 54. |
| Station 602 Pig Traps | Humphreys, MS | 32 | Installation of new pig traps on the proposed MSX Mainline inside the proposed Station 602. |
| Station 606A Pig Traps | Attala, MS | 96 | Installation of new pig traps on the proposed MSX Mainline inside the proposed Station 606A. |
| SNG South System 4 Interconnection Pig Traps | Clarke, MS | 177 | Installation of new pig traps on the proposed MSX Mainline. |
| MSX Meter Station 4 Pig Trap | Choctaw, AL | 199 | Installation of a new pig trap on the proposed MSX Mainline inside the proposed MSX Meter Station 4. |
| CGT Lateral Begin Pig Trap | Humphreys, MS | CGT Lateral MP 0 | Installation of a new pig trap on the proposed CGT Lateral inside the proposed MSX Meter Station 1. |
| CGT Lateral End Pig Trap | Humphreys, MS | CGT Lateral MP 7 | Installation of a new pig trap on the proposed CGT Lateral inside the proposed Station 602. |
| Contractor Yards | | | |
| MSX-CY-01 | Washington, MS | 0 | Approximately 5-acre temporary contractor yard |

Table 2.1-2: Proposed Mississippi Crossing Aboveground Facilities

| Facility Name | County, State | Nearest Pipeline MP | Description |
|---|----------------|---------------------|---|
| MSX-CY-13 | Humphreys, MS | 31 | Approximately 10-acre temporary contractor yard |
| MSX-CY-04 | Holmes, MS | 72 | Approximately 72-acre temporary contractor yard |
| MSX-CY-05 | Holmes, MS | 75 | Approximately 40-acre temporary contractor yard |
| MSX-CY-06 | Attala, MS | 87 | Approximately 31-acre temporary contractor yard |
| MSX-CY-10 | Newton, MS | 146 | Approximately 3-acre temporary contractor yard |
| MSX-CY-12A | Lauderdale, MS | 167 | Approximately 21-acre temporary contractor yard |
| MSX-CY-14 | Leake, MS | 116 | Approximately 13-acre temporary contractor yard |
| MSX-CY-17 | Neshoba, MS | 122 | Approximately 17-acre temporary contractor yard |
| MSX-CY-20 | Neshoba, MS | 124 | Approximately 6-acre temporary contractor yard |
| MSX-CY-21 | Neshoba, MS | 125 | Approximately 13-acre temporary contractor yard |
| MSX-CY-22 | Neshoba, MS | 125 | Approximately 5-acre temporary contractor yard |
| MSX-CY-23 | Lauderdale, MS | 167 | Approximately 18-acre temporary contractor yard |
| MSX-CY-24 | Lauderdale, MS | 167 | Approximately 15-acre temporary contractor yard |
| MSX-CY-25A | Lauderdale, MS | 167 | Approximately 54-acre temporary contractor yard |
| MSX-CY-25B | Lauderdale, MS | 167 | Approximately 39-acre temporary contractor yard |
| MSX-CY-26 | Clarke, MS | 176 | Approximately 13-acre temporary contractor yard |
| Note: Details obtained from TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058). | | | |

2.2 SOUTH SYSTEM EXPANSION 4 PROJECT

2.2.1 Pipeline Facilities

According to SNG/EEC, SSE4 includes 22 new gas pipeline loops, organized into 14 segments, totaling approximately 291 miles, across Mississippi, Alabama, and Georgia along SNG's existing South Main Line. The proposed pipeline loops range from 20 to 42 inches in diameter (see table 2.2-1 and figures 2.2-1 and 2.2-2). SSE4 has been collocated with the existing SNG right-of-way and other utility corridors to the greatest extent practicable, resulting in 269.3 miles (greater than 90 percent) of collocation and 22.1 miles of greenfield.²¹

²¹ Collocation miles obtained from table 1.2-9 of SNG/EEC's July 3, 2025, Application. Accession no.: 20250703-5175.

Table 2.2-1: Proposed SSE4 New Pipeline Facilities

| Line Segment | Facility ID | County, State | Outside Diameter (inches) | Length (miles) | Greenfield Mileage |
|---|-------------|---|---------------------------|----------------|--------------------|
| 1 | Loop A2 | Clarke County, MS | 36 | 2.7 | 0.4 |
| | Loop B2 | Clarke County, MS | 42 | 16.0 | 0.0 |
| 2 | Loop A1 | Sumter County, AL | 36 | 5.3 | 0.0 |
| | Loop C2 | Sumter County, AL | 42 | 13.0 | 0.0 |
| 3 | Loop B1 | Marengo County, AL | 36 | 7.6 | 0.5 |
| 4 | Loop C1 | Perry and Dallas Counties, AL | 42 | 25.4 | 0.7 |
| | Loop D2 | Dallas County, AL | 42 | 4.8 | 0.0 |
| 5 | Loop D1 | Autauga and Elmore Counties, AL | 42 | 15.7 | 0.0 |
| 6 | Loop E2 | Elmore, Tallapoosa, and Macon Counties, AL | 42 | 17.5 | 0.2 |
| | Loop E1 | Macon and Lee Counties, AL | 42 | 11.3 | 0.0 |
| 7 | Loop F1 | Lee County, AL and Muscogee and Harris Counties, GA | 42 | 35.8 | 10.4 |
| 8 | Loop G1 | Talbot County, GA | 42 | 13.1 | 0.0 |
| | Loop F2 | Talbot and Upson Counties, GA | 42 | 5.6 | 0.1 |
| | Loop G2 | Upson, Crawford, and Monroe Counties, GA | 36 | 15.7 | 0.0 |
| 9 | Loop H1 | Monroe and Bibb Counties, GA | 30 | 6.8 | 5.0 |
| 10 | Loop H2 | Jones and Baldwin Counties, GA | 30 | 17.4 | 0.0 |
| | Loop I1 | Baldwin County, GA | 30 | 14.6 | 0.2 |
| 11 | Loop J1 | Glascocock and Jefferson Counties, GA | 30 | 27.3 | 0.0 |
| | Loop I2 | Glascocock and Jefferson Counties, GA | 30 | 7.7 | 0.0 |
| 12 | Loop K1 | Richmond County, GA | 24 | 8.2 | 0.0 |
| 13 | Loop L1 | Monroe County, GA | 20 | 6.0 | 0.6 |
| 14 | Loop M1 | Spalding and Henry Counties, GA | 24 | 13.5 | 4.0 |
| Total Mileage of New Pipelines | | | | 291.0 | 22.1 |
| Note: Details obtained from SNG/EEC's February 17, 2026, Supplemental Filing (Accession no.: 20260217-5265) | | | | | |

Figures 2.2-1 and 2.2-2 provide a general overview of SSE4. More detailed mapping was filed by SNG/EEC via the SSE4 docket (February 17, 2026, Supplemental Filing #3, Appendices 1A and 1B). These maps are available to the public for review on FERC's eLibrary (accession number 20260217-5265).

Figure 2.2-1: South System Expansion 4 Project Overview Map (1 of 2)

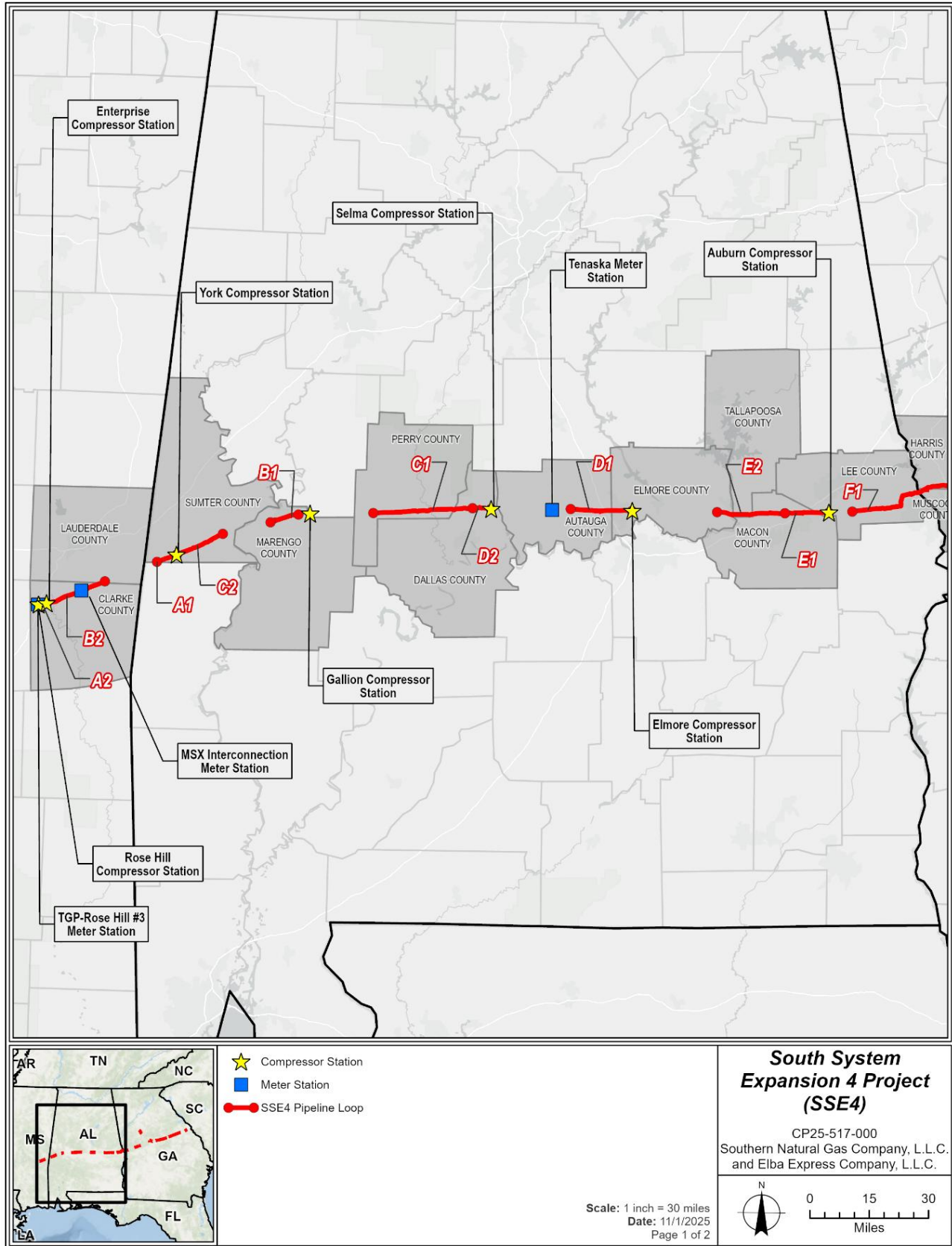
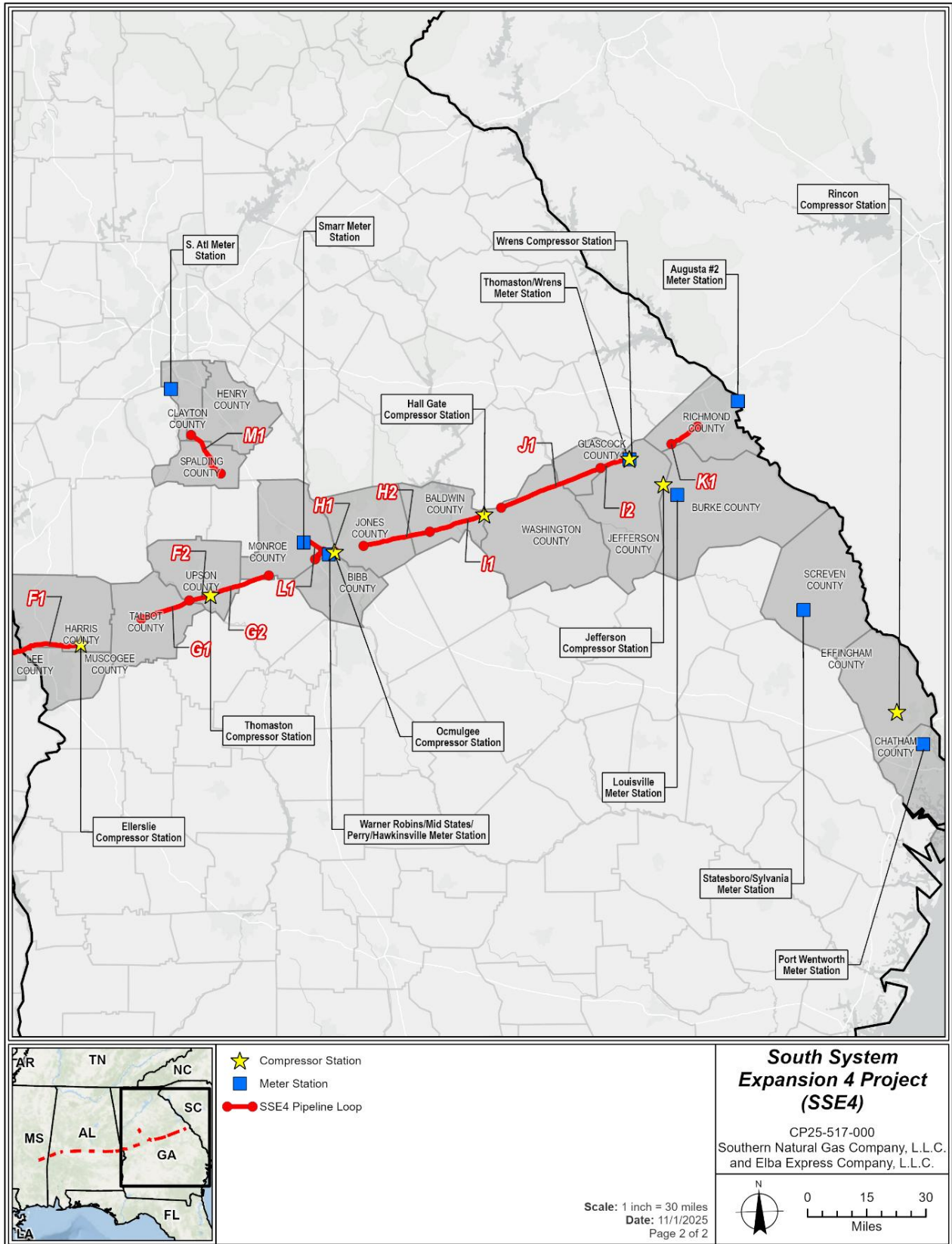


Figure 2.2-2: South System Expansion 4 Project Overview Map (2 of 2)



SNG also proposes to abandon approximately 2.2 miles of the 16-inch-diameter K Gen Lateral in Clarke County, Mississippi. Portions of this abandonment would be removed while other segments, such as a 0.1-mile section located under U.S. Interstate 59, would be capped and abandoned in place.

2.2.2 Aboveground Facilities

SNG/EEC are proposing to add new compressor units at 14 existing compressor stations in Mississippi, Alabama, and Georgia. Of the 14 compressor stations, 12 are owned and operated by SNG and two are owned and operated by EEC. Additional details are provided in table 2.2-2.

Table 2.2-2: Proposed SSE4 Compressor Station Modifications

| Name ¹ | County, State | Assoc. Loop | Description | Total New Horsepower (HP) | Total Abandoned HP |
|-------------------------------|---------------|-------------------|--|---------------------------|--------------------|
| Rose Hill Compressor Station | Clarke, MS | Loop A2 | Install new Titan 130 and Mars 100 compressor units at existing compressor station, install new gas coolers | 39,370 | N/A |
| Enterprise Compressor Station | Clarke, MS | Loop A2 & Loop B2 | Install a Titan 130 compressor unit at existing compressor station, install new gas coolers, abandon two Clark TLAD-5 units (5222-A-08 & 5222-A-09) | 23,470 | 4,000 |
| York Compressor Station | Sumter, AL | Loop A1 & Loop C2 | Install new Titan 130 compressor unit at existing compressor station, install new gas coolers | 24,470 | N/A |
| Gallion Compressor Station | Hale, AL | N/A | Install two Mars 100 compressor units at existing compressor station, Install new gas coolers, Abandon two Worthington units (5236-A-04 & 5236-A-05) | 31,800 | 3,920 |
| Selma Compressor Station | Dallas, AL | Loop D2 | Install new Titan 130 compressor unit at existing compressor station, Install new gas coolers, Re-wheel existing unit | 23,470 | N/A |
| Elmore Compressor Station | Elmore, AL | Loop D1 | Install two new Mars 100 compressor units at existing compressor station, Install new gas coolers, Re-wheel existing unit, Add precombustion chambers to existing Cooper GMWA-10 | 31,800 | N/A |
| Auburn Compressor Station | Lee, AL | Loop E1 | Install new Titan 130 compressor unit at existing compressor station, Install new gas coolers, Re-wheel three existing units | 23,470 | N/A |
| Ellerslie Compressor Station | Harris, GA | Loop F1 | Install new Mars 100 compressor unit at existing compressor station, Install new gas coolers, Tune and add new turbocharger to existing Cooper GMVS-10 | 15,900 | N/A |
| Thomaston Compressor Station | Upson, GA | Loop F2 & Loop G2 | Install new Taurus 70 compressor unit at existing compressor station, Install new gas coolers, Tune emission controls on unit #5 | 11,110 | N/A |
| Ocmulgee Compressor Station | Bibb, GA | Loop H1 | Install new electric compressor unit at existing compressor station, Install new gas coolers | 11,000 | N/A |
| Hall Gate Compressor Station | Baldwin, GA | Loop I1 | Install new Mars 100 compressor unit at existing compressor station, Install new gas coolers, Abandon two Clark TLA-10 units (5283-A-01 & 5283-A-02) | 15,900 | 6,800 |
| Wrens Compressor Station | Jefferson, GA | Loop I2 | Install new Centaur 50 compressor unit at existing station, Abandon three units (Wrens 5288-A-01 Ingersoll-Rad Reciprocating, Wrens 5288-A-02 Ingersoll-Rand Reciprocating, and Wrens 5288-A-03 Cooper Bessemer Reciprocating) | 6,130 | 1,800 |
| Jefferson Compressor Station | Jefferson, GA | N/A | Install new Mars 100 compressor unit at existing compressor station | 15,900 | N/A |

Table 2.2-2: Proposed SSE4 Compressor Station Modifications

| Name ¹ | County, State | Assoc. Loop | Description | Total New Horsepower (HP) | Total Abandoned HP |
|---------------------------|---------------|-------------|---|---------------------------|--------------------|
| Rincon Compressor Station | Effingham, GA | N/A | Install new Mars 100 compressor unit at existing compressor station | 15,900 | N/A |

¹ All compressor stations are owned/operated by SNG except for Jefferson and Rincon which are owned/operated by EEC.
Source: SNG and EEC's February 17, 2026, Supplemental Filing (Accession no.: 20260217-5265).

SNG/EEC are also proposing upgrades to seven existing meter stations and construction of three new meter stations in Mississippi, Alabama, and Georgia. These facilities are listed in table 2.2-3.

Table 2.2-3: Proposed SSE4 New and Expanded Meter Stations

| Name | County, State | Description | Total Capacity (MMcf/hr) |
|-----------------------|---------------|----------------------------------|--------------------------|
| TGP-Rose Hill #3 | Clarke, MS | Upgrade existing interconnect | 79 |
| MSX Interconnection | Clarke, MS | New meter station | 87.5 |
| Tenaska | Autauga, AL | Upgrade an existing interconnect | 8.85 |
| Smarr | Monroe, GA | New meter station | 9.5 |
| Valdosta #1 | Lowndes, GA | Upgrade an existing interconnect | 0.775 |
| Thomson / Wrens | Jefferson, GA | Upgrade an existing interconnect | 0.235 |
| Louisville | Burke, GA | Upgrade an existing interconnect | 0.0734 |
| Statesboro / Sylvania | Screven, GA | Upgrade an existing interconnect | 0.2 |
| Augusta #2 | Richmond, GA | Upgrade an existing interconnect | 3.8 |
| Port Wentworth | Chatham, GA | New meter station | 16.0 |

Source: SNG and EEC's February 17, 2026, Supplemental Filing (Accession no. 20260217-5265)

SNG/EEC have identified 48 potential contractor/laydown yards. They are expecting to utilize at least one contractor yard per pipeline loop; however, the final selection of contractor yards are still under consideration. These yards are presented in table 2.2-4.

Table 2.2-4: Potential Laydown Yards Under Consideration for SSE4 Construction

| Laydown Yard ID | County | State | Nearest Loop | Nearest Milepost | Total Area (Acres) |
|-----------------|---------|-------|--------------|------------------|--------------------|
| LDY-CL-B2-001 | Clarke | MS | B2 | 0.2 | 27.2 |
| LDY-CL-B2-002 | Clarke | MS | B2 | 0.3 | 7.0 |
| LDY-CL-B2-006 | Clarke | MS | B2 | 16.0 | 16.6 |
| LDY-SM-A1-001 | Sumter | AL | A1 | 2.6 | 19.8 |
| LDY-SM-A1-002 | Sumter | AL | A1 | 3.1 | 41.5 |
| LDY-SM-C2-006 | Sumter | AL | C2 | 6.0 | 15.7 |
| LDY-HL-B1-002 | Hale | AL | B1 | 7.6 | 19.0 |
| LDY-MR-B1-001 | Marengo | AL | B1 | 0.0 | 31.2 |
| LDY-DL-C1-010 | Dallas | AL | C1 | 20.8 | 13.2 |
| LDY-PR-C1-003 | Perry | AL | C1 | 3.0 | 42.4 |

Table 2.2-4: Potential Laydown Yards Under Consideration for SSE4 Construction

| Laydown Yard ID | County | State | Nearest Loop | Nearest Milepost | Total Area (Acres) |
|-----------------|------------|-------|--------------|------------------|--------------------|
| LDY-PR-C1-004 | Perry | AL | C1 | 9.1 | 30.0 |
| LDY-DL-D2-001 | Dallas | AL | D2 | 2.5 | 16.4 |
| LDY-AT-D1-002 | Autauga | AL | D1 | 6.7 | 13.9 |
| LDY-EL-D1-005 | Elmore | AL | D1 | 15.5 | 18.6 |
| LDY-EL-E2-001 | Elmore | AL | E2 | 0.0 | 9.0 |
| LDY-MC-E2-004 | Macon | AL | E2 | 10.8 | 15.6 |
| LDY-MC-E2-006 | Macon | AL | E2 | 15.5 | 22.3 |
| LDY-MC-E1-002 | Macon | AL | E1 | 3.0 | 5.4 |
| LDY-MC-E1-003 | Macon | AL | E1 | 3.0 | 8.4 |
| LDY-HR-F1-003 | Harris | GA | F1 | 30.4 | 180.8 |
| LDY-HR-F1-004 | Harris | GA | F1 | 32.7 | 22.8 |
| LDY-HR-F1-007 | Harris | GA | F1 | 35.8 | 16.6 |
| LDY-LE-F1-006 | Lee | AL | F1 | 2.5 | 28.4 |
| LDY-TB-G1-001 | Talbot | GA | G1 | 6.0 | 14.4 |
| LDY-TB-G1-003 | Talbot | GA | G1 | 8.5 | 35.2 |
| LDY-TB-G1-005 | Talbot | GA | G1 | 6.3 | 19.9 |
| LDY-UP-F2-002 | Upson | GA | F2 | 5.5 | 14.4 |
| LDY-CF-G2-002 | Crawford | GA | G2 | 11.0 | 12.7 |
| LDY-CF-G2-003 | Crawford | GA | G2 | 11.0 | 9.2 |
| LDY-BB-H1-001 | Bibb | GA | H1 | 6.9 | 6.7 |
| LDY-BW-H2-002 | Baldwin | GA | H2 | 12.5 | 9.4 |
| LDY-BW-H2-006 | Baldwin | GA | H2 | 12.5 | 18.8 |
| LDY-JN-H2-001 | Jones | GA | H2 | 3.0 | 34.3 |
| LDY-BW-I1-004 | Baldwin | GA | I1 | 3.1 | 15.7 |
| LDY-WS-I1-008 | Washington | GA | I1 | 14.5 | 30.6 |
| LDY-GC-J1-004 | Glascocock | GA | J1 | 20.7 | 16.9 |
| LDY-WS-J1-001 | Washington | GA | J1 | 7.8 | 12.9 |
| LDY-WS-J1-006 | Washington | GA | J1 | 7.7 | 20.9 |
| LDY-GC-I2-002 | Glascocock | GA | I2 | 1.0 | 13.8 |
| LDY-JF-I2-003 | Jefferson | GA | I2 | 4.5 | 11.5 |
| LDY-JF-I2-005 | Jefferson | GA | I2 | 7.5 | 61.3 |
| LDY-RM-K1-003 | Richmond | GA | K1 | 2.6 | 17.6 |
| LDY-RM-K1-004 | Richmond | GA | K1 | 4.4 | 14.6 |
| LDY-MR-L1-002 | Monroe | GA | L1 | 5.0 | 8.7 |
| LDY-HN-M1-004 | Henry | GA | M1 | 11.3 | 12.4 |
| LDY-SP-M1-001 | Spalding | GA | M1 | 2.0 | 19.5 |
| LDY-SP-M1-002 | Spalding | GA | M1 | 0.0 | 13.0 |
| LDY-SP-M1-005 | Spalding | GA | M1 | 0.0 | 35.0 |

Source: Attachment 2 of SNG's December 10, 2026 EIR response, FERC Accession no.: 20251210-5208

2.3 NON-JURISDICTIONAL FACILITIES

Under section 7 of the NGA, the Commission is required to consider, as part of its decision to authorize jurisdictional facilities, all factors bearing on the public convenience and necessity. Occasionally, projects have associated facilities that do not come under the jurisdiction of the Commission. These non-jurisdictional facilities may be integral to the need for the facilities (e.g., an electric transmission line necessary to power aboveground facility lighting) or they may be minor, non-integral components of the jurisdictional facilities that would be constructed and operated in association with the proposed facilities. The construction of non-jurisdictional facilities needed to support the Projects would be undertaken by third parties and are further discussed in section 4.14.

2.3.1 Mississippi Crossing Project

TGP identified multiple non-jurisdictional facilities that include potable water supply, communication lines, and new power lines providing access to Station 602, 606A, and 610 respectively.²² Additional power lines may be sought to power meter stations, OPP facilities, and MLVs, depending on the final site design proximity to existing utilities.

Construction of these utility lines would likely require the use of trucks, tractors, excavation equipment, bucket trucks, cable pulling equipment, pile drivers, lashing, and tensioning equipment and rigs. Although these facilities are outside of the Commission's jurisdiction, construction, operation, and maintenance would be performed in compliance with the applicable federal, state, and local environmental requirements.

2.3.2 South System Expansion 4 Project

SNG/EEC identified non-jurisdictional facilities associated with SSE4 that include a combined cycle energy generation facility, a new substation, power lines, communication lines, and removal of abandoned pipelines.

Oglethorpe Power Corporation (Oglethorpe) has proposed a new combined cycle energy generation facility in Monroe County, Georgia that would rely on natural gas delivered from SSE4 facilities. The proposed Smarr Meter Station would be the interconnection point for gas delivery to Oglethorpe for its new facility. The Oglethorpe facility requires federal approvals from the U.S. Department of Agriculture's (USDA) Rural Utilities Service. Oglethorpe anticipates the new facility would result in approximately 115 acres of land disturbances for construction and operation.

A new electric substation, developed, constructed, and operated by a local electric provider in Bibb County, Georgia, would be required to support the Ocmulgee Compressor Station modification. The new substation would require less than 0.1-acre of newly affected land and is outside of the jurisdiction of FERC.

²² TGP September 23, 2025, Supplemental Filing, (Accession no.: 20250923-5058).

2.4 LAND REQUIREMENTS

In total, MSX would disturb approximately 4,065.9 acres of land and SSE4 would disturb about 6,854 acres of land.^{23,24} A breakdown of temporary workspaces and permanent use is provided in the following sections.

2.4.1 Mississippi Crossing Project

According to TGP, MSX would require land disturbance for new permanent right-of-way, temporary workspace, ATWS, new compressor stations, new meter stations, new OPP facilities, MLVs, and other aboveground appurtenant facilities, contractor yards, and temporary access roads (TAR) and PARs; collectively described as the MSX construction area. MSX would temporarily disturb approximately 2,594.1 acres of land during construction and approximately 1,471.8 acres of new permanent easement for operations would be needed. Table 2.4-1 summarizes the land requirements for TGP's proposed temporary workspace for use during construction and new permanent easement for use during operation.

²³ Impact numbers obtained from obtained from TGP's Data Request Response Filing (Accession no.: 20260505-5068).

²⁴ Impact numbers obtained from table 1.2-7 of SNG/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

Table 2.4-1: Summary of Land Requirements for MSX

| Facility Name | Temporary Workspace for Construction (acres) | New Permanent Easement / Operations (acres) | Total Land Disturbance for MSX (acres) |
|--|--|---|--|
| Pipeline Facilities | | | |
| MSX Mainline ROW ^{a/} | 1,833.0 | 1,175.0 | 3,008.0 |
| MSX Mainline ATWS | 242.9 | 0.0 | 242.9 |
| CGT Lateral ROW | 64.1 | 41.2 | 105.3 |
| CGT Lateral ATWS | 12.3 | 0.0 | 12.3 |
| Texas Gas Lateral ROW | 0.8 | 3.7 | 4.5 |
| Texas Gas Lateral ATWS | 0.2 | 0.0 | 0.2 |
| Tetco Lateral ROW | 8.4 | 5.2 | 13.6 |
| Tetco Lateral ATWS | 0.6 | 0.0 | 0.6 |
| TGP 500 Lateral ROW | 1.1 | 0.7 | 1.8 |
| TGP 500 Lateral ATWS | 0.0 | 0.0 | 0.0 |
| Transco Lateral ROW | 3.3 | 2.7 | 6.0 |
| Transco Lateral ATWS | 2.2 | 0.0 | 2.2 |
| <i>Subtotal</i> | 2,168.9 | 1,228.5 | 3,397.4 |
| Compressor Stations | | | |
| Existing Station 54 ^{b/} | 50.9 | 0.0 | 50.9 |
| Station 602 | 30.7 | 25.2 | 55.9 |
| Station 606A | 21.8 | 28.1 | 49.9 |
| Station 610 | 17.6 | 15.1 | 32.7 |
| <i>Subtotal</i> | 121.0 | 68.4 | 189.4 |
| Meter Stations and OPP Facilities | | | |
| MSX Meter Station 1 | 0.0 | 1.7 | 1.7 |
| MSX Meter Station 2 | 0.0 | 1.0 | 1.0 |
| MSX Meter Station 3 | 0.0 | 1.0 | 1.0 |
| MSX Meter Station 4 | 0.0 | 1.3 | 1.3 |
| MSX OPP Facility 1 ^{b/} | 0.0 | 0.0 | 0.0 |
| MSX OPP Facility 2 | 0.0 | 0.6 | 0.6 |
| MSX OPP Facility 3 ^{d/} | 0.0 | 0.0 | 0.0 |
| Texas Gas Tap Site | 0.0 | 0.1 | 0.1 |
| <i>Subtotal</i> | 0.0 | 5.7 | 5.7 |
| Other Aboveground Facilities | | | |
| SNG South System 4 Interconnection ^{e/} | 0.9 | 1.0 | 1.9 |
| Mainline Valves ^{f/} | 0.0 | 0.0 | 0.0 |
| Pig Trap Facilities ^{g/} | 0.0 | 0.0 | 0.0 |
| <i>Subtotal</i> | 0.0 | 1.0 | 1.9 |
| Other Work Areas | | | |
| Contractor Yards | 233.5 | 0.0 | 233.5 |
| Access Roads | 69.8 | 168.2 | 238.0 |
| <i>Subtotal</i> | 303.3 | 168.2 | 471.5 |
| MSX Total | 2,594.1 | 1,471.8 | 4,065.9 |

Notes: The totals shown in this table may not equal the sum of addends due to rounding.

Acreages obtained from TGP's May 5, 2026, EIR Response (Accession no.: 20260505-5068).

^{a/} ROW = Right-of-way.

^{b/} Impacts within existing Station 54 would be within the operational area of the existing facility.

^{c/} Impacts are included in the impacts for existing Station 54.

^{d/} Impacts are included in the impacts for the new Station 610.

^{e/} Of the land requirements presenter herein for the SNG SSE4 Interconnection, 0.59 acre of temporary workspace and 0.31 acre of permanent workspace would be shared with SSE4.

^{f/} Impacts are included in the impacts for permanent pipeline easements and/or other aboveground facilities.

^{g/} Impacts are included in the impacts for permanent pipeline easements and/or other aboveground facilities.

2.4.1.1 Pipeline Right-of-Way

TGP proposes a 125-foot-wide construction right-of-way for the MSX Mainline and the CGT Lateral, excluding ATWS, and would acquire a 50-foot-wide permanent easement for the operation and maintenance of the pipelines. Generally, the construction right-of-way would be reduced to approximately 75 feet when crossing wetlands and other sensitive resources as described in our Procedures. TGP has requested deviations from our Plan and Procedures for certain site-specific locations where conditions require ATWS resulting in a wider construction right-of-way (hereinafter referred to as, MSX Plan and Procedures). These requested deviations are listed in appendix E. We have reviewed TGP's requested deviations and find them acceptable.

To minimize effects, TGP has collocated the MSX Mainline and CGT Lateral with existing pipeline and electric transmission line easements to the greatest extent practicable. Approximately 52.8 miles, or 26.5 percent of the pipelines, would be collocated with existing rights-of-way.²⁵

2.4.1.2 Aboveground Facilities

TGP is proposing three new compressor stations, four new meter stations, three new OPP facilities, and a new Interconnection with SNG's SSE4. Additionally, there would be numerous mainline valves and pig launcher/receivers installed within the new aboveground facilities and permanent pipeline rights-of-way. Table 2.4-1 provides the anticipated land requirements for construction and operation of these facilities. Additional details regarding the land use affected by MSX aboveground facilities are provided in section 4.8.1.

2.4.1.3 Contractor Yards

TGP proposes using 11 multi-purpose contractor yards during construction of MSX, resulting in 233.5 acres²⁶ of temporary workspace during construction. Following construction, these contractor yards would be restored in accordance with the MSX Plan resulting in no additional permanent easement.

2.4.1.4 Access Roads

A total of 102 new PARs and 92 TARs are planned for MSX.²⁷ TGP proposes approximately 69.8 acres of TARs to be used during construction, which would be restored to preconstruction conditions or better, unless otherwise requested by landowners, following construction. Construction of new PARs and modifications to existing access roads would result in approximately 168 acres of new PARs (or permanent improvement to existing roads) for operation of MSX.

2.4.2 South System Expansion 4 Project

According to SNG/EEC, SSE4 would require land disturbance for new permanent right-of-way, temporary workspace, ATWS, compressor station modifications, new and modified meter stations, MLVs and other aboveground appurtenant facilities, contractor yards, and TARs and

²⁵ Collocation details obtained from table 1.2-5 of TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

²⁶ Impact numbers obtained from TGP's Data Request Response Filing (Accession no.: 20260505-5068).

²⁷ Impact numbers obtained from table 1.2-3 of TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

PARs; collectively described as the SSE4 construction area. Of the approximately 6,386 acres disturbed during construction, SSE4 would temporarily disturb approximately 4,934 acres of land and approximately 1,452 acres of new permanent easement for operations would be needed.²⁸ Table 2.4-2 and Table 2.4-3 summarize the land requirements for SNG/EEC’s proposed temporary workspace (for construction) and new permanent easement (for operation).

Table 2.4-2: Summary of Land Use Acreages for SSE4 Pipeline Loops

| Facility Type and Name | Temporary acres | Permanent acres | Total acres |
|---|-----------------|-----------------|----------------|
| Loop A2 | 36.9 | 4.5 | 41.4 |
| Loop B2 | 216 | 53.6 | 269.6 |
| Loop A1 | 81.4 | 9.4 | 91.8 |
| Loop C2 | 188.3 | 46.1 | 234.4 |
| Loop B1 | 115.6 | 20.8 | 136.4 |
| Loop C1 | 358.9 | 95.3 | 454.2 |
| Loop D2 | 83.7 | 15.8 | 99.5 |
| Loop D1 | 264.5 | 3.5 | 268.0 |
| Loop E2 | 245.7 | 61.6 | 307.3 |
| Loop E1 | 172.4 | 42.8 | 215.2 |
| Loop F1 | 451.1 | 157.3 | 608.4 |
| Loop G1 | 202.7 | 32.2 | 234.9 |
| Loop F2 | 88.8 | 7.5 | 96.3 |
| Loop G2 | 235.0 | 43.6 | 278.6 |
| Loop H1 | 54.7 | 39.1 | 93.8 |
| Loop H2 | 201.8 | 42.4 | 244.2 |
| Loop I1 | 165.5 | 30.3 | 195.8 |
| Loop J1 | 294.8 | 56.7 | 351.5 |
| Loop I2 | 89.0 | 18.0 | 107.0 |
| Loop K1 | 101.4 | 1.3 | 102.7 |
| Loop L1 | 48.1 | 20.7 | 68.8 |
| Loop M1 | 103.7 | 64.9 | 168.6 |
| Pipeline total | 3,800.0 | 867.4 | 4,667.4 |
| Note: Acreages obtained from SSE4/EEC’s February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265) | | | |

²⁸ Acreages obtained from SSE4/EEC’s February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

Table 2.4-3: Summary of Land Use Acreages for SSE4 Aboveground Facilities

| Facility Type and Name | Temporary acres | Permanent acres | Total acres |
|---|-----------------|-----------------|----------------|
| Compressor Station Modifications | | | |
| Rose Hill Compressor Station | 42.6 | 0.4 | 43.0 |
| Enterprise Compressor Station | 31.5 | 1.1 | 32.6 |
| York Compressor Station | 15.1 | 10.5 | 25.6 |
| Gallion Compressor Station | 29.7 | 5.5 | 35.2 |
| Selma Compressor Station | 18.4 | 3.5 | 21.9 |
| Elmore Compressor Station | 53.2 | 10.1 | 63.3 |
| Auburn Compressor Station | 18.8 | 3.8 | 22.6 |
| Ellerslie Compressor Station | 21.5 | 2.7 | 24.2 |
| Thomaston Compressor Station | 29.9 | 3.8 | 33.7 |
| Ocmulgee Compressor Station | 26.2 | 0.5 | 26.7 |
| Hall Gate Compressor Station | 16.9 | 4.7 | 21.6 |
| Wrens Compressor Station | 24.7 | 0.7 | 25.4 |
| Jefferson Compressor Station | 29.2 | 0.8 | 30.0 |
| Rincon Compressor Station | 32.3 | 0.0 | 32.3 |
| Compressor Station Subtotal | 390.0 | 48.1 | 438.1 |
| Meter Station Modifications | | | |
| Tenaska Meter Station | 2.8 | 0.0 | 2.8 |
| Valdosta #1 Meter Station | 3.5 | 0.7 | 4.2 |
| Thomson / Wrens Meter Station | 0.0 | 0.0 | 0.0 |
| Augusta #2 Meter Station | 0.0 | 1.2 | 1.2 |
| Louisville Meter Station | 1.8 | 0.0 | 1.8 |
| Statesboro / Sylvania Meter Station | 4.1 | 0.0 | 4.1 |
| TGP - Rose Hill #3 Meter Station | 0.0 | 0.0 | 0.0 |
| Meter Station Modification Subtotal | 12.2 | 1.9 | 14.1 |
| New Meter Stations | | | |
| MSX Interconnection | 0.0 | 1.0 | 1.0 |
| Smarr Meter Station | 0.0 | 3.7 | 3.7 |
| Port Wentworth Meter Station | 3.9 | 1.4 | 4.7 |
| New Meter Station Subtotal | 3.9 | 6.1 | 9.4 |
| Other Aboveground Facilities | | | |
| New Pig Launchers/Receivers and MLVs | 0.0 | 5.4 | 5.4 |
| Modified Launchers/Receivers and MLVs | 14.9 | 0.0 | 14.9 |
| Other Aboveground Facilities Subtotal | 14.9 | 5.4 | 20.3 |
| Other Work Areas | | | |
| Contractor Yards | 1,101.2 | 0.0 | 1,101.2 |
| Access Roads | 32.8 | 584.4 | 617.2 |
| Other Work Areas Subtotal | 1,134.0 | 584.40 | 1,718.4 |
| Pipeline Loop Totals (from above table) | 3,800.0 | 867.4 | 4,667.4 |
| SSE4 TOTAL | 4,934.0 | 1,451.8 | 6,385.8 |
| Note: Acreages obtained from SSE4/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265) | | | |

2.4.2.1 Pipeline Right-of-Way

The pipelines proposed as part of SSE4 would consist of 22 new natural gas pipeline loops, comprising 14 looping segments that range in diameter from 20 – 42 inches. The looping design would result in the majority of segments being collocated with existing SNG rights-of-way. A collocated pipeline is one that is laid parallel to another existing pipeline or other linear utility feature (e.g., pipelines, waterlines, fiber optic lines, transmission lines, etc.). The existing utility line already has a permanently maintained corridor. Therefore, utilizing a portion of the existing right-of-way for construction and operation of the new pipeline results in a reduction in visual effects and fewer acres of newly cleared and acquired construction and operational corridors. The construction right-of-way width would range from 90 – 200 feet depending on the proposed

pipeline diameter, conditions on the ground, and/or presence of environmental features. In areas where the new pipeline would be collocated with an existing pipeline, SNG would utilize portions of its existing and maintained rights-of-way. The permanent easement for the new pipeline loops would be 50 feet in most areas (25 feet on each side of the pipe centerline). However, portions of the new permanent easement would overlap with SNG's existing permanent easement, with the new pipeline being approximately 25 feet from the nearest existing collocated pipeline. In some cases, SNG has requested a permanent right-of-way wider than 50 feet to eliminate gaps between new and existing pipeline corridors when the new pipeline loop must be placed more than 25 feet from the existing pipeline. Table I.2.4-2 provides the locations and justifications where SNG has proposed permanent easements that would result in widths greater than 50 feet.

We have reviewed SNG's request for a wider permanent easement at these locations and find them to be acceptable.²⁹

2.4.2.2 Aboveground Facilities

The majority of aboveground facilities that are proposed as part of SSE4 are modifications of existing compressor stations and meter stations. All 14 of the compressor station modifications would occur at the existing facility with expansions ranging from no increase in the permanent facility footprint at the Rose Hill Compressor Station to approximately 10 acres at the Elmore Compressor Station. Table 2.2-2 provides descriptions for each of the compressor station modifications.

Of the ten proposed meter station modifications, seven would be upgrades of existing facilities requiring little to no additional permanent footprints. The three newly proposed meter stations would require 1 to 4 acres of operation workspace each. Additional details regarding the land use affected by SSE4 aboveground facilities are provided in section 4.8.1.

2.4.2.3 Pipe and Contractor Yards

SNG/EEC is evaluating the use of more than 40 contractor yards/lay down yards for staging equipment, storing pipe, staging portable offices for contractors, and parking workers' vehicles (table 2.2-4). SNG/EEC would return these temporary workspaces to pre-construction conditions once workers have demobilized and equipment has been removed.

2.4.2.4 Access Roads

A total of 528 access roads, with 451 PARs and 77 TARs proposed for SSE4.³⁰ SNG/EEC proposes approximately 571 acres of TARs to be used during construction, which would be restored to preconstruction conditions or better, unless otherwise requested by landowners, following construction. Construction of new PARs and modifications to existing access roads

²⁹ SNG's alignment sheets depicting proposed construction corridor, ATWS and other dimensions requested for the safe construction of the proposed pipelines is available in the February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

³⁰ SSE4 November 6, 2025, Supplemental Filing #2, table 1.A.4-1 (Accession no.: 20251106-5006).

would result in approximately 585 acres³¹ of new PARs, or permanent improvement to existing roads, for operation of new and upgraded facilities.

2.5 CONSTRUCTION PROCEDURES

TGP and SNG/EEC would design, construct, test, operate, and maintain the proposed SSE4 and MSX facilities to conform with or exceed federal, state, and local requirements, including the U.S. Department of Transportation's (USDOT) regulations in 49 Code of Federal Regulations (CFR) 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*; *FERC's Siting and Maintenance Requirements* in 18 CFR 380.15; and other applicable federal and state safety regulations, including U.S. Department of Labor's Occupational Safety and Health Administration requirements.

The Companies committed to following FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Proce³²[OBJ]) with certain proposed alternative measures. The Companies' proposed alternative measures are summarized in table E-1 and E-2 of appendix E for MSX and appendix F-1 and F-2 for SSE4. A comprehensive list of where and why these modifications are requested is also provided in appendices E and F. We have reviewed these alternative measures to our Plan and Procedures and conclude that they are sufficiently justified. In addition to our Plan and Procedures, the Companies would implement other project-specific plans during construction and restoration of the proposed Projects to reduce potential environmental effects. All of the plans shown in table 2.5-1, are collectively contained and organized as the Companies' Environmental Construction Management Plan (ECMP). We have reviewed these plans and found them acceptable.

³¹ Impact numbers obtained from table 1.2-7 of SNG/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

³² Our Plan and Procedures are a set of baseline construction and mitigation measures developed to minimize the potential environmental effects of construction on upland areas, wetlands, and waterbodies. Our Plan can be viewed at: <https://www.ferc.gov/sites/default/files/2020-04/upland-pocket-guide.pdf> and Our Procedures can be viewed at: <https://www.ferc.gov/sites/default/files/2020-04/wetland-waterbody-construction-mitigation-procedures.pdf>.

Table 2.5-1: Project Plans for MSX and SSE4

| Plan | Description | FERC Accession Numbers | |
|--|---|------------------------|-----------------|
| | | MSX | SSE4 |
| HDD Contingency Plan & Inadvertent Returns | A contingency plan for construction in the event an HDD fails, and a discussion of how the abandoned drill hole would be sealed (if necessary). Also, a description of how the inadvertent releases of drilling mud (typically used during HDD construction) would be contained and cleaned up. | 20250630-5152 | 20260217-5265 |
| Spill Prevention and Control Plan (SPCP) | A project-wide plan to prevent or reduce the likelihood of a spill, provide for prompt identification and proper removal of contaminated materials if a spill did occur, and compliance with applicable state and federal laws to protect human health and the environment. | 20250630-5152 | 20250703-5175 |
| Site-specific HDD Plans | Site-specific construction diagrams for each of the proposed HDDs along the project, including locations of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction. | 20250923-5058 | 20251105-5163 |
| Site-specific Residential Construction Plan | Site-specific construction diagrams showing the project footprint where residences are within 25 feet of work areas, including measures to be implemented to address safety and minimize adverse effects on residents. | FEIS appendix G | FEIS appendix H |
| Unanticipated Discoveries of Cultural Resources Plan | Procedures to follow, including the appropriate agencies/organizations to contact, in the event an unanticipated cultural resource or human remains are discovered during construction. | 20250630-5152 | 20250703-5175 |
| Fugitive Dust Control Plan | Guidance for reducing the air and surface effects of fugitive dust generated by construction activities, including dust control measures as well as monitoring and recordkeeping practices. | 20250630-5152 | 20250703-5175 |
| Blasting Plan | Guidelines and general conditions for all blasting activities that may occur during project constructions. | 20250630-5152 | 20250703-5175 |
| Noxious and Invasive Weed Control Plan | A plan for detection, containment, and treatment of noxious weeds during construction. | 20250630-5152 | 20250703-5175 |
| Hydrostatic Test Plan | Project-specific plan identifying potential sources and anticipated volume of hydrostatic pressure testing water, as well as anticipated discharge methods. | 20250630-5152 | 20250826-5140 |
| Traffic Management Plan | Measures to be implemented to control the flow of traffic and ensure the safety of workers and road users during construction. | 20250630-5152 | 20250703-5175 |

2.5.1 General Pipeline Construction Procedures

The Companies propose to install the MSX Mainline and laterals and the SSE4 pipeline loops using conventional overland pipeline construction techniques. The Companies provided typical construction cross-sectional diagrams that are available to the public for review.^{33, 34}

The Companies would provide environmental training for all individuals working on site. They would employ dedicated EIs across the Projects that would monitor project activities during all phases of construction and clean-up, and would verify the completion of all necessary restoration following construction. The EIs would assist in complying with the environmental requirements of the Projects and, as required by TGP's and SNG/EEC's construction, mitigation, and restoration plans, would have the authority to stop construction activities that violate the environmental commitments and conditions of the Projects and to order corrective action. In addition to the Companies' efforts to ensure environmental compliance, FERC staff would conduct inspections throughout construction and restoration to verify compliance with the Commission's orders.

The Companies would construct the pipelines using a generally sequential construction technique that includes survey and staking; clearing and grading; pipe stringing, bending, welding, and coating; trenching; lowering-in and backfilling; hydrostatic testing; commissioning; and cleanup and restoration. For pipeline replacement only, SNG would purge and clean the existing pipeline using compressed air and would excavate the trench prior to existing pipe removal (where applicable). Construction crews would generally move down the construction right-of-way as work progresses. Construction at any single point along the pipeline, from surveying and staking to cleanup and restoration, could last six to 12 months or more. The Companies would use special construction techniques for wetland and waterbody crossings (discussed further in sections 2.5.3.1 and 2.5.3.2). Generally, the main thoroughfares such as state and U.S. highways, and railroads would be crossed by boring (conventional bore or HDD) beneath the road or railroad without disrupting traffic. The conventional bore method involves installing a short segment of prefabricated pipeline through a hole bored by equipment operating from pits excavated on either side of the feature being crossed. The HDD method is described in section 2.5.3.2. The Companies filed lists of all road and railroad crossings along with proposed construction methods. These lists are available to the public via FERC's eLibrary.^{35, 36}

2.5.1.1 Depth of Cover

Except as depicted on site-specific plans, the depth of cover for the pipeline would be in accordance with the Companies' minimum specifications, as set forth in table 2.5-2. Scour analysis and potential for external damage may increase these depths. In actively cultivated agricultural lands, the Companies propose to install pipelines with 48 inches of cover, except where rock prevents this depth. In these cases, the minimum depth of cover would be used.

³³ MSX's Typical Cross Sectional Diagrams, June 30, 2025, Certificate Application, appendix 1.E (Accession no.: 20250630-5152).

³⁴ SSE4's Typical Cross-Section Diagrams, July 3, 2025, Certificate Application, appendix 1.E (Accession no.: 20250703-5175).

³⁵ TGP's September 23, 2025, Supplemental Filing, table 1.4-3 (Accession no.: 20250923-5058).

³⁶ SNG and EEC's November 5 & 6, 2025, Supplemental Filing #2, table 1.A.4-4 (Accession no.: 20251106-5006).

Table 2.5-2: Minimum Specifications for Depth of Cover (inches)

| Location ^{a/} | Normal Soil | Consolidated Rock |
|--|-------------|-------------------|
| PHMSA Class 1 | 30 | 18 |
| PHMSA Class 2, 3, and 4 or drainage ditches of public roads and railroad crossings | 36 | 24 |
| PHMSA Navigable river, stream, or harbor | 48 | 24 |

^{a/} As defined by PHMSA at 49 CFR 192.5 and 49 CFR 192.327.
 Class 1: offshore areas and areas within 220 yards of a pipeline with ≤10 buildings intended for human occupancy.
 Class 2: areas within 220 yards of a pipeline with >10 but <46 buildings intended for human occupancy.
 Class 3: areas within 220 yards of a pipeline with >46 buildings intended for human occupancy and areas within 100 yards of either a building or a small, well defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least five days a week for 10 weeks in any 12-month period.
 Class 4: areas within 220 yards of a pipeline where buildings with four or more stories are prevalent.

The Companies would bury the pipelines at greater depths where they cross foreign pipelines, based on the depth of the existing pipelines. When crossing foreign pipelines, utilities, or other structures, crews would maintain a minimum of 24 inches of clearance between the pipeline and the utility or structure being crossed.³⁷ In areas requiring special construction techniques through rock, crew would bury the pipeline in accordance with USDOT requirements under 49 CFR 192. Before construction activities begin, the construction contractor would contact each state’s applicable One Call system (811) to identify and mark underground utilities and foreign pipelines. Crews would begin trenching in the vicinity of these foreign utilities only after completing the appropriate notification and marking procedures.

2.5.1.2 Shallow Bedrock and Blasting

Blasting procedures during construction are discussed in section 4.1.5.6. While TGP does not anticipate encountering instances of shallow bedrock during construction of MSX that would require controlled blasting, this method could be required to remove challenging materials.

SNG may use controlled blasting for portions of the SSE4 pipeline loops in eastern Alabama and western Georgia, or anywhere shallow and hard bedrock is found and blasting determined to be necessary.

2.5.2 Aboveground Facility Construction Procedures

The Companies would construct aboveground facilities in accordance with all applicable federal and state regulations (including 49 CFR 192). Generally, crews would begin construction of aboveground facilities with clearing and grading of the workspace, excavating where necessary to accommodate new foundations. Subsequent activities include preparing foundations, installing underground piping, installing aboveground piping and machinery, testing the piping and control equipment, and cleaning and stabilizing the work area. The Companies would provide mapping depicting any existing fencing at each aboveground facility site on the corresponding plot plan and install fencing consistent with existing conditions at each site. The Companies would also cover areas around facilities, meters, piping, and associated equipment with gravel, or would seed and maintain an herbaceous cover.

³⁷ 49 CFR Part 195.250 requires a minimum of at least 12 inches of clearance between the outside of the pipe and the extremity of any other underground structure.

2.5.3 Specialized Construction Procedures

2.5.3.1 Waterbody Crossings

Waterbody and wetland construction methods would vary according to the physical and environmental characteristics of each crossing location. The Companies propose numerous trenchless construction locations (such as HDD) for both MSX and SSE4, which are discussed further below. The Companies would cross the remaining streams using dry-ditch methods, which may include a flumed crossing or a dam-and-pump, depending on site-specific conditions at the time of construction. These methods would temporarily divert stream flow around or through the work area to minimize contact between stream water and the trench excavation, which would minimize sediment suspension during excavation, pipeline installation, and backfill activities. The Companies also may use a wet open cut crossing method for minor and intermediate waterbodies or as permitted.

Flumed Crossing – The flume crossing conveys the stream flow through one or more flume pipes over the area to be excavated. This method allows excavation of the pipe trench to occur completely underneath the flume pipes without disruption of water flow in the stream. Stream flow is diverted through the flumes by constructing two bulkheads using sandbags or plastic dams. The flume pipes are removed once the crossing is complete. A flumed stream crossing would redirect the water flow through one or more flume pipes to allow for the trenching and pipe installation to occur in relatively dry conditions.

Dam-and-Pump – The dam-and-pump method involves installation of temporary dams upstream and downstream of the proposed waterbody crossing location, typically using sandbags and plastic sheeting to construct temporary dams. Pumps are then used to dewater the upstream impoundment and transport the stream flow around the construction workspace to the downstream side of the work area. Following completion of pipeline installation, backfill of the trench, and restoration of waterbody banks, the temporary dams are removed to restore the stream flow. Crews would use the dam-and-pump method for stream crossings where pumps and hoses could adequately transfer stream flow volumes from upstream of the work area to downstream of the work area, and where passage of aquatic organisms is not a concern.

Trenchless Crossing Methods

Trenchless construction methods would be used to construct pipelines in certain areas to minimize direct adverse effects on resources, including certain significant waterbodies, roadways, cultural resources, and other sensitive areas. Using these techniques, crews would install pipelines beneath the resource using equipment staged at the outside edge of the resource. The types of trenchless crossing methods that were considered for the Projects include conventional bore, HDD, and Direct Pipe™, with the Companies proposing to use the conventional bore and HDD crossing methods for most trenchless crossings.

HDD is a specialized construction technique that would be used to install pipelines in areas where traditional open-cut excavations are not practicable due to sensitive resource areas or logistical reasons. To begin, crews would establish large staging areas on either side of a crossing at the drill entry and exit point. After the initial setup of the drilling equipment and bore holes, the contractor would drill a small diameter pilot hole from the entry point to the exit point by pumping a slurry mixture into the ground under high pressure. Once the pilot hole is complete, the crew

would attach a reamer to a drill string to enlarge the pilot hole. The reamer may pass through the pilot hole multiple times until the necessary diameter for pipeline installation is achieved. During drilling, crews would use a bentonite clay drilling fluid mixture to lubricate the drill bit, remove drill cuttings from the hole, and fill void space to maintain the integrity of the drill pathway prior to pipe installation.³⁸ Cuttings would be separated from the drilling fluid when the mixture returns to the surface and is reclaimed. The contractor would complete a final pass, the swab pass, to ensure the hole is ready to receive the pipe. From there, the hole would be widened, the pipeline would be pulled into position, and tied-in to the pipeline on both ends of the crossing. Compared to the other crossing methods, the HDD technique would avoid direct effects to surface resources by drilling down and beneath the surface, leaving the portion of land in between the entry and exit point relatively undisturbed.

HDDs proposed for MSX and SSE4 are listed in tables 2.5-3 and 2.5-4, respectively. The use of HDDs at these locations would alleviate multiple traditional surface constraints, including the potential for surface resource effect minimization.

Table 2.5-3: HDDs Proposed for the Mississippi Crossing Project

| Begin MP | End MP | County, State | Feature | Length (ft) |
|---|--------|-------------------------------------|--|---------------|
| 10.5 | 10.7 | Washington County, MS | Deer Creek | 1,500 |
| 12.3 | 12.6 | Washington County, MS | Bogue Phalia | 1,500 |
| 21.4 | 21.7 | Washington & Humphreys Counties, MS | Big Sunflower River | 1,700 |
| 40.1 | 40.5 | Humphreys County, MS | Yazoo River Levee West ¹ | 2,255 |
| 41.0 | 441.4 | Humphreys County, MS | Yazoo River | 2,300 |
| 41.5 | 41.8 | Humphreys County, MS | Yazoo River Levee East ¹ | 1,700 |
| 46.8 | 47.1 | Humphreys County, MS | Belmont Road and Tchula Lake | 1,500 |
| 51.5 | 51.8 | Holmes County, MS | U.S. Hwy 49 E and Canadian National RR – North America | 1,380 |
| 54.3 | 55.0 | Holmes County, MS | Sensitive Resource | 3,600 |
| 72.9R | 73.3 | Holmes County, MS | Interstate 55 | 2,270 |
| 77.1 | 77.5 | Holmes & Attala, MS | Big Black River and Wetland | 2,160 |
| 92.0 | 93.1 | Attala, MS | Natchez Trace Parkway | 5,639 |
| 115.9 | 116.4 | Leake, MS | Pearl River | 2,483 |
| 166.2 | 166.6 | Lauderdale, MS | Interstate 59 | 2,244 |
| 185.3 | 185.7 | Clarke, MS | Hurricane Creek | 2,440 |
| Total distance of HDD Crossings | | | | 34,671 |
| Note: HDD information obtained from MSX’s March 23, 2026, Comments on the DEIS – Attachment 2 (Accession no.: 20260323-5236) | | | | |

³⁸ Bentonite clays are non-toxic and form a low permeability, low porosity boundary layer preventing any fluid migration wherever drilling fluids are present. This essentially seals the walls of the borehole, preventing the drilling fluids from becoming incorporated into groundwater within aquifers. Aquifers are the geologic layer that holds the water. The bentonite clays act as an aquitard that keeps these hydrologic units discrete.

| Begin MP | End MP | County, State | Feature | Length (ft) |
|--|--------|---------------|---------|-------------|
| TGP filed a Section 408 Alteration Permission Request with the USACE for the proposed HDD crossing of the Yazoo River East and West Levees on June 27, 2025. A copy was provided in TGP's June 30, 2025, Certificate Application under appendix 1.F (Agency Communications), Accession no.: 20250630-5152. | | | | |

While the HDD method generally avoids direct effects on the feature being crossed, the Companies would use a guide wire system that would require non-mechanized clearing between the entry and exit pits. The foot paths would be approved by the EI, the NPS (for the Natchez Trace Parkway crossing) prior to implementation of the HDD guidance system. In addition, the Companies have proposed ATWS within the path of certain HDDs to provide access for water withdrawals from certain waterbodies. Water withdrawals are addressed further in section 4.3.2.3. The alignment sheets provide locations of where ATWS or access roads may be installed between the HDD workspace and the water ³⁹ _{OB},⁴⁰

Table 2.5-4: HDDs Proposed for the South System Expansion 4 Project

| Loop ID | Begin MP | End MP | County, State | Feature | Length (ft) |
|--------------|----------|--------|--|-------------------------------------|---------------------|
| Loop B2 | 1.7 | 2.3 | Clarke County, MS | Chickasawhay River | 3,323 |
| Loop C1 | 14.4 | 14.8 | Perry County, AL | Cahaba River | 2,050 |
| Loop D1 | 8.5 | 9.0 | Elmore County, AL | Interstate-65 | 2,550 |
| Loop E2 | 3.3 | 4.0 | Elmore County, AL | Tallapoosa River | 3,875 |
| Loop F1 | 5.6 | 6.0 | Lee County, AL | Little Uchee Creek | 2,492 |
| Loop F1 | 19.8 | 20.2 | Lee County, AL and Muscogee County, GA | Chattahoochee River and Lake Oliver | 1,950 |
| Loop F1 | 27.4 | 27.9 | Harris County, GA | Interstate-185 | 2,950 |
| Loop F2 | 0.1 | 0.5 | Upson County, GA | Flint River | 2,312 |
| Loop I1 | 6.3 | 6.7 | Baldwin County, GA | Oconee River | 1,707 |
| Loop L1 | 4.6 | 4.8 | Monroe County, GA | Okmulgee Skullcap Critical Habitat | 1,108 ^{1/} |
| Loop L1 | 5.1 | 5.4 | Monroe County, GA | Interstate-75 | 1,660 |
| Total | | | | | 25,977 |

Note: HDD information obtained from SSE4/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

^{1/} In a document filed to the FERC docket on January 9 2026, SNG/EEC have agreed to trenchless construction techniques for these crossings (Accession no.: 20260109-5221).

HDD personnel would walk the land-based path of the drill to monitor for any inadvertent return of drilling mud to the surface. The Companies also anticipate HDD activities may require 24-hours per day/7 days per week drilling. Companies would implement measures to reduce noise from HDD construction as described in section 4.12.4.

³⁹ The MSX alignment sheets are available to the public for review via FERC's eLibrary at Accession no.: 20251020-5035.

⁴⁰ The SSE4 alignment sheets are available to the public for review via FERC's eLibrary at Accession no.: 20260217-5265.

The Companies have each provided an HDD Plan that addresses the prevention, detection, notifications, and response to inadvertent returns in upland areas, wetlands, and waterbodies.^{41, 42} In response to inadvertent returns of drilling mud to the surface, on-site personnel would assess the volume and discharge location to inform appropriate containment and response measures. In the event an inadvertent release enters a wetland or stream, the Companies would work to stop the flow and isolate the release and upon completion of the drill, would develop a cleanup plan based on site-specific conditions in consultation with appropriate agencies. The Companies have assessed the feasibility of HDD construction for the Projects and determined that the likelihood of success for each HDD is high, with possible exception of the Loop D1 and six outstanding HDD sites still undergoing geotechnical investigation.^{43, 44} HDD feasibility is further discussed in section 4.1.5.

The Companies also considered the use of additional trenchless methods for crossing waterbodies and wetlands, including conventional bore and Direct Pipe. TGP is only proposing to cross waterbodies and wetlands located along the sides of roads using conventional bore due to several factors limiting the success of a boring operation, including the crossing distance, subsurface soil and geologic conditions, and existing topography. SNG/EEC have determined boring is feasible at certain installation sites based on crossing distance, substrata layers, setup area, and considerations relative to constructability and/or safety. The Companies indicated that they would not propose the use of Direct Pipe.

2.5.3.2 Wetland Crossings

The Companies would minimize potential adverse effects on wetlands using construction procedures specified in their project-specific Procedures. The Companies would use standard construction techniques for wetland crossings, except for those crossed by trenchless methods, such as HDD, or where the standard pipeline construction method is not feasible.

Conventional wetland construction methods would support construction equipment without significant soil disturbance. Prior to crossing and movement of construction equipment through these wetlands, crews would stabilize the construction workspace using timber mats to allow for stable, safe working conditions. Unless soils are saturated, crews would segregate the top 12 inches of wetland topsoil over the trench line. Crews would temporarily stockpile trench spoil in a ridge along the pipeline trench, leaving gaps in the spoil pile at appropriate intervals to provide for natural circulation or drainage of water. While crews dig the trench, they would assemble the pipeline in a staging area located in an upland area. After lowering the pipeline into the trench, the crews would use wide-track excavators (e.g., specialized amphibious excavator) or specialized construction techniques supported on timber mats for backfilling, final clean-up, and grading. This method would minimize the amount of equipment and travel in wetland areas.

⁴¹ TGP's HDD Contingency Plan, June 30, 2025, Certificate Application, appendix 1.D.4 (Accession no.: 20250630-5152).

⁴² SNG's HDD Contingency Plan, July 3, 2025, Certificate Application, appendix 1.D.4 (Accession no.: 20250703-5175).

⁴³ TGP's HDD Feasibility Studies, September 23, 2025, Supplemental Filing, attachment 5 (Accession no.: 20250923-5058).

⁴⁴ SNG's HDD Feasibility Studies, August 26, 2025, Supplemental Filing, appendix 1.D.8 (Accession no.: 20250826-5140).

Where necessary, crews would use a drag-section, which involves trenching, installing, and backfilling a prefabricated length of pipeline containing several pipe segments within a single day. Crews would backfill the trench at the end of each day after lowering the pipe to ensure safety.

2.5.3.3 Residential Areas

Construction activities within residential areas, and measures to restore these areas once construction is completed are discussed in section 4.8.1.7.

2.5.3.4 Agricultural Lands

Construction of the Projects would affect agricultural land, defined by the presence of active or rotated crop production, hay, and improved pasture. To preserve soil productivity in agricultural lands, up to 12 inches of topsoil would be segregated during grading and stored separately from subsoil. The Companies would utilize full right-of-way topsoil segregation as required by landowner agreements, the Natural Resources Conservation Service (NRCS) District, or as appropriate based upon site-specific conditions. During the backfilling and restoration phases, topsoil would be replaced, and any stones uncovered during construction that are larger than 4 inches, or inconsistent with the existing surrounding area which are uncovered, would be removed or handled in accordance with individual landowner agreements. Any drain tiles damaged during construction would be repaired or replaced. Cleanup and restoration of the construction right-of-way would leave it in a condition similar to surrounding areas.

2.5.3.5 Rugged Topography

The Companies have completed a steep slope analysis of the Projects and determined that the overall gradient of the rights-of-way range from less than 5 percent to 85 percent on MSX⁴⁵ and one percent to 26 percent on SSE4.⁴⁶

Special construction techniques may be employed where slope gradient exceeds 30 percent. Section 4.1.5.2 provides a discussion of construction along steep slopes.

2.5.3.6 Foreign Utility Crossings

Both MSX and SSE4 would cross or come in close proximity to numerous foreign utilities or pipelines, including overhead electric or telephone utility lines. Prior to construction, the Companies would utilize the One-Call system to locate known utilities and would identify the precise location of each foreign line prior to excavation, using handheld devices. The Companies would give each operator adequate notice so they could be present during construction around their utility lines. When crossing foreign pipelines, utilities, or other structures, the Companies would normally install with a minimum of 24 inches of clearance between the proposed pipeline and the utility or structure being crossed. If foreign utilities are accidentally damaged during construction, the Companies would contact emergency response, and evacuate the immediate area, as appropriate. To aid in immediate response in the event of accidental damage, the Companies

⁴⁵ Table 1.2-4 from TGP's Supplemental Filing (MSX) dated September 23, 2025, identifies locations along the right-of-way where ATWS has been requested for slopes greater than 30 percent. Accession no.: 20250923-5058.

⁴⁶ Table 6.B-2 from SNG's/EEC's Supplemental Filing (SSE4) dated August 26, 2025, identifies percent slope along the project corridor. Accession no.: 20250826-5140.

would coordinate with the utility companies on the timing of construction so that the utility company could have a representative on-site during excavation.

2.6 CONSTRUCTION SCHEDULE AND WORKFORCE

Construction activities would generally occur between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday; with the exception of certain specialized construction activities, which would occur on a 24-hour per day, 7-day per week schedule during certain periods of construction, such as:

- HDD activities;
- hydrostatic testing of HDD sections, mainline pipe, and facilities;
- dewatering of test sections;
- conventional bore pits and trench or bell holes ahead of mainline installation crews;
- mainline tie-in and specialty crews at resource and road crossings (as needed pending schedule and progress);
- aboveground facilities construction; and
- commissioning, line purge and drying, and line fill activities.

In addition, we recognize that certain construction efforts (e.g., equipment and material unloading, operation of pumps, non-destructive testing) may require uninterrupted completion extending into nighttime hours. The Companies also state that dry-ditch stream crossing timing windows may necessitate nighttime work or work on Sundays and holidays. Lastly, limited 24-hour-per-day, nighttime, and/or Sunday work in the event of construction delays due to unforeseen events such as weather conditions, challenging site conditions, emergencies, or equipment breakdown may occur.

2.6.1 Mississippi Crossing Project

TGP has indicated that MSX would be split into two construction spreads. Spread 1 would include milepost 0.0 to 96.0 of the MSX Mainline and the CGT Lateral. Spread 2 would consist of milepost 96.0 to 199 and the remaining four laterals. Table 2.6-1 outlines the anticipated schedule and workforce for the different phases of MSX construction.

Table 2.6-1: Anticipated Construction Schedule and Workforce for MSX

| Facility | MP Begin | MP End | Approx. Length (mi) | Construction Schedule | | Peak Workforce | |
|-------------------------------|----------|--------|---------------------|-----------------------|------------|----------------|-----------|
| | | | | Begin | End | Construction | Operation |
| Pipeline Facilities | | | | | | | |
| MSX Mainline (Spread 1) | 0.0 | 96.0 | 96 | 01/01/2027 | 11/01/2028 | 600 | 9 |
| CGT Lateral | 0.0 | 7.0 | 7 | | | | |
| MSX Mainline (Spread 2) | 96.0 | 199.0 | 103 | 01/01/2027 | 11/01/2028 | 600 | |
| Texas Gas Lateral | 0.0 | 0.6 | 0.6 | 01/01/2027 | 11/01/2028 | 75 | |
| Tetco Lateral | 0.0 | 0.3 | 0.3 | 01/01/2027 | 11/01/2028 | 75 | |
| TGP 500 Lateral | 0.0 | 0.2 | 0.2 | 01/01/2027 | 11/01/2028 | 75 | |
| Transco Lateral | 0.0 | 0.5 | 0.5 | 01/01/2027 | 11/01/2028 | 75 | |
| Aboveground Facilities | | | | | | | |
| Existing Station 54 | 0.0 | -- | -- | 01/01/2027 | 11/01/2028 | 60 | 0 |
| New Station 602 | 32.0 | -- | -- | 01/01/2027 | 11/01/2028 | 160 | 2 |

| Facility | MP Begin | MP End | Approx. Length (mi) | Construction Schedule | | Peak Workforce | |
|---------------------------------------|----------|--------|---------------------|-----------------------|------------|----------------|-----------|
| | | | | Begin | End | Construction | Operation |
| New Station 606A | 96.0 | | -- | 01/01/2027 | 11/01/2028 | 100 | 1 |
| New Station 610 | 164.0 | | -- | 01/01/2027 | 11/01/2028 | 140 | 3 |
| New Meter Stations and OPP Facilities | -- | | -- | 01/01/2027 | 11/01/2028 | 60 | 1 |
| Workforce Total for MSX | | | | | | 2,020 | 16 |

TGP anticipates that MSX construction would begin immediately following receipt of Notice to Proceed from the Commission (potentially as early as October 1, 2026, subject to receipt of required permits and regulatory approvals). Construction is expected to take approximately 34 months with final restoration activities to follow immediately. TGP is aiming to place MSX into service in November 2028, with final restoration immediately following. TGP anticipates completing all restoration in Spring 2029.

2.6.2 South System Expansion 4 Project

SSE4 would also be organized into two phases as shown in the table below. SNG/EEC anticipates beginning construction of Phase I facilities in 4th quarter 2026, assuming all required permits and approvals are in place. Phase I construction would extend through November of 2028. Construction of Phase II facilities would begin in May 2028 and conclude at the end of 2029. Table 2.6-2 outlines the anticipated schedule and workforce for each phase of SSE4 construction.

Table 2.6-2: Anticipated Construction Schedule and Workforce for SSE4

| Facility | County, State | Construction Schedule | | Peak Workforce | |
|--|-----------------------------------|-----------------------|---------|----------------|------------------------|
| | | Begin | End | Construction | Operation |
| PHASE I - Pipeline Facilities | | | | | |
| Loop A1 | Sumpter, AL | 7/2027 | 11/2027 | 203 | 0 |
| Loop B1 | Marengo, AL | 7/2027 | 12/2027 | 240 | 0 |
| Loop C1 | Dallas & Perry, AL | 4/2027 | 1/2028 | 440 | 0 |
| Loop D2 | Dallas, AL | 4/2027 | 1/2028 | 219 | 0 |
| Loop D1 | Autauga & Elmore, AL | 6/2027 | 2/2028 | 407 | 0 |
| Loop E1 | Lee & Macon, AL | 10/2027 | 4/2028 | 358 | 0 |
| Loop F1 ^{a/} | Lee, AL and Harris & Muscogee, GA | 7/2027 | 5/2028 | 534 | 0 |
| Loop G1 | Talbot, GA | 11/2027 | 6/2028 | 393 | 0 |
| Loop F2 | Upson & Talbot, GA | 11/2027 | 6/2028 | 220 | 0 |
| Loop H1 | Bibb & Monroe, GA | 5/2027 | 11/2027 | 228 | 0 |
| Loop I1 | Baldwin, GA | 1/2028 | 7/2028 | 347 | 0 |
| Loop J1 | Glascocock & Washington, GA | 11/2027 | 8/2028 | 429 | 0 |
| Loop K1 | Richmond, GA | 4/2028 | 9/2028 | 242 | 0 |
| Loop L1 | Monroe & Bibb, GA | 11/2027 | 4/2028 | 215 | 0 |
| Loop M1 | Henry & Spalding, GA | 4/2028 | 10/2028 | 300 | 0 |
| PHASE I -Compressor Stations (CS) | | | | | |
| Rose Hill CS | Clarke County, MS | 1/2028 | 11/2028 | 113 | 1 |
| Enterprise CS | Clarke County, MS | 1/2028 | 11/2028 | 113 | 1 |
| York CS | Sumter County, AL | 3/2027 | 12/2027 | 113 | 2 |
| Gallion CS | Hale County, AL | 1/2028 | 11/2028 | 113 | 3 |
| Selma CS ^{a/} | Dallas County, AL | 3/2027 | 12/2027 | 113 | 2 |
| Elmore CS | Elmore County, AL | 1/2028 | 11/2028 | 113 | 5 |
| Auburn CS | Lee County, AL | 3/2027 | 12/2027 | 113 | 1 |
| Ellerslie CS | Harris County, GA | 1/2028 | 11/2028 | 113 | 2 |
| Thomaston CS ^{a/} | Upson County, GA | 1/2029 | 11/2029 | 113 | 2 |
| Ocmulgee CS | Bibb County, GA | 1/2028 | 11/2028 | 113 | 2 |
| Hall Gate CS | Baldwin County, GA | 3/2027 | 12/2027 | 113 | 2 |
| Workforce Total for SSE4 – PHASE I | | | | 6,018 | 23 |
| PHASE II - Pipeline Facilities | | | | | |
| Loop A2 | Clarke, MS | 12/2028 | 3/2029 | 177 | 0 |
| Loop B2 | Clarke & Lauderdale, MS | 10/2028 | 4/2029 | 404 | 0 |
| Loop C2 | Sumter, AL | 11/2028 | 5/2029 | 371 | 0 |
| Loop E2 | Macon, Tallapoosa, & Elmore, AL | 5/2028 | 12/2028 | 423 | 0 |
| Loop G2 | Crawford & Upson, GA | 7/2028 | 1/2029 | 389 | 0 |
| Loop H2 | Baldwin & Jones, GA | 8/2028 | 3/2029 | 383 | 0 |
| Loop I2 | Glascocock & Jefferson, GA | 9/2028 | 2/2029 | 234 | 0 |
| PHASE II -Compressor Stations (CS) | | | | | |
| Wrens CS | Jefferson County, GA | 1/2029 | 11/2029 | 113 | 2 |
| Jefferson CS | Jefferson County, GA | 1/2029 | 11/2029 | 113 | 1 |
| Rincon CS | Effingham County, GA | 1/2029 | 11/2029 | 113 | 2 |
| Workforce Total for SSE4 – PHASE II | | | | 2,720 | 5 |
| GRAND TOTAL WORKFORCE FOR SSE4 | | | | 8,738 | 29^{b/} |
| <p>Note: Schedule and phase information obtained from SNG/EEC’s August, 26, 2025, Supplemental Filing, (Accession no.: 20250826-5140). Workforce information obtained from SNG/EEC’s July 3, 2025, Certificate application, (Accession no.: 20250703-5175).</p> <p>^{a/} These facilities would be constructed during both Phase I and Phase II.</p> <p>^{b/} In addition to the 28 permanent new hires needed for operation at compressor stations, there would be one new permanent position placed in SNG’s Birmingham office, for a grand total of 29.</p> | | | | | |

As depicted in the table above, SSE4 construction would take approximately 36 months with final restoration activities to follow immediately. SNG/EEC anticipate placing the Phase 1 and Phase 2 facilities into service in November 2028 and November 2029, respectively. Due to the relatively staggered construction schedule, SNG/EEC anticipate that many of the workers would support construction of multiple facilities and phases (i.e., construction of SSE4 is unlikely to require over 8,700 individual workers).

The Companies would have at least one EI per spread assigned to the Projects during active construction and restoration. The EIs would work closely with the Chief Construction Inspector and/or Construction Manager but would report directly to the Companies' Environmental Inspection Coordinator (EIC). The Companies' environmental personnel would maintain contact with the EIC, EIs, and compliance coordinator at the appropriate levels throughout the construction of the Project. The EI's duties would be consistent with those contained in the Plan and Procedures, and the EI would have the authority to stop activities that violate the environmental conditions of the FERC Certificate and other federal and state permits or landowner requirements, and to order corrective action. In addition, FERC staff would maintain compliance oversight of the Project throughout construction and restoration.

Shifts in the proposed routes or other variations from what is approved by a FERC Certificate may be required prior to and during construction to accommodate currently unforeseeable site-specific constraints related to engineering, landowner, and environmental concerns. Any necessary alignment shifts outside of the certificated right-of-way would be subject to review and approval by the FERC.

3 ALTERNATIVES

We evaluated potential alternatives to MSX and SSE4 to determine whether an alternative would be environmentally preferable, reasonable, and/or technically and economically feasible to the proposed action. Alternatives that we considered or evaluated include system alternatives, major route alternatives, and minor route variations. FERC staff also reviewed public comments received through scoping or that were filed on the project dockets in response to the draft EIS, that involved location-specific route variations. These are presented in table J.3.0-1. Appendix J includes supporting tables and figures for the alternatives analysis of the Projects. During the comment period for the draft EIS, we received submissions from the public requesting renewable energy be considered as an alternative to the Projects. Statements, questions, and/or comments regarding general energy policy concerns (such as comments requesting that FERC consider other methods of power generation) are noted but are considered outside the scope of the EIS, because the purpose of the Project is to transport natural gas, and the generation of electricity from renewable energy sources, like solar, is not a transportation alternative that could satisfy the Projects' purpose and need. Further, FERC does not have regulatory oversight of solar energy infrastructure siting. For more information on the purpose and need of the projects, see chapters 1 and 2 of this EIS.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the MSX pipeline facilities would not be constructed and TGP's plan to provide 2.1 million Dth/d of new firm natural gas transportation service would not be met. The SSE4 pipeline facilities would not be constructed and SNG/EEC's plan to provide 1.3 million Dth/d of additional natural gas transportation service would not be met. The environmental effects identified throughout this EIS would not occur under the no-action alternative; however, the Companies' purpose to provide natural gas transportation service to meet growing energy needs in the Southeast would not be met. If the proposed facilities are not constructed, shippers could seek alternative projects or other sources of energy which could have similar or greater (or lesser) effects on the environment; however, we find it speculative to determine what other actions may be proposed to serve shippers need for additional firm transportation capacity in the absence of the Projects. Therefore, we have not identified any reasonably foreseeable negative environmental effects of not implementing the proposed action. We do not recommend the no-action alternative, but the Commission will ultimately determine the Projects' needs and could select the no-action alternative.

3.2 ALTERNATIVES EVALUATION PROCESS

Each alternative was compared to the proposed action using the following three evaluation criteria:

- 1) Would the alternative meet the purpose(s) of the proposed action?
- 2) Would the alternative be technically and economically feasible, reasonable, and practical?
- 3) Would the alternative offer significant environmental advantage over the proposed action?

The first consideration for including an alternative in our analysis is whether it could satisfy the stated purpose of the Projects. An alternative that cannot achieve the project's purpose cannot be considered as an acceptable replacement for the project. Some alternatives may be limited by the extent of system capacities, while others may not be practical because sites are unavailable or cannot be developed for the proposed use. Our evaluation of the identified alternatives is based on project-specific information provided by the applicant, stakeholder comments, publicly available information, and our expertise and experience regarding the siting, construction, and operation of natural gas transmission facilities and their potential effects on the environment.

Alternatives that would not meet one of the first two criteria 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 effects on each resource as well as an analysis of effects on resources that are not common to the alternatives being considered. The determination must then balance the overall effects and all other relevant considerations. In comparing the effect between resources, we also considered the degree of effect anticipated on each resource. Ultimately, an alternative that offers only equal or minor advantages in terms of environmental effect would not compel us to recommend a change that shifts the effects to another location, unless our analysis identifies a clear and reasonable justification.

The alternatives considered in this EIS focus on system alternatives that could leverage existing pipeline facilities or systems, and major route alternatives or minor route variations designed to avoid or minimize adverse environmental effects or address landowner requests.

3.3 SYSTEM ALTERNATIVES

System alternatives would meet the projects' purpose by using a different, often existing, natural gas facility, pipeline system, or configuration (FERC, 2017). The purpose of identifying such alternatives is to determine whether potential environmental effects associated with the construction and operation of the proposed action could be avoided or reduced while still meeting projects' purpose. System alternatives allow for transportation of all or a portion of the additional natural gas volumes by expansion of existing facility/pipeline systems or by the construction and operation of other new facility/pipeline systems. A viable system alternative would make construction of all or part of the proposed Projects unnecessary. System alternatives that would result in fewer environmental effects might be preferable to the proposed Projects, but only those alternatives that are reasonable, feasible, and consistent with the Projects' purposes were considered. Accordingly, we can attempt to identify, to the extent possible, other existing natural gas pipeline systems in the vicinity of the Projects that could theoretically meet the stated purpose. However, it is outside of the scope of this EIS to speculate whether theoretical pipelines or alternative energy sources could one day provide energy as suggested by some commenters, nor can this EIS direct other companies or agencies to design or construct a project that would take the place of this proposed Project. The system alternative must be technically and economically practical and offer a significant environmental advantage over the proposed Project. In general, collocating pipeline infrastructure with existing utility easements is preferred because it minimizes additional ground disturbance, reduces adverse effects on vegetation and wildlife habitat, and promotes more efficient use of previously developed areas.

3.3.1 System Alternatives for MSX

We analyzed alternatives along TGP's existing natural gas pipeline system to identify viable alternatives that would result in fewer environmental effects. We did not identify any other company's existing facilities that could reasonably deliver a similar volume of natural gas to meet the purpose of the MSX.

We evaluated three system alternatives for MSX that would have incorporated existing TGP pipeline infrastructure and maximized collocation of new pipeline installation with established TGP rights-of-way, determining that only two of the three system alternatives could meet the purpose of the proposed action and were technically and economically feasible. Upon complete evaluation of the potential environmental effects of these alternatives (comparison provided in table J.3.3-1), we concluded that neither would be preferable to the proposed action. Despite being entirely collocated with existing pipeline infrastructure, System Alternative A would result in substantially greater environmental effects as compared to the proposed action due to its significantly longer pipeline length, larger construction footprint, and greater direct effects to wetlands, waterbodies, natural and scenic rivers, and designated critical habitat. Additionally, this alternative would pass through more densely developed areas which would require construction workspaces to be within 50 feet of more residences and, thus, result in substantially greater potential for residential disturbance. System Alternative B would also affect a greater number of residences near construction work areas compared to the proposed action but would, otherwise, result in similar environmental effects to wetlands, waterbodies, and protected species habitat. Using our standardized approach to alternatives evaluation, we determined that there is not a preferable system alternative to the proposed action for MSX. We did not identify an alternative that could provide the necessary natural gas transportation capacity while being technically and economically feasible and resulting in substantially fewer environmental effects.

3.3.2 System Alternatives for SSE4

SSE4 is proposed to increase capacity along SNG's existing South Main Line System. We did not identify any other existing systems that have both sufficient unsubscribed capacity and the necessary geographic reach to provide firm natural gas service to the proposed delivery points as required by the project shippers.

3.4 MAJOR PIPELINE ROUTE ALTERNATIVES

Major pipeline route alternatives are those that deviate from the proposed route for an extended number of miles or are several miles away from the proposed route. We evaluated major route alternatives primarily to accommodate construction limitations, improvements of the proposed alignment crossings of streams, roads, and other infrastructure, and/or avoidance of natural features.

3.4.1 Major Pipeline Route Alternatives for MSX

We evaluated five major pipeline route alternatives for MSX. A comparative analysis, including the location (i.e. MP) of each alternative, is provided in table J.3.4-1. Route alternatives B, C, and D were considered to increase collocation of the proposed alignment with existing infrastructure corridors by a total of 32.4 miles. Route alternatives B and D would meet the projects' purpose and be technically and economically feasible; however, we determined that there

were either slightly greater or no substantial difference in the environmental effects between the alternatives and the proposed MSX Mainline. When we compared route alternative C to the proposed alignment, we determined the alternative would increase collocation by 18.7 miles and reduce effects on wetlands by 2.3 acres, but the alternative would affect 6 more perennial waterbodies and 1.1 acres of state managed lands. Route alternative C offers a tradeoff of effects between a few resources without a substantial advantage. Therefore, we conclude that none of these 3 route alternatives offer significant benefit over the proposed action and, as such, these alternatives were removed from further consideration.

We considered route alternative A because it would eliminate the need for the CGT Lateral and would reduce the overall pipeline length by 2.5 miles (table J.3.4-1). This alternative would meet the first two evaluation criteria, and we determined that it would affect 8.2 fewer acres of wetland, including 6.4 fewer acres of forested wetlands. This alternative, however, would reduce the overall collocated length of pipeline by 22.3 miles. Generally, the environmental effects were similar between route alternative A and the proposed MSX Mainline, and we concluded that the benefit of reducing the length of the overall pipeline was diminished by the reduced collocated length of this alternative. We do not recommend this alternative because deviating from existing infrastructure corridors does not offer significant environmental advantage compared to the proposed alignment.

We considered route alternative E because it would reduce the overall pipeline length by 10.1 miles and would affect 6.3 fewer acres of wetlands. During our evaluation, however, we found steep side slopes and difficult terrain throughout portions of this alternative alignment that would present challenges to the constructability and long-term operation of the pipeline. Route alternative E would diverge southwest of the proposed alignment (figure J.3.4-1) and traverse difficult terrain and steep side slopes for approximately 13 miles. Pipeline installation along side slopes increases construction complexity, introduces additional safety risks, and increases the potential for erosion or slope failure. The proposed alignment navigates the steep terrain perpendicularly which minimizes the chance for external geophysical forces to be exerted on the pipeline during operation. We determined there was not significant environmental advantage to route alternative E, and we do not recommend this alternative. Ultimately, there were no major route alternatives considered for MSX that met the first two evaluation criteria and provided significantly reduced environmental effects, thus, we recommend the proposed alignment.

3.4.2 Major Pipeline Route Alternatives for SSE4

We evaluated major route alternatives on three of the proposed pipeline loops, Loop F1, Loop H1, and Loop M1. These alternatives are discussed in more detail in the following sections.

Loop F1 Major Route Alternatives

We reviewed two major route alternatives for Loop F1 in response to comments from landowners along the proposed route regarding effects on their properties, as described in table J.3.0-1. The route alternatives are depicted in figure J.3.4-2, and a tabular comparative analysis of the proposed pipeline Loop F1 and the two alternatives mentioned is provided in table J.3.4-2.

Route alternative F1-1 would be entirely collocated with the existing SNG pipeline corridor. The existing corridor traverses residential areas which have become highly congested as

housing developments grew over time, leaving little room for expansion of the pipeline right-of-way to accommodate a new pipeline loop. The benefits that collocation normally would provide, such as reduced environmental effects, are outweighed by the disadvantages of directly affecting an estimated 98 private residences (whereas the corresponding section of the proposed route affects 5 residences). Due to constructability challenges and the effects that this alternative route would have on private residences across multiple communities, we do not consider route alternative F1-1 to be preferable to the proposed route, and we removed it from further consideration.

We considered route alternative F1-2 because it would reduce the overall length of Loop F1 by 2.4 miles and increase collocation with existing infrastructure corridors (including overhead powerlines) by 4 percent compared to the proposed alignment. We limited the scope of our evaluation to focus only on the approximately 8 miles that differ between route alternative F1-2 and the proposed alignment. Our analysis determined that route alternative F1-2 would affect 6.6 fewer acres of wetlands, one more perennial waterbody, and one less residence within 50 feet of proposed temporary workspace (table J.3.4-2). This alternative would cross designated critical habitat for the Georgia rockcress (*Arabis georgiana*), a small perennial herb that is listed as Threatened on both federal and state protected species lists.⁴⁷ The proposed alignment does overlap with suitable habitat for this species, however, there is no designated critical habitat that overlaps with the current route. The potential effects that SSE4 could have on the Georgia rockcress are discussed in section 4.7 and minimization measures such as HDD could be employed to avoid effects to the Georgia rockcress habitat along the alternative route. We determined that route alternative F1-2 does not offer significant environmental advantages as compared to the proposed alignment. Additionally, this alternative could affect designated critical habitat for a protected species. For these reasons, route alternative F1-2 was removed from further consideration. Minor route variations associated with the alignment of Loop F1 are discussed in section 3.5.2.

Loop H1 Major Route Alternative

We evaluated one alternative, route alternative H1-1, against the proposed Loop H1 alignment to determine the environmental effects and feasibility of fully collocating the new loop with the existing South Main Line near Macon, Georgia. Loop H1 crosses U.S. Highway 41 S and parallels U.S. Interstate 75 before crossing the interstate north of the Bass Pro Shops in Macon, Georgia (figure J.3.4-3). The proposed alignment would deviate north from the existing South Main Line immediately after crossing U.S. Interstate 475 from the west. The current alignment would be collocated with existing utility corridors for approximately 1.3 miles (20 percent of the total length) and would affect about 2.41 acres of additional wetlands compared to the route alternative H1-1.⁴⁸ Since construction of the South Main Line system, two neighborhoods and local businesses have been established in proximity to the existing rights-of-way, leaving very little space for a new loop. Route alternative H1-1 would be located within 50 feet of 29 existing residences compared to 10 along the proposed route. If route alternative H1-1 was selected, Loop L1 would need to be extended an additional 1.6 miles to intersect with Loop H1 as shown in figure

⁴⁷ Species profile for Georgia rockcress, including designated critical habitat and range maps, can be found on the FWS Environmental Conservation Online System (ECOS) at: <https://ecos.fws.gov/ecp/species/4535#rangeInfo>. State specific information for this species in Georgia can be found here: https://georgiabiodiversity.org/portal/profile?group=all&es_id=18522.

⁴⁸ SNG/EEC's February 17, 2026, Supplemental Filing (Accession no.: 20260217-5265).

J.3.4-3. We conclude that route alternative H1-1 would not offer significant environmental advantage over the proposed alignment and, ultimately, eliminated the alternative from further consideration due to the greater number of landowners that would be directly affected by construction activities. Minor route variations associated with the alignment of Loop H1 are discussed in detail in section 3.5.2.

Loop M1 Major Route Alternatives

We evaluated one alternative, route alternative M1-1, against the proposed Loop M1 alignment to determine the environmental effects and feasibility of fully collocating the new loop with the existing South Main Line. The proposed alignment deviates east of the existing South Main Line approximately 2 miles north-northeast of Griffin, Georgia (figure J.3.4-4) to avoid residential development. Alternative M1-1 would be fully collocated with the existing South Main Line in Spalding County, Georgia and would, in turn, result in a smaller total project footprint, but would affect an additional 1.3 acres of wetlands and 8 additional residences within 50 feet of the proposed construction work area compared to the proposed alignment.⁴⁹ Route alternative M1-1 would affect more acres of wetland and more residences as compared to the proposed Pipeline Loop M1. We concluded that it would not offer a significant environmental advantage, and it was eliminated from further consideration.

3.5 MINOR ROUTE VARIATIONS

Minor route variations include realignments that are identified to avoid or resolve localized resource issues or to accommodate landowner requests. Minor route variations are typically considered to avoid or minimize effects on localized sensitive resources and are informed by field surveys, stakeholder feedback, and constructability considerations. As part of refining design of the Projects, the Companies incorporated minor route adjustments prior to and during our environmental review. The Companies will continue to analyze route variations to accommodate construction limitations and avoid natural features that would cause challenges during construction or restoration, improve crossings of streams or existing infrastructure, and consider landowner and stakeholder concerns. During the draft EIS comment period, we received comments from landowners requesting route variations shifting the pipeline to different locations. TGP evaluated route variations proposed by landowners and provided details of correspondence with each landowner, where applicable. The following sections describe the variations that were analyzed. We reviewed all public comments received during scoping and in response to the draft EIS that included suggestions or requests for minor route variations and provided responses in table J.3.0-1.

3.5.1 Minor Route Variations for MSX

TGP's route design reviews during Project development and input received from landowners resulted in minor variations to the proposed route in certain locations that were incorporated into the proposed alignment (table J.3.0-1) prior to the end of our environmental review. As part of the proposed alignment, the potential effects resulting from these variations are evaluated in chapter 4 of this EIS. We received public comments through scoping and during the draft EIS comment period expressing concern about MSX's potential effects on existing historic resources, natural resources, land use, landforms, and agriculture. These individual concerns were

⁴⁹ Table V1.B.1 of the SNG supplemental filing August 26, 2025, FERC Accession no.: 20250826-5140.

addressed between TGP and the affected landowners and, in some cases, were incorporated into the proposed alignment (table J.3.0-1). We received several comments expressing concern that the proposed project would devalue Mississippi 16th Section Public School Trust Lands (Public School Trust Lands). We evaluated minor route variations that would avoid crossing Public School Trust Lands in multiple locations, however, we did not find suitable alternatives for all Public School Trust Lands that cross MSX. Further discussion of potential effect MSX could have on these classified lands can be found in section 4.8.2.

3.5.1.1 Royce Variation

Prior to the draft EIS, Mr. Ben Royce, speaking on behalf of himself, his siblings, and Killian RKR, LP, proposed rerouting the pipeline at approximate MP 22.8-23.7 to the northern boundary of his property to avoid co-location with the existing Texas Gas pipeline corridor which crosses diagonally through a number of agricultural fields.⁵⁰ In response, TGP revised the alignment to follow the northern boundary of Mr. Royce's property.⁵¹ In response to the draft EIS, Mr. Royce further refined the family's requested minor route variation to avoid affecting drainage on agricultural land enrolled in a conservation program administered by the NRCS, as discussed in section 4.8.1.3 of this EIS.⁵² Mr. Royce indicated that it would be less disruptive to farming operations and conservation practices to shift the pipeline North of the existing drainage ditch and continue East across Royce Road through a nonagricultural tract of land (see figure J.3.5-1).

The Royce variation would be similar in length to the proposed route; however, it would affect one new landowner and potentially result in additional effects to an unknown structure located on the east side of Royce Road. As portions of the Royce variation occur outside of the surveyed corridor, it is uncertain the current use of the land and the extent of effects on wetlands that could occur with the variation. Further, the new landowner on the Royce variation has not had an opportunity to provide comments on this variation.

Restoration of soil structure and productivity of agricultural land along the proposed route could take several years to achieve success, as discussed in sections 4.2.3 and 4.8.1.3 of this EIS. TGP has committed to returning the land to pre-construction contours in accordance with the MSX Plan and Procedures and to return drainage patterns to previous conditions during restoration. Revegetation of agricultural areas would be considered successful when crop growth is similar to adjacent undisturbed portions of the same field. FERC staff would monitor restoration efforts and require corrective action where necessary. As such, the effects on the agricultural land along the proposed route are expected to be temporary until restoration is deemed complete. As permanent effects on agricultural land are not anticipated, an alternative that offers only equal or minor advantages in terms of environmental effects would not compel us to recommend a change that shifts the effects to another location. For these reasons, we conclude that this route variation would not offer a significant environmental advantage. Therefore, we recommend the proposed route depicted in figure J.3.5-1.

⁵⁰ Comment by Ben Royce, Royce Family, Accession nos.: 20250325-5210; 20251001-5272; and 20251001-5053.

⁵¹ Alignment Sheet: MS-D1-ALIGN-024, Rev. C; Accession no. 20250630-5152.

⁵² Comment by Ben Royce, Accession no.: 20260304-0007.

3.5.1.2 Phillips Variation

Ms. Phillips, on behalf of her family, submitted a public comment to the MSX project docket (CP25-514-000) on March 23, 2026, (Accession No. 20260325-5025) requesting a minor route variation to the proposed pipeline alignment where it crosses her family's land. Ms. Phillips notes that, at the time of her comment, her family was in active negotiations with TGP regarding the proposed pipeline, but that the family would prefer the alignment to be shifted to follow the Mills Lane public road right-of-way rather than bisecting the Phillips property.⁵⁴ Ms. Phillips states that shifting the alignment would reduce effects to the property's hardwood forest. On April 9, 2026, we requested TGP provide a response to Ms. Phillips's March 23rd comment (Accession No. 20260409-3029). TGP responded to our information request on April 23, 2026, (Accession No. 20260423-5193) stating that TGP had met with Ms. Phillips and the family confirmed the proposed alignment. At the time of this meeting, Ms. Phillips noted the family's discontent with the proposed alignment, however, the family did not provide a specific alternative for TGP to conduct a comparative environmental, engineering, and economic analysis against the proposed alignment.⁵⁵ The proposed alignment was developed to minimize environmental disturbance by following a direct route across the property. From an engineering perspective, the alignment allows for safe and constructible installation while navigating existing terrain, including areas of switchback topography. Additionally, TGP has acquired easement rights on adjacent properties to the north and south of Ms. Phillips's property, which limits flexibility for alignment adjustments without introducing additional effects or requiring new land acquisition. TGP has stated it will continue to coordinate with Ms. Phillips to address her concerns and will work in good faith to identify any reasonable, site-specific adjustments that may be practicable. For these reasons, we conclude that the Phillips variation would not offer a significant environmental advantage, and, as such, we do not recommend this alternative.

3.5.1.3 Langston Variation

Mr. Langston submitted a comment at the public comment session held in Kosciusko, Mississippi requesting a variation to the alignment between MP 114.3 and MP 114.9 (approximate location).⁵⁶ Mr. Langston's proposed alternative would avoid bisecting the affected parcel and could minimize effects on upland, forested areas. The variation proposes to shift the current alignment east towards Rice Creek and then parallel the creek to the southeast. TGP responded to Mr. Langston's comment noting that routing the pipeline closer to Rice Creek was considered, however, it would have resulted in roughly 3.5 to 4 acres of additional wetland impacts. Based on the above, we do not recommend the Langston Variation as it would not offer a significant environmental advantage and recommend TGP's proposed route. TGP notes that they will continue coordination with the landowner to address reasonable access needs, including Mr. Langston's request to cross the pipeline after construction with logging equipment.⁵⁷

3.5.2 Minor Route Variations for SSE4

Many comments have been filed on the SSE4 docket suggesting minor deviations to the proposed alignment. Common concerns expressed across a multitude of comments include

⁵⁴ Comment by Natasha Phillips, Accession no.: 20260325-5025.

⁵⁵ Supplemental filing, Accession no.: 20260423-5193.

⁵⁶ Comment by Frank Langston, Jr., Accession no.: 20260317-4001.

⁵⁷ Supplemental filing, Accession no.: 20260423-5193.

proximity of the proposed alignment to existing residences or planned structures, potential adverse effects on suitable habitat for protected species, and negative effects on wetlands and waterbodies (table J.3.0-1). Minor route variations for loops D1, F1, H1, and L1, as well as location-specific variations requested by landowners during the draft EIS public comment period, are discussed below.

3.5.2.1 Loop D1

We received multiple requests from an affected family for minor route variations along Loop D1 between MP 9.2 and 9.6 due to potential effects on the family's 40-acre farm.⁵⁸ The current proposed alignment would bisect the family's 40 acres and affect existing structures on the northwest 10-acre property. The family expressed concerns regarding effects on old growth trees on a very steep ravine through the property. The family is opposed to the proposed route through their property and suggested that the south side of their property is a better location for the pipeline. The family also raises concerns about the safety of their cattle, both in terms of securing them throughout all phases of the project and the risks associated with construction equipment. Additionally, the family highlights issues with the small road used to access their property and neighboring properties, requesting that the road be maintained during construction. Further, the family presented four access road alternatives and alternative workspace configurations, which were provided directly to the applicant, however, no cohesive route has been provided to the docket.

In response to the draft EIS recommended condition no. 13, SNG filed an analysis of Alternative D1 Route, as suggested by the affected landowners along Loop D1 between MP 9.2 and 9.6 as presented in figure J.3.5-2.⁵⁹ Based on the most recent filings, negotiations are still in progress between SNG/EEC and these landowners. While the Proposed D1 Route affects 0.2 acre less forest clearing than Alternative D1 Route, SNG/EEC plan to proceed with the Alternative D1 Route in the interest of alleviating and resolving landowner concerns. Once negotiations have been completed and a resolution with the landowners has been achieved, SNG/EEC states that it would incorporate the Alternative D1 Route into the proposed alignment for Pipeline Loop D1 and provide the necessary information to the FERC. SNG/EEC would file its results of negotiations with landowners with its Implementation Plan. (see section 5.2, recommended condition no. 5)

3.5.2.2 Loop F1: Fowler Variation

Mr. William A. Fowler submitted a comment during the public comment session held in Harris County, Georgia in March 2026, suggesting a variation to Loop F1 that would utilize an existing overhead utility transmission line easement.⁶⁰ Mr. Fowler noted that his property and the surrounding properties contained forested land and springs and expressed concern about the effects that pipeline construction would have on these features. The Fowler Variation would shift the current Loop F1 alignment North into the active transmission line easement and would, therefore, avoid effects to the forest and springs. SNG/EEC provided a response stating that no springs were identified on Mr. Fowler's property during environmental field surveys and cited multiple attempts to get in touch with Mr. Fowler without response, as of April 9, 2026. SNG/EEC offered to

⁵⁸ The family filed comments in Accession nos.: 20250915-5011, 20250908-5025, 20250415-5095, and 20250324-5006.

⁵⁹ SNG/EEC's February 17, 2026, Supplemental Filing, Exhibit A (Accession no.: 20260217-5265)

⁶⁰ Comment by William A Fowler, Accession no.: 20260324-4000.

conduct pre- and/or post-construction water sampling for potable springs within 150 feet of the pipeline construction right-of-way or additional temporary workspace by a qualified, independent contractor. Companies would avoid effects to previously unidentified springs to the extent practicable and implement best management practices as described in section 4.3.1.5 of this EIS. We do not recommend the Fowler Variation because it would introduce unnecessary safety hazards during construction and pipeline installation underneath existing overhead utility transmission lines, and we have not identified a significant environmental advantage compared to the proposed Loop FI alignment.

3.5.2.3 Loop H1

We received many comments from residents of the North Rivoli Farms neighborhood requesting the proposed Loop H1 be relocated off their properties or reconfigured to reduce effects on tree clearing and loss of privacy/buffers, as well as addressing effects on gardens, pools, recreation areas, and pet cemeteries. In response to the draft EIS, we received additional comments regarding the routing in this location. Landowner comments specific to this minor route variation request are included in table J.3.0-1. Further, SNG modified its proposed pipeline route (referred to in this analysis as Alternative C) as discussed below.⁶¹

In the draft EIS, we reviewed two minor route variations that could potentially address the landowner concerns, as shown in figure 3.5-1 below and presented in table J.3.5-1.⁶³ Alternative A (pink line in figure below) would keep the pipeline alignment on the southwest side of US Highway 41 S until crossing the highway, railroad, and local Rivoli Road perpendicularly near MP 1.8. This option would eliminate the need to clear trees that currently provide a visual buffer between the North Rivoli Farms community and Rivoli Road; however, this alternative would shift tree clearing and effects on visual buffers to US Highway 41 S to new currently unaffected landowners along Sara Kay Lane. Alternative B (orange line in figure below) would also keep the pipeline alignment on the southwest side of US Highway 41 S until eventually crossing the highway, railroad, and local Rivoli Road north of the Mount Zion Baptist Church. This option would similarly avoid effects on forested areas that currently provide a visual buffer between the North Rivoli Farms community and local Rivoli Road and would avoid effects on Mount Zion Baptist Church property; however, this would result in similar effects on new landowners along Sara Kay Lane. Further, we received a comment from a landowner with a newly constructed home on Stilmont Drive along Alternative B expressing concern about forest clearing and effects to the residence and the adjacent church and cemetery.⁶⁴ In general, shifting effects from one landowner to another is not, in and of itself, a justified reason for rerouting a pipeline. Therefore, we do not recommend Alternative A or B as alternatives to the proposed alignment.

In response to the draft EIS recommended condition no. 14, SNG/EEC modified their original route for Loop H1, proposed in their June 30, 2025, application, (red line in figure below) between MP 1.5 and MP 2.5 to reduce the number of landowners crossed by the centerline and to minimize effects on homeowners in the North Rivoli Farms neighborhood (Alternative C, green line in figure below). Alternative C would be slightly longer (0.04 mile), cross two previously unaffected landowners, affect two additional perennial waterbodies, and clear 0.4 acre more of

⁶¹ SNG/EEC's February 17, 2026, Supplemental Filing, Exhibit A (Accession no.: 20260217-5265)

⁶³ SNG/EEC's April 23, 2026, Supplemental Filing, response 14, table 1.1-2 (Accession no.: 20260423-5197)

⁶⁴ Accession no.: 20260121-5000 available online at elibrary.ferc.gov.

forest than the original route. SNG asserts that Alternative C would affect one fewer landowner than the original route and result in the least landowner effects due to the preservation of screening trees/shrubs, reduction of effects on residential areas, and shifting the centerline further from residences, as was requested by the commenters. Our environmental comparison of the original route to Alternative C does not clearly identify one route presenting a significant environmental advantage over the other. However, we find Alternative C responds to many landowner concerns and is an acceptable alignment.

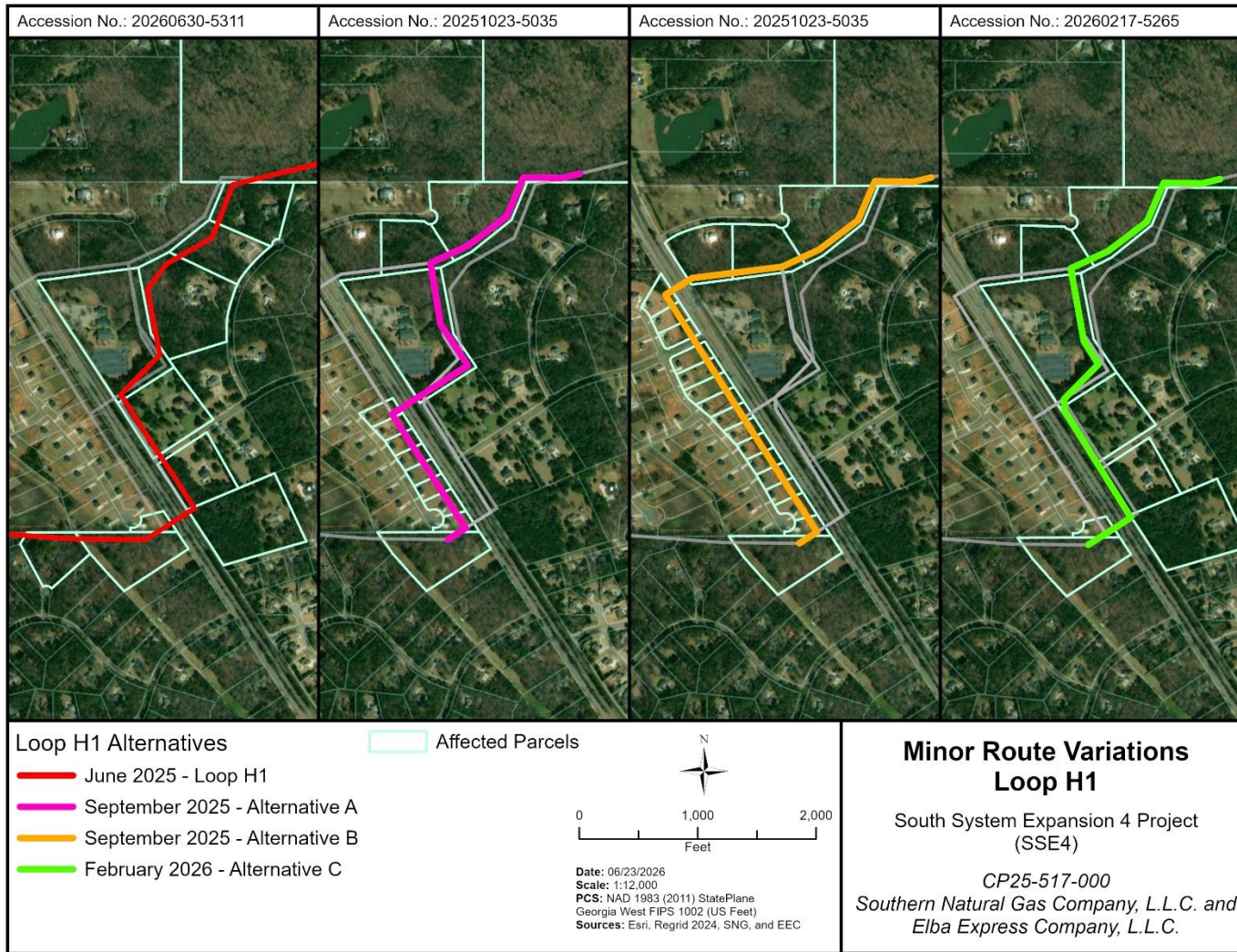
3.5.2.4 Loop L1: Griggers Variation

We received comments from Mr. Chuck Griggers recommending that portions of Loop L1 follow the existing easement corridor parallel to two existing gas pipelines near New Forsyth Road in order to minimize tree clearing, as opposed to SNG/EEC's proposed route which was collocated with an existing overhead utility corridor.⁶⁵ We reviewed an approximate 0.6-mile minor route deviation starting near MP 0.2 of Loop L1 that would result in a similar total project length and acreage, but would require 1.1 acres less of forested clearing and cross one less perennial waterbody compared to the proposed alignment.⁶⁶ This alignment would cross two additional landowners, as shown in figure J.3.5-3. While shifting effects from one landowner to another is not, in and of itself, a justified reason for rerouting a pipeline, we find both routes acceptable and note that the reduction in effects to forested land with this variation could provide an advantage over the proposed alignment. SNG/EEC have indicated that they would continue negotiations with the landowners in an effort to reach an agreement. If SNG/EEC can obtain landowner approvals for the variation, they can submit a request to FERC for a route realignment (see section 5.2, recommended condition no. 5).

⁶⁵ Accession nos.: 20260317-5099 and 20260323-5092.

⁶⁶ SNG/EEC's April 23, 2026, Supplemental Filing, response 13 (Accession no.: 20260423-5197).

Figure 3.5-1: Minor Route Variation Options for Loop H1 Based on Public Comment⁶⁷



⁶⁷ SNG filing response to our April 9, 2026, data request, Attachment EIR 14, Accession no.: 20260423-5197.

3.6 ABOVEGROUND FACILITY ALTERNATIVES

Compressor stations and aboveground facility siting are often constrained by several factors including pipeline hydraulics and DOT regulations. That is, an otherwise seemingly ideal site based on land use or other environmental factors might not be within the necessary engineering and hydraulic parameters of the pipeline system. Also, compressor stations constructed to increase pressure or deliverability on an existing system would need to be sited along (or nearby) the existing pipeline facilities to avoid the need for additional connection (suction/discharge) pipelines. Consideration is also given to environmental effects associated with accessing each site, construction requirements, noise-sensitive areas, sensitive resources, contamination, and the reasonable availability of sites sufficiently large enough to provide a buffer from adjoining properties.

Regarding site selection, although section 7(h) of the NGA grants Certificate holders the right to exercise eminent domain, we believe it is generally preferable for a site to be reasonably obtained from the current landowners (e.g., purchase, lease, restrictive easement) to minimize the use of eminent domain to secure land for aboveground facilities where possible.

We did not receive comments for either of the Projects regarding alternative locations for the new compressor stations, meters stations, or OPP facilities proposed and did not identify any specific resource concerns that would justify conducting a comprehensive alternatives analysis to evaluate different sites. In addition, we did not identify any significant environmental issues with any of the proposed facility sites and, therefore, did not evaluate alternative locations for aboveground facilities further.

3.7 CONCLUSIONS

Overall, we conclude that the preferred configurations for MSX and SSE4 would best achieve the intended purpose while minimizing environmental effects. Minor modifications to routing or construction techniques may further address landowner concerns. SNG/EEC is continuing consultations on Loop D1 and L1 and would file updates on landowner negotiations along with submission of its Implementation Plan. The proposed action (the preferred alternative) would not result in significant adverse effects on the human environment.

4 ENVIRONMENTAL ANALYSIS

The following sections present an assessment of potential environmental effects associated with the Projects and their influence on existing environmental conditions. This evaluation considers information from the Companies' applications and supplemental materials, input from relevant agencies and stakeholders, and established experience with the development and operation of natural gas transmission systems. Effects are categorized as temporary, short-term, long-term, or permanent, based on their duration and the expected recovery period. Temporary effects would be limited to construction activities; short-term effects could extend for up to three years; long-term effects would require more than three years to recover; and permanent effects would result in lasting changes to resources, such as those from aboveground facilities. An effect would be considered significant if it substantially alters the physical environment.

The Companies proposed several mitigation measures to minimize potential environmental effects from the Projects. In some instances, we identified additional measures to further reduce these effects. These additional recommendations are presented in bold text throughout the following sections and are summarized in section 5.2. We recommend that the Commission include these measures as environmental conditions in any Order authorizing the Projects.

4.1 GEOLOGY

4.1.1 Geologic Setting

MSX is located within the Mississippi Embayment, an inland extension of unconsolidated Gulf Coastal Plain sediments such as sand, silt, clay, limestone, marl and gravel (USGS, 1995). Table I.4.1-4 shows the depth to bedrock encountered for the MSX Mainline and aboveground facilities.

The proposed pipeline loops and aboveground facilities locations of SSE4 are within the Atlantic Coastal Plain and the Piedmont physiographic provinces (NPS, 2017). Pipeline Loops A1, B1, C1, D1, E1, I1, J1, E2, and I2 are in the Atlantic Coastal Plain, Pipeline Loops G1, H1, L1, M1, F2, and G2 are in the Piedmont province, and Pipeline Loops F1 and H2 cross the geologic boundary between these two provinces known as the Fall Line. Geologic materials crossed by the SSE4 pipeline loops and aboveground facilities are listed in table I.4.1-5 (USGS, 2025g). The associated mapping is available for the public on FERC's eLibrary.⁶⁸ Most of the project is underlain by alluvium deposits of sand, clay, and silt. Other portions are underlain by metamorphic rock including gneiss, biotite-gneiss, amphibolite, mylonite, and phyllite. Tables I.4.1-6 and I.4.1-7 show depth to bedrock and slope encountered along the SSE4 loops and aboveground facilities, respectively. According to the U.S. Soil Survey Geographic database, shallow bedrock may be encountered along the proposed pipeline loops (NRCS, 2025a).

4.1.2 Mineral Resources

Mineral resources include both fuel-based mineral production and non-fuel mineral production. Fuel-based mineral resources include oil, natural gas, and lignite. Non-fuel mineral resources include sand and gravel (construction and industrial), clay, limestone, lignite, and silica.

⁶⁸ SSE4/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

Mississippi Crossing Project

Data were obtained from the Mississippi Oil and Gas Board for oil and gas wells within 0.25-mile of proposed MSX facilities and nine were discovered. Of these nine wells, none are located in Project workspaces, and all are either plugged or abandoned (Mississippi Oil and Gas Board, 2025). Based on information from TGP, the nearest well is 115 feet from a proposed access road.⁶⁹ Wells found during construction, would have a 10-foot buffer with safety fencing to minimize potential effects. TGP would identify the owner and use of the well to develop mitigation measures to protect the well from construction. If a drinking water well is discovered, TGP would offer water testing for quality and yield in coordination with the landowner. No effects on these wells would occur during construction or operation of the Project.

According to the U.S. Geological Survey (USGS) Mineral Resource Data System, there are no past or present mines, mining prospects, or mining processing plants within one mile of MSX (USGS, 2025a). One non-fuel mineral resource site is within 0.25-mile of MSX in Leake County near MP 10.7.⁷⁰ The site is a sand and gravel construction site (USGS, 2025b) and is not anticipated to be disturbed by Project construction.

South System Expansion 4 Project

SNG/EEC reviewed mineral resource data for Mississippi, Alabama, and Georgia to determine if any resources are within 0.25-mile of the project area (USGS, 2025a, Mississippi Oil and Gas Board, 2025). Table I.4.1-8 details the fuel and non-fuel mineral resources within 0.25-mile of SSE4.⁷¹ No active oil and gas wells were identified within 0.25-mile of the aboveground facilities or proposed pipeline loops.⁷² Therefore, no effects on wells are anticipated. SNG/EEC would adhere to the SSE4 Plan and Procedures if any unexpected active mining operations are encountered.

4.1.3 Paleontological Resources

Paleontological resources are the fossilized remains of prehistoric plants and animals and include trace fossils in rock or other materials. A review of the route for MSX determined that no unique paleontological resources are known to exist in this area (Paleobiology Database, 2025).⁷³ TGP would stop work and notify the appropriate agencies in the event of a discovery so MSX would not adversely affect paleontological resources.

SSE4 would be subject to paleontological laws only in Alabama, as the States of Mississippi and Georgia do not have state laws protecting paleontological resources. SSE4 would not cross any counties in which paleontological resources have been known to exist. If a paleontological find is discovered, SNG/EEC would protect the resource to the greatest extent

⁶⁹ Information obtained from TGP's October 6, 2025, Response to the September 15, 2025, Environmental Information Request, number 42. Accession no.: 20251006-5171.

⁷⁰ Non-fuel mineral resources obtained from MSX June 30, 2025 Application. Accession no.: 20250630-5152.

⁷¹ A map showing the locations of mineral resources was filed by SNG/EEC on November 5, 2025 as part of its supplemental filing and is available for the public review on FERC's eLibrary at Accession no.: 20251105-5163.

⁷² Oil and gas well information obtained from SSE4 November 5, 2025 Supplemental Filing. Accession no.: 20251105-5163.

⁷³ Paleontological resources obtained from MSX June 30, 2025 Application. Accession no.: 20250630-5152

practicable and would notify FERC and the landowner to consider future actions. As the SSE4 facilities would not cross unique known paleontological resources and SNG/EEC would stop work and notify the appropriate agencies in the event of a discovery, SSE4 is not expected to affect paleontological resources.

4.1.4 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 (USGS, 2025e), surface faulting, and soil liquefaction. Below, we also discuss landslides, ground subsidence (including karst terrain), acid rock drainage, flood hazards, blasting, and HDD feasibility.

4.1.4.1 Seismicity and Soil Liquefaction

Seismic hazards include earthquakes, faulting, and secondary effects such as soil liquefaction. Peak ground acceleration (PGA) (expressed in terms of acceleration as a percent of gravity) is a measure of the effect of an earthquake at a certain distance from the source and is based on geological conditions. PGA values for MSX and SSE4 were calculated based on seismic hazard mapping developed by USGS for ground motions having a 10 percent probability of exceedance in 50 years, which represents a return period of 475 years (Petersen et al. 2021 & 2023; Rukstales and Petersen 2019).

Soil liquefaction is a phenomenon associated with seismic activity in which saturated, non-cohesive sandy or silty soils temporarily lose their strength and liquefy when subjected to ground shaking (in general, a PGA of 10 percent of gravity or greater). All three of these conditions must be present for soil liquefaction to occur.

Mississippi Crossing Project

The MSX Mainline would be located in an area with PGA values within 0.04 percent.⁷⁴ This level of ground shaking is anticipated to cause moderate to strong shaking but leads to “none” to “slight” damage to underground pipelines according to Federal Emergency Management Agency (FEMA) (FEMA 1992). The PGA is estimated at 10 to 14 percent in the western portion of the MSX area and 6-10 percent in the eastern portion of the MSX area. The level of PGA intensity is thus considered a low threat to a buried pipeline. The majority of soils crossed by MSX would be well-drained soils and therefore would be unlikely to be susceptible to soil liquefaction.

MSX is not expected to be affected by geologic faults, as the project would not be located in an area associated with major faults, and displacement of the earth’s surface along a fault line during an earthquake is extremely rare in the eastern U.S. The pipeline would be designed and constructed in accordance with applicable USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations (49 CFR Part 192) and constructed to standards that would allow the project to withstand probable seismic events within the seismic risk zones crossed,

⁷⁴ Geologic hazard mapping filed by TGP as part of its June 30, 2025, Certificate Application is available to the public for viewing at FERC’s eLibrary (appendix 6.A) at Accession no.: 20250630-5152.

including applicable standards and design requirements in any additional federal and state regulations.

Given the conditions described above, we conclude that there is low potential for ground shaking, ground rupture, or soil liquefaction to occur or significantly affect MSX facilities. TGP would monitor geophone seismic monitoring stations along the project for earth movements during operation as part of its integrity monitoring program.

South System Expansion 4 Project

SSE4 would not cross any areas of Quaternary deformation and faulting in Mississippi, Alabama, or Georgia (USGS 2020). There is a low probability that earthquakes of significant magnitude would occur in the vicinity of SSE4.

SSE4 mapping demonstrates that the PGA ground motions values are relatively low within the vicinity of the SSE4 pipeline loops and aboveground facilities and depicts historical earthquakes with a magnitude of 2.5 or greater from 1800 to present within the vicinity of SSE4.⁷⁵ The earthquakes occurring within 0.25-mile of SSE4 are tabulated in table 4.1-1 below.

Table 4.1-1: Earthquakes with a Magnitude of 2.5 or Greater from 1800 – Present within 0.25-mile of SSE4

| Nearest Project Facility | MP | Distance (feet) and Direction from Project | Date | Location (City, State) | Magnitude | Depth (km) |
|--------------------------|------|--|------------------|-------------------------------|-----------|------------|
| Access road for Loop C2 | 10.5 | 193, NE | May 7, 1998 | 9 km SSE of Bellamy, Alabama | 2.8 | 10 |
| Access road for Loop I1 | 8.4 | 819, S | October 29, 2005 | 7 km ESE of Hardwick, Georgia | 2.5 | 17.1 |

SSE4 would be designed and constructed in accordance with applicable PHMSA regulations (49 CFR Part 192) and applicable standards and design requirements in federal and state regulations.

We conclude that the potential for ground shaking, ground rupture, or soil liquefaction to occur or significantly affect SSE4 facilities is low. No other mitigation for seismicity would be proposed; however, SNG/EEC would monitor conditions and adapt as needed.

4.1.4.2 Landslides and Slope Stability

Landslides involve the downslope mass movement of soil, rock, or a combination of materials on an unstable slope. Natural causes of landslides include slope destabilization resulting from adverse bedrock conditions, steep inclines, water content and flow, precipitation, freeze/thaw cycles, and soil characteristics. Anthropogenic causes or contributing factors include ground disturbance, and alteration of surface or subsurface drainage patterns. Construction-related landslide triggers can additionally include vibrations from machinery or traffic, addition of new loads on a slope, and removal of deep-rooted vegetation. The Companies have completed a steep

⁷⁵ Geologic hazard mapping filed by SNG/EEC on February 17, 2026, as part of a supplemental filing. Available to the public for viewing at FERC’s eLibrary (figure 6.A-3 and figure 6.A-4) at Accession no.: 20260217-5265.

slope analysis of the Projects and determined that the overall gradient of the rights-of-way range from less than 5 percent to 85 percent on MSX and one percent to 26 percent on SSE4.^{76,77}

Where construction activity must be conducted on side slopes, or where ground conditions warrant the use, specialized techniques would be used to ensure the safety of workers, the public, and the environment. Pipe installation and construction activities across steep slopes would be similar to standard upland construction methods, but equipment may be tethered via a winch line to other stabilized equipment at the top of the slope. This technique provides a simple arrest to uncontrolled movements and can function as an assist to equipment when traversing across or up and down the slope within the right-of-way. Equipment used to prepare the construction corridor and excavate the trench would be secured with a series of winch tractors to maintain control and provide an additional level of safety. Spoil piles adjacent to the trench would be stabilized with temporary sediment controls as needed to keep excavated soils within the construction work area. All sediment and erosion controls would be installed in accordance with project-specific Plans and Procedures.

In areas where pipeline construction involves side slopes, cut-and-fill grading may be necessary to create a safe, flat work terrace. Soil from the construction work area would be excavated and moved to be stockpiled as spoil or to create a temporary fill to support activity. After the pipeline is installed, the slope's original contours would be restored to the greatest extent practicable.

Pipe joints may be stockpiled at various points on a slope in addition to staging areas at the top and bottom of the right-of-way. A variety of methods to string, weld, and lower-in pipe may be employed. Under some conditions, it may be possible to string, weld, and lower-in using typical methods. Under other conditions it may be necessary or beneficial to connect multiple pipe segments on less steep areas and then transport the welded pipe string into position for installation. Another method may be to use a tethered side boom carrying individual pipe lengths to their intended position one joint at a time up or down the slope before lowering-in and welding. Grading may be minimized by detouring non-essential equipment around areas of excessively steep slopes using an approved TAR or bypass. Two-toning (grading two small cuts where the working side is higher than the spoil side) may also be implemented to minimize grading for steep cuts.

The Companies would install temporary trench plugs and temporary slope breakers during construction on slopes greater than 5 percent. Temporary slope breakers would channel water off the right-of-way through a J-hook or other baffling device to limit water flow down long steep slopes. Temporary trench plugs would reduce the velocity of water flowing along the trench and the volume of water that collects at the bottom of slopes. The Companies would install permanent trench breakers and permanent slope breakers in areas of steep slopes. Trench breakers are designed to prevent preferential water flow along the pipeline trench by diverting subsurface water flow to the land surface. Groundwater discharging to the land surface would then be redirected

⁷⁶ Table 1.2-4 from TGP's Supplemental Filing (MSX) dated September 23, 2025, identifies locations along the right-of-way where ATWS has been requested for slopes greater than 30 percent. Accession no.: 20250923-5058.

⁷⁷ Table 6.B-2 from SNG's/EEC's February 17, 2026 Supplemental Filing (SSE4) identifies percent slope along the project corridor. Accession no.: 20260217-5265.

off the right-of-way by slope breakers. Used in combination, these structures would prevent subsurface piping of soils that can lead to slope instability and failure.

Mississippi Crossing Project

MSX would be in an area of low landslide incidence and susceptibility and the entire MSX area would have less than 1.5 percent chance of landslide incidence (Radbruch-Hall et al., 1982). Furthermore, no landslides were reported to have occurred within the proposed project area (USGS, 2025f).

TGP identified areas along its proposed route where ATWS may be needed to accommodate special construction techniques for slopes greater than 30 percent.⁷⁸ To mitigate the potential for slope instability during construction, TGP would install temporary trench plugs and slope breakers on slopes greater than five percent. These structures would prevent subsurface piping of soils that could lead to slope instability and failure. Construction operations would have geotechnical personnel available who would prescribe additional mitigation measures as needed if unanticipated subsurface conditions are encountered.

Blasting may also be required for both MSX and SSE4, as described in sections 2.5.1.2 and 4.1.5.5. In areas where blasting would be required for construction on slopes, returning slopes to preconstruction contours may not be feasible or conducive to maintenance of slope stability during operation, and additional measures or engineering controls may be required. We conclude that the potential for landslides and slope instability to occur within MSX would be low. TGP would monitor installation activities as they occur and would adapt as needed.

South System Expansion 4 Project

A total of seven areas of high landslide risk were identified within 100 feet of the proposed SSE4 pipeline loops, based on current light detection and ranging, known as LiDAR, data and monitoring information.⁷⁹ To mitigate construction-related triggers of slope failure, the SNG/EEC would implement best management practices (BMPs) during construction and restoration, which would ensure appropriate grading, limited undercutting or overloading on slopes, and appropriate revegetation. The BMPs planned for implementation are described in the SSE4 Plan and Procedures. BMPs would also be implemented for pipeline loops that fall in areas with higher densities of recorded landslides following construction to monitor for new landslides that may develop.

The SSE4 pipeline loops and aboveground facilities would be located in areas with low landslide incidence.⁸⁰ Slopes would not exceed 26 percent for pipeline loops or 25 percent for aboveground facilities. Steep slope construction techniques would be used on any slopes greater than five percent. During construction, the results noted in the *Phase I Landslide, Geologic, and*

⁷⁸ Table 1.2-4 from TGP's Supplemental Filing (MSX) dated September 23, 2025, identifies locations along the right-of-way where ATWS has been requested for slopes greater than 30 percent. Accession no.: 20250923-5058.

⁷⁹ Phase I report in SNG/EEC's Resource Report appendix filed on July 3, 2025, as part of its Certificate Application (Accession no.: 20250703-5175).

⁸⁰ As provided by SNG/EEC in its July 3, 2025, Certificate Application – Resource Report 6 (Accession no.: 20250703-5175). Also reference figure 6.A.5 in SNG/EEC's February 17, 2026, supplemental filing (Accession no.: 20260217-5265).

*Hydrologic Hazard Assessment*⁸¹ would be used to mitigate susceptible areas where necessary. We conclude that the potential for landslides and slope instability to occur within SSE4 would be low to moderate. TGP would implement mitigation procedures to prevent any increase in slope instability and would adapt installation activities as needed.

4.1.4.3 Land Subsidence and Karst Terrain

Ground subsidence, involving the localized or regional lowering of the ground surface, may be caused by dissolution of carbonate or evaporite rocks, underground mines, and sediment compaction from oil, natural gas, or groundwater extraction/over pumping. Karst terrain is characterized by the presence of sinkholes, caverns, and sometimes highly irregular, pinnacled bedrock surface. These features develop from the dissolution of chemical sedimentary or unfoliated metamorphic rock (limestone, dolomite, marble, or gypsum) by groundwater or rainfall. Karst terrain often has unique hydrology and highly productive aquifers, which can be susceptible to contamination where direct pathways to groundwater are present (USGS, 1997).

Mississippi Crossing Project

There are no active or historic subsurface mines within 0.25-mile of MSX, nor does the area experience large groundwater withdrawals that would contribute to sediment compaction. Therefore, no land subsidence would be expected within the MSX area.

The MSX project area is not within an area mapped as karst or potential karst by the USGS, and no carbonate rock formations were noted within MSX. Given the distance to carbonate bedrock formations, MSX would have a low probability of significant effects due to the low potential for karst terrain and the formation of sinkholes.

South System Expansion 4 Project

There are no active or historic subsurface mines within 0.25-mile of SSE4. It is not expected that the SSE4 facilities would require high-capacity groundwater extraction nor oil and gas extraction; contribute to drainage of wetlands and organic soils, sediment compaction, sediment loading, surface water drainage and management; or use water for industrial purposes that could contribute to ground subsidence. Therefore, no significant land subsidence associated with SSE4 would be expected.

About 101 miles of SSE4 pipeline loops are underlain by karst topography (Doctor et al., 2020; Wood et al., 2023), as summarized in table I.4.1-9.

As noted in *2024 Phase I Landslide and Hydrologic Hazard Assessment for Southeast System Expansion 4 Loops*,⁸² there was no land subsidence due to karst observed along the proposed pipeline loop centerlines. Additionally, no sinkholes were identified within SSE4.

Effects associated with karst topography are expected to be minimal. No evidence of subsidence related to karst was observed along the SSE4 Project's centerline, and to the extent practicable, SNG/EEC would avoid traversing areas of visible ground subsidence if encountered. It is highly unlikely that a sinkhole would affect the pipeline, due to its structural integrity. SSE4

⁸¹ Provided by SNG/EEC in SSE4 July 3, 2025, Certificate Application (Accession no.: 20250703-5175).

⁸² Provided by SNG/EEC in SSE4 July 3, 2025, docket filing. Accession no.: 20250703-5175.

would be monitored for geotechnical integrity through routine operations and maintenance activities. Any effects on the geotechnical integrity of SSE4 from karst would be identified, and corrective actions subsequently implemented, to ensure the safe operation of the system. During inspections, SNG/EEC personnel would note any localized settling or possible “cracking” of the soil in or near potential karst features. If required, maintenance work would be performed to correct the situation by re-grading, installing additional soil, or mitigating the sinkhole. We conclude that effects on SSE4 due to karst topography would be low, as SNG/EEC would implement monitoring and mitigation activities to adapt as needed.

4.1.4.4 Flash Flooding and Scour

Flash floods can occur during periods of heavy rain or when levees, dams, or water systems break. Flash flooding is possible on streams and rivers within the Projects’ workspace. Bank erosion or scour from flash flooding could result in pipeline exposures or cause pipelines to become unsupported. TGP and SNG/EEC used FEMA Flood Insurance Rate Maps to evaluate floodplains and flood risk within the MSX and SSE4 areas.

Mississippi Crossing Project

Portions of the MSX Mainline, CGT Lateral, access roads, and contractor yards would be located in areas of Zone A (608.1 acres) and Zone AE (273.0 acres) flood risk.⁸³ The compressor stations, meter stations, and OPP facilities would fall within Zone X, which is outside of the 100-year floodplain. Along the MSX Mainline, the new MLV 601-1 at MP 16.4, and MLV 607-1 at MP 114.8 would be located within Zones A and AE (see table I.4.1-10 for a summary of flood zone acreage).⁸⁴

TGP would use best engineering practices to design the new MLVs that would be located within Zones A and AE so that they would accommodate the floodplain elevation. TGP would fill in the area with soil to raise the new MLV sites to grades equal to the adjacent roads. This would minimize concerns with future flood events. Due to their about three-yards-diameter size, the MLVs would result in minimal lost flood storage capacity, and construction would not significantly alter the floodplain characteristics. Mitigation measures to prevent damage to the MLVs within floodplains would include installing equipment and structures on elevated piers, surrounding the facilities with chain link fence, and/or factoring in design measures to prevent erosion and facilitate proper site drainage if a flooding event occurs. Construction of the MSX Mainline and CGT Lateral would not affect flood elevations as the pipelines would be buried underground, and the surface would be restored to pre-construction contours to the extent practicable. TGP would design, construct, and operate MSX in accordance with applicable regulatory requirements for development within a flood zone. There would be no anticipated adverse effects on floodplain functions due to MSX.

⁸³ A Zone X floodplain is identified as an area with a moderate to low flood risk and is outside the 500-year flood limit. Zone A represents an area that is subject to a one percent or greater annual flood risk, and Zone AE is located on the flood fringe and is subject to inundation by a one percent annual chance flood event (FEMA, 2025)

⁸⁴ Maps indicating the FEMA flood zones that would be in the vicinity of MSX were filed by TGP on September 23, 2025, as part of its supplemental application. These maps are available for the public to view on FERC’s eLibrary at Accession no.: 20250923-5058.

We do not expect construction of the MSX Mainline to increase the high-water mark during a flood, because the pipeline would be buried, and the surface restored to preconstruction contours to the extent practicable. During construction, TGP would limit long-term equipment storage in floodplains to that which is necessary, limit equipment refueling and fuel storage in floodplains where feasible (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]), and verify that equipment can handle waterbody flow increases during pipeline installation activities.

TGP would also use best engineering practices when designing and installing the MSX Mainline through each stream crossing. Approximately 6.4 miles of the pipeline would be installed via 15 HDD crossings (table 2.5-3). These crossings via HDD would limit the vertical scour concerns by avoiding direct interaction with surface waterbodies and their beds. Additionally, the HDD crossings would result in the pipeline being located to a depth under the waterbody that is not likely to experience scour (generally 40 feet or more).

TGP would implement the proper operating procedures, including continually monitoring pipeline pressure and volume, and would inspect any facilities that may have sustained damage following a weather-related event. Facilities that need to be repaired or replaced would be addressed as needed. These measures would appropriately mitigate effects due to flooding and scour.

South System Expansion 4 Project

The SSE4 pipeline loops and portions of the project workspaces, temporary workspace for York Compressor Station, and Port Wentworth Meter Station would cross FEMA-mapped floodways and floodplains. These facilities would be located within Zone A (448.6 acres) and Zone AE (49.3 acres) flood risk zones, which are designated as areas subject to flooding by a one-percent-annual-chance flood event.⁸⁵ The remaining SSE4 facilities would be located within Zone X, which is outside the mapped 100-year floodplain. See table I.4.1-11 for a summary of flood zone acreage.⁸⁶

The Port Wentworth Meter Station and any workspaces located within the 100-year floodplain would be designed with intent to accommodate the floodplain elevation and to minimize concerns with future flood events. All work would be performed in accordance with the SSE4 Procedures, and SNG/EEC would return temporary workspaces to pre-construction conditions.

Due to its small size, the Port Wentworth Meter Station would result in minimal loss of flood storage capacity, and construction would not significantly alter the floodplain characteristics. To further minimize effects of flooding, SNG/EEC would implement measures included in the SSE4 Plan. Additionally, the subsurface nature of the pipeline would limit effects associated with flooding, and the high-water mark during a flood would not be expected to change. During construction, SNG/EEC would limit long-term equipment storage in floodplains to that which is necessary, limit equipment refueling and fuel storage in floodplains where feasible, and verify that

⁸⁵ Flood Zone Acreages for SSE4 were provided by SNG/EEC in the February 17, 2026, Supplemental Filing (Accession no.: 20260217-5265).

⁸⁶ Updated maps indicating the FEMA flood zones that would be in the vicinity of SSE4 were filed by SNG/EEC on February 17, 2026, as part of Supplemental Filing #3 (Attachment B, Appendix 2A). These maps are available for the public to view on FERC's eLibrary at Accession no.: 20260217-5265.

equipment can handle waterbody flow increases during pipeline installation activities (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]).

Adverse effects of flash flooding on a pipeline are generally related to stream bank erosion and scour along steep slopes. Proper construction practices during pipeline construction would limit the potential for scour to affect the pipeline. Design and installation of the pipeline loops through rivers and streams would be completed using best engineering practices to minimize effects from scour. HDD crossings would limit vertical scour concerns by avoiding direct interaction with surface waters, and such crossings typically result in the pipeline being located to a depth under the waterbody that is not likely to experience scour.

SNG/EEC would implement the proper operating procedures, including continually monitoring pipeline pressure and volume, and would inspect any facilities that may have sustained damage following a weather-related event. Facilities that need to be repaired or replaced would be addressed as needed. These measures would appropriately mitigate effects associated with flooding and scour. SSE4 would only minimally affect floodplain storage capacity because the pipeline would be buried, and aside from the access road, an appurtenant aboveground facility, and a meter station no other facilities are proposed within a floodplain.

4.1.4.5 Blasting

Blasting can damage water lines, underground power, and other civil infrastructure. Controlled blasting is typically required in areas with shallow depth to bedrock that is difficult to excavate. This type of excavation may be used in certain areas with shallow and hard bedrock, which restricts trenching. If bedrock is encountered during trenching, the Companies would remove it using one of the techniques listed below.

While shallow bedrock is expected to be encountered during construction of MSX, a review of surficial geology, soil mapping, and desktop geotechnical survey results showed the bedrock encountered is expected to be paralithic (soft), weathered bedrock and should not require controlled blasting.

Controlled blasting may be required for a portion of SSE4 through eastern Alabama and western Georgia, and anywhere else that shallow and hard bedrock is found and blasting is determined to be necessary. If blasting is required, SNG/EEC would remove any bedrock encountered during trenching through excavation, hammering, and/or rock trenching, depending on site-specific conditions. If bedrock cannot be removed by conventional techniques, blasting followed by mechanical excavation would be used. SNG/EEC have prepared a general Blasting Plan to be implemented during such activities.⁸⁷ General blasting precautions are described in the Blasting Plan.

Techniques that would be used are listed below:

- conventional excavation with an excavator;
- ripping with an excavator equipped with a ripping tooth followed by conventional removal by excavator;

⁸⁷ The Blasting Plan for SSE4 was filed July 3, 2025, in SNG/EEC's Certificate Application (Accession no.: 20250703-5175).

- hammering with a pointed backhoe attachment or a pneumatic rock hammer, followed by a backhoe excavation; or
- controlled blasting and excavation with a backhoe.

If controlled blasting is deemed necessary for rock removal, TGP would engage a licensed and certified blasting contractor. The contractor would adhere to applicable federal and state blasting requirements as discussed in TGP's Blasting Plan, and would develop site-specific blasting plans for certain sensitive locations, as necessary.⁸⁸ TGP would notify all nearby landowners and other stakeholders within an area specified by the site-specific blasting plan.

TGP's blasting contractor would conduct pre-blasting of the rock, as needed, and develop site-specific controlled blasting operations and monitoring plans to be approved by TGP to avoid potential property or environmental damage. Control of blasting would limit stresses on existing pipelines, nearby structures, water supply wells, oil and gas wells, electrical transmission tower footings, and other utilities located near the workspace. Controlled blasting activities would not begin until occupants of nearby buildings, stores, residences, businesses, and farms are notified and pre-blast inspections have been conducted on structures and water wells.

TGP would carefully monitor and assess controlled blasting within 200 feet of residences and 200 feet of private or public water supply wells. Blasting mats would be used during controlled blasting to keep the material within the approved workspaces. TGP and its blasting contractor would adhere to the provisions in the Blasting Plan, which identifies controlled blasting procedures, including the use, storage, and transportation of explosives.

Following controlled blasting, where necessary, TGP would remove excess rock from the construction workspace, subject to affected landowner approval and applicable permit conditions. In areas where rock is predominant and little suitable backfill material is available, TGP would pulverize rock and place it in the trench as padding material around the pipe.

SSE4 could require limited blasting in areas of shallow bedrock. If blasting were required, contractors would follow established plans that include pre- and post-blast inspections, landowner notification, and use of blasting mats to prevent offsite effects. Effects on mineral resources, paleontology, and risks of acid rock drainage would not be significant. If unknown wells were discovered, construction would stop and the appropriate notifications and protective measures would be implemented.

4.1.5 HDD Feasibility

The Companies would conduct geotechnical investigations and adhere to HDD Contingency Plans as required to address potential adverse effects from the release of drilling fluid through hydraulically induced fractures during the HDD process. These investigations would be completed for all HDD locations associated with both MSX and SSE4. HDD Contingency Plans have been completed as noted in table 2.5-1.

The length of an HDD alignment, the pipe diameter, and the subsurface conditions are factors that determine the technical feasibility of an HDD installation. Subsurface conditions that

⁸⁸ The Blasting Plan for MSX was filed June 30, 2025, in TGP's Certificate filing. Accession no.: 20250630-5152.

can affect feasibility of an HDD include excessive rock strength and abrasiveness, unconsolidated gravel and boulder materials, poor bedrock quality, solution cavities, and artesian conditions. It is also possible for HDD pipeline installations to fail, primarily due to encountering unexpected geologic conditions such as transitioning from coarse unconsolidated materials into bedrock or if the pipe were to become lodged in the hole during pullback operations.

During HDD operations, drilling fluid consisting primarily of water and bentonite clay is pumped under pressure through the inside of the drill pipe and flows back (returns) to the drill entry point along an annular space between the outside of the drill pipe and the drilled hole. Because the drilling fluid is pressurized, in certain conditions it can seep into the surrounding rocks and sediment. Drilling fluid losses typically occur when the drilling fluid flows through the pore spaces in the soil through which the HDD drilling profile passes or within fractures contained in the rock formation. Inadvertent releases of drilling fluid are more likely to occur in more permeable soils or via fractures or fissures in bedrock. The risk of an inadvertent release occurring is greatest near the drill entry and exit points, where the drill path has the least amount of ground cover.

The Companies propose to use HDD to construct both the SSE4 and MSX pipelines. Several of the proposed HDDs would cross under NRI streams, which are designated by the NPS for their rare, unique, or exemplary characteristics. NRI streams are discussed in detail in section 4.8.2.5.

MSX proposes 15 HDDs along about 6.4 combined miles of pipeline.⁸⁹ Results of geotechnical investigations at the time of the Certificate application are incorporated into the MSX HDD Feasibility Studies.⁹⁰

SSE4 would install approximately 4.9 combined miles of SSE4 pipeline loops via 11 HDDs.⁹¹ In the SSE4 December 16, 2025, supplemental filing, SNG indicated it also would cross the Ogeechee River using a trenchless method.⁹² Results of geotechnical investigations can be found in SSE4 HDD Feasibility Studies.⁹³

Geotechnical investigations are not complete for all proposed HDD crossings. Therefore, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that, prior to HDD construction, the Companies file revised HDD feasibility studies that incorporate geotechnical investigation results for each proposed HDD and to seek approval for any modifications to the applicable HDD workspaces or drill paths** (see section 5.2, recommended condition no. 13).

4.1.5.1 Mississippi Crossing Project

Fifteen HDD locations have been proposed for HDD crossings and two have been investigated by TGP for HDD feasibility, as identified in table 4.1-2. For further discussion of all

⁸⁹ HDD miles and counts obtained from MSX June 30, 2025, Application. Accession no.: 20250630-5152.

⁹⁰ Available for review at Accession nos.: 20250630-5152 and 20250923-5058.

⁹¹ HDD miles and counts obtained from table 1.4-4 of SNG/EEC's February 17, 2026, Supplemental Filing. Accession no. 20260217-5266.

⁹² Filed by SNG/EEC as supplemental information under Accession no.: 20251216-5120.

⁹³ Filed under at Accession nos.: 20250703-5175, 20250826-5141, and 20251105-5165.

proposed HDD crossings, reference section 2.5.3.2. As discussed in section 4.1.5 above, we recommend that the Companies provide revised HDD Feasibility studies that incorporate geotechnical investigation results for each HDD proposed before any horizontal directional boreholes are drilled.

Table 4.1-2: Geotechnical Investigation Results at HDD Crossings for MSX

| HDD Crossing | Boring IDs | Maximum Depth (feet) | MP Location | True Crossing Length (feet) | Primary Geotechnical Conditions |
|--------------|----------------|----------------------|-------------|-----------------------------|---------------------------------|
| Yazoo River | YR-BH1; YR-BH3 | 90 | MP 41.1 | 2,006 | Lean clay, clayey/gravelly sand |
| Pearl River | Undetermined | Undetermined | MP 116.3 | 2,495 | Undetermined |

Notes:

Based on the geotechnical information provided by TGP in the June 30, 2025, Certificate Application (Accession no. 20250630-5152)

This table shows the results of completed geotech results as of the time of this final EIS. Additional geotechnical investigations are in progress and would be finalized prior to final site design.

MSX Yazoo River HDD

TGP completed two geotechnical test borings (YR-BH1 and YR-BH3) at a maximum depth of 90 feet below existing ground surface (bgs). Groundwater was noted at a depth of 13 feet bgs.

MSX Pearl River HDD

At the time of finalizing this EIS, the field work for HDD feasibility at Pearl River is still in progress.

4.1.5.2 South System Expansion 4 Project

SNG/EEC propose the use of the HDD method to cross infrastructure (roads, railroads, and utility corridors) and sensitive resources (wetlands and waterbodies) at ten locations. A summary of the geotechnical investigations and feasibility assessments completed at the time of finalizing this EIS is provided in table 4.1-3 and in the sections below.

Table 4.1-3: Geotechnical Investigation Results at HDD Crossings for SSE4

| HDD Crossing | Boring IDs | Maximum Depth (feet) | MP Range | True Crossing Length (feet) | Primary Geotechnical Conditions |
|--|---|----------------------|-------------|--------------------------------------|---|
| Loop D1 (Interstate 65 Crossing) | SB-D1-1A; SB-D1-1B; SB-D1-1C | 165 | 8.5 – 9.0 | 2,550 | Sandy clay, weathered rock, quartzite |
| Loop E2 (Tallapoosa River Crossing) | Option 1: SB-E2-1A, SB-E2-1B; Option 2: SB-E2-1C through SB-E2-1D | 150 | 3.2 – 3.6 | 2,252 (Option 1) 3,895 (Option 2) | Clays and silts, dense sands, weathered rock, quartzite |
| Loop F1 (Interstate 185 Crossing) | SB-F1-1A through SB-F1-1D | 165 | 27.1 – 27.6 | 2,964 | Clays and silts, sands, gneiss |
| Loop L1 (Interstate 75 Crossing) | SB-L1-1A; SB-L1-1B | 415 | 5.1 – 5.4 | 1,678 | Elastic silts, silty sands, quartz bedrock |

Notes:

Based on the geotechnical information provided by SNG/EEC in the August 26, 2025, Supplemental Filing (accession number 20250826-5140).

This table shows the results of completed geotechnical investigations as of the time of this final EIS. Additional geotechnical investigations are in progress and would be finalized prior to final site design.

The proposed SSE4 HDD crossings were evaluated using exploratory geotechnical borings and laboratory testing to characterize subsurface conditions. This included the completion of three (Loop D1, Loop F1, Loop L1) geotechnical borings on land and one (Loop E2) boring over waterbodies. At the time of finalizing this EIS, geotechnical investigations for the remaining six HDD sites are ongoing. Results for these investigations will be finalized prior to completion of final site design.

SSE4 Loop D1 - Interstate 65 HDD Crossing

The subsurface investigations showed a design path that would be within highly variable bedrock that is highly to completely weathered and within complex terrain of the Appalachian fold and thrust belt. These conditions may present a challenge for HDD operations as advancement into a weathered gneiss may cause IRs if they are advanced into a cavern or if drilling is advanced too fast through the weaker lithology. Multiple washout zones and completely weathered bedrock sections may present unstable drilling conditions requiring specialized drilling fluids, drill bits, or techniques, while the competent granite gneiss and quartzite sections would require appropriate drilling parameters for hard rock penetration.

SSE4 Loop E2 - Tallapoosa River HDD Crossings

Based on the results of the subsurface investigation, the design path for either of these two crossings would not be likely to cause inadvertent issues into the Tallapoosa River, and the transition from soil to bedrock would not pose a significant problem.

SSE4 Loop F1 – Interstate 185 HDD Crossing

The HDD bore path is anticipated to pass through quartz-rich bedrock, which is an ideal condition for HDD installation.

SSE4 Loop L1 - Interstate 75 HDD Crossing

Subsurface materials along the design path were determined to be composed of loose sands, medium dense sands with some gravel, and medium strong to very strong mylonite and biotite gneiss bedrock. These soils and bedrock would be considered suitable materials for HDD installation.

4.1.6 Conclusion

4.1.6.1 Mississippi Crossing Project

Overall, MSX would result in limited and localized effects on geologic resources, which would be minimized effectively through engineering design and BMPs. Based on this assessment, we conclude that MSX would not likely be adversely affected by geologic hazards and that geologic effects due to MSX would not be considered significant.

4.1.6.2 South System Expansion 4 Project

Through adherence to federal design standards and BMPs, SSE4 would maintain slope stability, protect floodplain function, and minimize geotechnical risks. Based on this assessment, we conclude that SSE4 would not likely be adversely affected by geologic hazards and geologic effects would not be considered significant.

4.2 SOILS

The NRCS Soil Survey Geographic (SSURGO) database was used to determine the soil map units associated with MSX and SSE4 (NRCS, 2025a). The SSURGO database uses information from published NRCS soil surveys and generally provides the most detailed level of geographic soil data available. The soil map units included in the SSURGO database comprise one or more soil series. Soil series are the lowest category in the hierarchy of the NRCS soil classification system and are the most homogeneous classes in the taxonomic system. Furthermore, soil series nomenclature is used to name soil map units, which may contain specific surface soil texture, slope, and/or erosion characteristics that affect soil properties and designations. The properties and designations of soil map units within the proposed MSX and SSE4 areas were used to evaluate the existing soil resources that would be affected by the Projects.

4.2.1 Soil Characteristics

MSX would cross 269 soil map units and would occur within the NRCS soil survey areas of Attala, Clarke, Holmes, Humphreys, Lauderdale, Leake, Neshoba, Newton, Sunflower, and Washington counties, Mississippi and Choctaw County, Alabama.⁹⁴ We compiled a summary table (table I.4.2-1) of the physical soil characters for the soils affected (by acre) due to the construction and operation of MSX.⁹⁵ SSE4 would cross 464 soil map units and would occur within the following NRCS soil survey areas: Clarke and Lauderdale counties, Mississippi; Autauga, Dallas, Elmore, Lee, Macon, Marengo, Perry, Sumter and Tallapoosa counties, Alabama; and, Baldwin, Bibb, Crawford, Glascock, Harris, Henry, Jefferson, Jones, Monroe, Muscogee, Richmond, Spalding, Talbot, Upson, and Washington counties, Georgia.⁹⁶ We compiled a summary table (table I.4.2-2) of the physical soil characters for the soils affected (by acre) due to the construction and operation of SSE4.⁹⁷ The acreages provided in the following subsections are available for review in tables I.4.2-1 and I.4.2.-2.

4.2.1.1 Hydric Soil

Soils that, in an undrained condition, are saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation are, by definition, hydric (7 CFR 12.2(a) “Hydric soils”). In total, the MSX project area includes approximately 1,258 acres of hydric soil, while the SSE4 project area includes approximately 287 acres of hydric soil. Hydric soils are generally associated with wetlands or aquatic areas. The NRCS ranks soil map units by designation based on the hydric status of major (20 percent or more of a map unit) and minor (less than 20 percent of a map unit) components.

⁹⁴ Detailed mapping of soil map units for MSX is available in appendix 7.B of Resource Report 7 from the June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

⁹⁵ Values of affected soil characteristics for MSX were provided in TGP’s September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058). See table I.4.2-1.

⁹⁶ Detailed mapping of soil map units for SSE4 is available in appendix 7.B of Resource Report 7 on elibrary.ferc.gov/eLibrary/search. Accession no.: 20260217-5265 filed on February 17, 2026.

⁹⁷ Values of affected soil characteristics for SSE4 were provided in SNG/EEC’s February 17, 2026 Supplemental Filing (Accession no.: 20260217-5265). See table I.4.2-2.

4.2.1.2 Prime Farmland and Farmland of Statewide Importance

Prime farmland is defined in 7 CFR § 657.5[a] as land with the optimal combination of physical and chemical characteristics for growing food, feed, forage, fiber, and oilseed crops. Unique farmland includes non-prime soils used for high-value specialty crops (7 CFR § 657.5[b]). Soils of state-wide importance are nearly prime and capable of producing high yields of crops when treated and managed properly, while soils of local importance are designated for agriculture by local authorities or ordinances (7 CFR § 657.5[c]). Prime farmland soils were identified along the MSX Mainline and laterals as well as along SSE4's proposed pipeline loops. MSX and SSE4 would affect approximately 2,455 and 2,934 acres, respectively, of prime farmland, unique farmland, farmland of statewide importance, or farmland of local importance. The current land use of both project areas is described further in section 4.8.1 of this EIS.

4.2.1.3 Soil Compaction

The NRCS rates moist soils based on their susceptibility to compaction from the operation of ground-based equipment for site preparation and agriculture activities. Soil compaction is a form of physical degradation in which soil particles are pressed together, reducing porosity, permeability, and biological activity, while increasing soil strength and disrupting soil structure. NRCS classifies compaction susceptibility into one of three ratings: low, medium, or high (NRCS, 2025a). MSX and SSE4 would affect approximately 761 and 190 acres, respectively, of soil with high compaction potential.

4.2.1.4 Highly Erodible Soils

Soil erosion is a natural process that wears away surface soils, usually by wind or water, causing a loss in soil structure, organic matter, and nutrients. Gradation (distribution of soil particles), vegetation cover, length and percent of slope, rainfall, and wind intensity are factors that could influence the erosion potential of soil (NRCS, 2025a). The slope of the terrain greatly influences soil's susceptibility to water erosion. Steep, long slopes accelerate the flow of surface water runoff leading to increased erosion. Wind erosion potential is quantified by the wind erodibility index factor (7 CFR 12.2(a) "Erodibility index"). Wind erodibility groups are determined by grouping soils with similar properties that affect their susceptibility to wind; soils in wind erodibility groups 1, 2, and 3 are considered highly susceptible to erosion by wind (NRCS, 2025a). MSX and SSE4 would affect approximately 1,356 and 154 acres of soil highly susceptible to water erosion, respectively, with approximately 1,677 and 4,622 acres highly susceptible to wind erosion, respectively (table I.4.2-1). We received a comment expressing concern about soil compaction and structure. The Companies would utilize temporary erosion control devices such as timber mats and slope breakers, limiting soil compaction. We find this acceptable.

4.2.1.5 Low Revegetation Potential

Revegetation of soil map units are rated based on the following soil properties: topsoil thickness, surface texture, average water capacity, drainage class, soil temperature, and slope. Coarse-textured surface layers and soils in drought-prone areas, as well as soils with slopes greater than 9 percent, are generally rated as having low revegetation potential (NRCS, 2025a). MSX and SSE would affect approximately 1,360 and 4,302 acres of soil with poor revegetation potential, respectively.

4.2.1.6 Stony and Rocky Soils

The presence of stone and coarse rock fragments in surface soil can reduce its moisture-holding capacity and hinder successful revegetation. These materials are commonly introduced during construction activities such as trenching, grading, or controlled blasting (NRCS, 2025a). Soils containing significant rock content are typically classified with terms such as gravelly, cobbly, stony, or may contain more than 5 percent by weight of fragments larger than 3 inches. Droughty soils have a surface texture of sandy loam or coarser material and are moderately well-drained to excessively drained (NRCS, 2025a). MSX and SSE4 would affect approximately 28 and 0 acres of stony-rocky soils, respectively, with approximately 288.6 and 0 acres of drought-prone soils, respectively. After reviewing the soil map units that make up SSE4, we confirmed that no soils were identified as stony/rocky nor prone to drought.

4.2.1.7 Shallow Bedrock

Bedrock is defined as the layer of solid rock found beneath the soil layer, gravel, or rock fragments and, within the context of the SSURGO database, refers to a layer of rock within a soil profile that is restrictive to both water and root systems (NRCS, 2025a). Soils with shallow bedrock are typically classified as either lithic or paralithic bedrock. Shallow bedrock typically refers to bedrock within 60 inches of the surface. MSX and SSE would affect approximately 420 and 477 acres of soil underlain by shallow bedrock, respectively.

4.2.2 Inadvertent Spills or Discovery of Contaminants

The introduction of contaminants from spills or leaks of fuels, lubricants, and coolants from construction equipment can adversely affect soils. Measures to reduce contamination of soil from fuels and hazardous materials are addressed in each project's SPCP. These plans address personnel training, secondary containment design, hazardous substance storage and disposal procedures, refueling areas, spill response procedures, mitigation measures, and BMPs designed to reduce or eliminate potential contamination of soils. We reviewed potential sources of soil contamination, including hazardous waste sites, underground storage tanks, production wells, and gathering lines for the Projects.

4.2.2.1 Mississippi Crossing Project

We did not identify any solid waste or landfill sites within 0.25-mile of MSX. Twenty sites with the potential for contamination were identified within a 0.25-mile radius of the MSX workspace, and two of these sites were identified within the workspace. One of the two sites, operated by CertainTeed Gypsum and Ceiling Manufacturing, Inc., is located within the boundary for a TAR associated with pipe yard MSXCY-12A (TAR 098.000⁹⁸), adjacent to Meridan Regional Airport in Lauderdale County, Mississippi. However, this site did not show a history of leaks, spills, or exceedances that would suggest soil contamination (EPA, 2025c). The second site, TGP's existing Station 54, in Washington County, is considered a very small quantity generator⁹⁹ of lead, mercury, benzene, and tetrachloroethylene (EPA, 2025b, 2025d). This site has a history of polychlorinated biphenyl (PCB) contaminated soils. However, the contaminated areas were remediated in accordance with an Administrative Order on Consent for Removal Response

⁹⁸ Source: Accession no.: 20250630-5152

⁹⁹ EPA Registry Id: 110001471906; RCRA defines a "very small quantity generator" as one that generates no more than 100 kg of hazardous waste per month.

Activities, and the Final Site Report was finalized with the EPA in September of 1999.¹⁰⁰ TGP continues to follow the PCB/Hazardous Substance List Remediation Program Maintenance Manual to guide ongoing operations and maintenance activities at Station 54 in areas that may contain residual PCBs or other hazardous substances.

4.2.2.2 South System Expansion 4 Project

We reviewed available public information and determined that there was no potential to encounter contaminated sediments within 0.25-mile of the Project area (EPA, 2025e). SSE4 crosses two landfills, the Tallassee Waste Disposal Center and Richmond County Solid Waste. SNG/EEC do not anticipate that any permanent effects would result from the construction of the pipeline loops, and do not anticipate that specific mitigation measures would be necessary at these locations as SNG/EEC's safety procedures allow for the transportation of natural gas in proximity to landfills.

4.2.3 Effects and Mitigation

The Companies would adhere to their project-specific Plan and Procedures to minimize the construction effects on soil resources. The following are typical minimization measures employed to reduce soil erosion and disturbance:

- minimize the quantity and duration of exposed soil;
- protect critical areas during construction by redirecting and reducing the velocity of runoff;
- install and maintain erosion and sediment control measures during construction;
- re-establish vegetation as soon as possible following final grading; and
- inspect the facility boundaries and maintain erosion and sediment controls, as necessary, until final stabilization is achieved.

4.2.3.1 Mississippi Crossing Project

Effects on hydric soils would primarily occur during the construction phase and would be relatively minor and short term, with the exception of approximately 68 acres within Station 602, meter station and OPP facilities, and PARs which would be permanently affected. Table 2.1-2 outlines the MPs associated with MSX's aboveground facilities. A total of 92 TARs and 102 new PARs are planned for MSX.¹⁰¹ Temporarily disturbed soils would be restored to their pre-construction conditions. TGP would implement BMPs outlined in the MSX Plan and Procedures to minimize effects of MSX on hydric soils.

While the majority of MSX's effects on designated prime farmland soils would be temporary and limited to the construction phase, approximately 200 acres, of the 2,455 total acres would be permanently affected by operation of certain facilities including Station 602, Station 606A, Station 610, meter stations, OPP facilities, the SNG South System 4 Interconnection, and PARs. Station 602, certain meter stations and OPP facilities, SNG South System 4

¹⁰⁰ Source: Resource Report 12 of TGP's June 30, 2025, Certificate Application, Accession no.: 20250630-5152.

¹⁰¹ A comprehensive list of PARs and TARs proposed for MSX was provided by TGP in its September 23, 2025, Supplemental Filing, table 1.2-5 (Accession no.: 20250923-5058)

Interconnection, and certain PARs would be constructed in areas currently used for agricultural practices. A comprehensive list of soils characteristics that would be affected by MSX's proposed facilities was provided by TGP in its application, table 7.A-2 (Accession no. 20250630-5152) and Table I.4.2-1 lists the total acreages of affected soil characteristics for MSX.

In general, potential effects on designated farmland for MSX soils include soil erosion, interference with and damage to agricultural surface and subsurface drainage systems and irrigation systems, the mixing of topsoil and subsoil, the potential loss of fertile topsoil, and topsoil compaction. In addition, if drainage tiles are exposed or damaged during construction activities, appropriate measures to repair or replace the drainage tiles would occur after coordination with the affected landowner and in accordance with applicable regulatory guidelines. Topsoil would be stripped and segregated in agricultural lands that are annually cultivated or undergo crop rotations. Furthermore, soils in agricultural lands would be decompacted as necessary, and rocks, when present, would be removed following the pipeline installation. Based on the location of the pipeline, the primarily temporary effects on soils, and the abundance of available surrounding agricultural lands, the permanent loss of approximately 200 acres of designated prime farmland soil would not result in a significant effect given the overall availability of prime farmland, unique farmland, farmland of statewide importance, or farmland of local importance in the region. NRCS was not consulted about seed mixes; however, TGP has committed to using restoration seed mixes that are certified as weed-free by the suppliers.

To mitigate MSX's effects on revegetation, site-specific application of fertilizer and soil pH modifiers, as required by applicable regulatory agencies or by landowners, would be incorporated into the top two inches of soil during or following application. In areas of poor revegetation potential where no site-specific requirements are identified, TGP would apply standard soil amendments (e.g., fertilizer, lime) to offset potential nutrient loss and enhance plant establishment. TGP would not use soil additives or fertilizers within wetlands or near waterbodies unless required by the applicable regulatory agency. Seed mixes would be used by TGP in accordance with permit approvals/agency coordination during restoration. TGP would monitor permanent rights-of-way for poor revegetation and would re-treat and/or revegetate disturbed areas as necessary.

Approximately 81 percent of soils associated with MSX are generally not highly susceptible to compaction; therefore, mitigation measures (e.g., plowing or tilling) are not anticipated to be necessary for the majority of MSX. Mitigation measures would potentially be implemented for the first approximately 54 miles of the MSX Mainline (MP 0.0 to MP 54), as the area is dominated by active agricultural fields and wetlands which are more prone to soil compaction from construction and operation activities. Soil compaction would be avoided or minimized by utilizing timber mats through saturated wetland areas during construction when necessary. A maximum of 12 inches of topsoil would be removed, or stripped, and segregated in agricultural lands that are annually cultivated or undergo crop rotations.

A sizable quantity of soil map units ranked as highly susceptible to wind (1,733.1 acres) and/or water erosion (1,467.0) are associated with MSX. To mitigate soil erosion, TGP would install silt fences, staked straw, bales, and drivable berms following initial ground disturbance, which would help prevent sediment from flowing across or off the right-of-way during construction. In areas with steep slopes, TGP would follow the steep slopes construction

procedures discussed in section 2.5.3.5 of this EIS. Furthermore, during construction, temporary cut slopes and excavation walls would be sloped to safe angles based on the strength of the subsurface material or benched to avoid failures and instability.

Stony-rocky soils would be crossed by the MSX Mainline and laterals (approximately 25 acres) and PARs (approximately 2 acres). In addition, droughty soils would be present within approximately 301 acres of MSX workspace. To reduce the effects of stony-rocky soils and droughty soils, TGP would follow the measures in the MSX Plan and Procedures, including disposal of excess rock in the case of stony-rocky soils.

Where shallow bedrock is encountered along the MSX Mainline and laterals, and hydraulic hammers and mechanical rippers are insufficient to excavate to the necessary depth for pipeline installation, controlled blasting may be required. Additional information regarding controlled blasting is provided in section 2.5.1.2, and a project-specific Blasting Plan has been developed in accordance with industry-accepted standards, applicable regulations, and permit requirements.¹⁰²

4.2.3.2 South System Expansion 4 Project

Temporary effects on hydric soils would occur during the construction and operation of SSE4. No permanent effects on hydric soils would occur as a result of SSE4. Temporarily disturbed soils would be restored to their pre-construction conditions. SNG/EEC would implement the BMPs outlined in the SSE4 Plan and Procedures to minimize effects of SSE4 on hydric soils. The majority of SSE4's effects on designated farmland soils would be limited to the construction phase and are considered relatively minor and short term; however, permanent effects on soils would potentially occur within expanded aboveground facilities.

Of the approximately 2,934 acres of prime farmland that would be temporarily disturbed during construction, land would be returned to preconstruction conditions along the pipeline corridor. Approximately 256.7 acres would be permanently affected by the expansion of aboveground facilities and new permanent access roads. These areas would be contained within SNG/EEC's expanded fenceline and no longer available for farming activities, or permanently graveled to allow future facility access. Based on the location of the pipeline, the primarily temporary effects on soils, the abundance of surrounding agricultural lands, and the overall limited permanent loss of designated farmland soil, SSE4 would have a minimal effect on the overall availability of prime farmland, unique farmland, farmland of statewide importance, or farmland of local importance. SNG/EEC would consult with NRCS prior to construction to determine appropriate revegetation measures, including the following: species composition of seed mixes, fertility requirements, and any necessary pre-planting site preparation. The transport of construction equipment would potentially result in soil compaction and rutting, which may restrict water penetration, root growth, and oxygen diffusion.

To mitigate soil erosion, SNG/EEC would install silt fences, staked straw, bales, and drivable berms following initial ground disturbance, which would help prevent sediment from flowing across or off the right-of-way during construction. In areas with steep slopes, SNG/EEC would follow the steep slopes construction procedures discussed in section 2.5.3.5. Furthermore,

¹⁰² MSX Blasting Plan provided in the June 30, 2025, FERC Filing, Accession no.: 20250630-5152

during construction, temporary cut slopes and excavation walls would be sloped to safe angles based on the strength of the subsurface material or benched to avoid failures and instability.

To reduce the effects of stony-rocky soils and droughty soils, SNG/EEC would follow the measures in the SSE4 Plan and Procedures, including disposal of excess rock in stony-rocky soils. Where shallow bedrock is encountered along the SSE4 pipeline loops, and hydraulic hammers and mechanical rippers are not sufficient to excavate to the necessary depth for pipeline installation, controlled blasting may be required. Additional information regarding controlled blasting is provided in section 2.5.1.2, and a project-specific Blasting Plan has been developed in accordance with industry-accepted standards, applicable regulations, and permit requirements.

4.2.4 Conclusion

4.2.4.1 Mississippi Crossing Project

The majority of soils effects would occur during construction and would be minimized through established BMPs as outlined in the MSX Plan. TGP would segregate and restore topsoil in agricultural areas, decompact soils after pipeline installation, and implement erosion control measures such as silt fencing, slope breakers, and other slope stabilizations to maintain soil stability and fertility. Where shallow bedrock or stony soils are encountered, controlled blasting and rock disposal would be managed under site-specific plans to protect soil integrity. The use of site-appropriate revegetation methods and soil amendments would further reduce long-term effects. Given the extent of permanent soil conversion and the project's emphasis on avoidance, stabilization, and restoration, we conclude that overall effects on soils would be moderate, but temporary and not significant.

4.2.4.2 South System Expansion 4 Project

SSE4 would also result in mostly short-term and localized soil disturbance during construction. Effects on farmland, hydric, and compactable soils would be minimized through topsoil segregation, decompaction, drainage system repair, and coordination with landowners to ensure agricultural productivity is restored. SNG/EEC would apply standard erosion control measures and revegetation practices to stabilize slopes and prevent sedimentation, while also following the Blasting Plan where shallow bedrock occurs. BMPs would control runoff and limit soil displacement, restoring to pre-construction conditions wherever feasible. With the implementation of these mitigation and restoration measures, we conclude that SSE4 would avoid significant long-term degradation of soil resources and would maintain overall agricultural capability. The effects of SSE4 on soil resources would be moderate but temporary, and not significant.

4.3 WATER RESOURCES

4.3.1 Groundwater Resources

Mississippi Crossing Project

The MSX area would be located within the Mississippi Embayment Aquifer and Mississippi River Valley Alluvial Aquifer within the larger Mississippi Alluvial Plain in Mississippi and Alabama (USGS, 1998).

TGP consulted the EPA NEPAAssist Online Tool (EPA, 2025f), the Alabama Department of Environmental Management (ADEM, 2025a) list of permitted municipal solid waste landfills (ADEM, 2021), the ADEM list of permitted construction/ demolition landfills and industrial landfills (ADEM, 2020), and the State of Mississippi Solid Waste Management Facilities Listing (Mississippi Department of Environmental Quality [MDEQ], 2021) to identify the presence and locations of potential contaminated soil and/or groundwater within 0.25 miles of the proposed project facilities and existing aboveground facilities. No hazardous waste sites or landfills were identified within 0.25 miles of the MSX area. The project area would not be within an area mapped as karst or potential karst by the USGS. For additional information, refer to section 4.1.

South System Expansion 4 Project

The SSE4 area would be located within three main aquifer systems: the Mississippi Embayment Aquifer system, the Piedmont and Blue Ridge Crystalline-Rock Aquifers, and the Southeastern Coastal Plain Aquifer system (USGS, 1998, 1990, 2017, 2021).

Carbonate karst terrains represented by sinkholes in soluble bedrocks would be present beneath SSE4 and would be more prevalent in the Southeastern Coastal Plain aquifer system in Alabama (ArcGIS, 2024; Doctor et al., 2020; Geologic Survey of Alabama [GSA], 2019). For additional information, refer to section 4.

No hazardous waste sites or landfills were identified within 0.25 miles of the SSE area. Therefore, we do not expect groundwater contamination would affect the Project.

4.3.1.1 Designated Sole Source Aquifers

The EPA defines a sole source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area, where there are no reasonably available alternative drinking water sources should the aquifer become contaminated (EPA, 2025g). No EPA-designated sole-source aquifers were identified within either the MSX or SSE4 areas.

4.3.1.2 Wellhead Protection Areas

Wellhead protection areas are defined as the surface and subsurface areas which surround a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach the water well or wellfield (EPA, 2025h).

Mississippi Crossing Project

MSX would be required to operate under state regulations for Mississippi and Alabama. In Mississippi, MDEQ and Mississippi State Department of Health regulate all types of wells that supply drinking water, including irrigation wells and public water supply wells. Alabama operates a Wellhead Protection Program through the ADEM Groundwater Branch. Review of databases for these states showed that there would be 16 wellhead protection areas within 0.25-mile and 14 water protection areas within 1,000 feet of MSX. No state or local wellhead protection areas or public water systems would be crossed by the project (GSA, 2025; Mississippi Automated Resource Information System [MARIS], 2025).

South System Expansion 4 Project

SSE4 would be subject to regulations administered by Mississippi, Alabama, and Georgia. Therefore, the project would follow MDEQ and ADEM guidance as stated above for MSX. In Georgia, the Georgia Department of Natural Resources (GADNR), Georgia Environmental Protection Division (GAEPD) has responsibility to ensure wells and groundwaters comply with the Georgia Water Well Standards Act of 1995.

In Mississippi and Georgia, four water systems were identified that would cross SSE4 (MDEQ, 2025a, GAEPD, 2025). These include four community groundwater systems: the Town of Enterprise, Harmony Water Association #4, South Hampton Mobile Home Park, and West Winds Subdivision. At the time of finalizing this EIS, ADEM indicated they did not have information available (ADEM, 2025a).

4.3.1.3 Water Supply Wells and Springs

Water supply wells may be identified as public wells, which serve a larger population and are managed through a water provider or supplier, or private wells, which are permitted privately and manage only a limited number of connections.

Mississippi Crossing Project

Review of well usage in Mississippi and Alabama identified several water supply wells located within 150 feet of the MSX construction workspace (see table I.4.3-1). These wells were identified through review of online databases in Alabama (GSA Groundwater Well Finder) and Mississippi (MARIS). For the wells located within 150 feet of the pipeline construction right-of-way or ATWS, TGP would offer pre- and post-construction water sampling for all public and private groundwater supply wells and potable springs. Sampling may also be requested by landowners with water supplies located outside of the monitoring area. Testing would be performed by a qualified, independent contractor.

In addition to the private water wells, two public groundwater wells owned by the City of Greenville were identified and would be located within 400 feet of the contractor yard MSX-CY-01 (MARIS, 2025). TGP would offer pre- and post-construction water sampling for these and any other identified municipal and public groundwater wells that would be located within 400 feet of MSX.

At the time of finalizing this EIS, no contact has been made with MDEQ to notify the agency of wells that would be within 10 feet of the MSX construction corridor. It is anticipated that an update would be provided once notification and discussion have been initiated. It is not anticipated that trenching activities would have an effect on integrity or supply of the wells, as trenching activities would be shallow in comparison to well depth. However, to ensure well protection is maintained, TGP would notify each landowner that has a well located within 10 feet of the project construction corridor. Additionally, pre- and post-construction monitoring would be offered to these landowners.

We received a public comment about springheads. No springs were identified that would be located within 150 feet of the MSX project area (GSA, 2025; MARIS, 2025).

South System Expansion 4 Project

We received public comments raising concerns that the project may contaminate groundwater resources or diminish the yield of wells and springs used for drinking water. The USGS National Water Information System Map (USGS, 2024), National Groundwater Monitoring Network (USGS, 2025c), Groundwater Climate Response Network (USGS 2025d), and the GSA Well Water Finder (GSA, 2025) were reviewed to locate public and private water supply wells that would be located 150 feet within SSE4. Several water supply wells for residential, industrial, and public use were identified in the states of Mississippi and Alabama (see table I.4.3-2). Two of these wells would be located directly within the SSE4 workspace. SNG/EEC would offer pre- and post-construction water sampling for all public and private groundwater supply wells and potable springs identified within 150 feet of the construction right-of-way or ATWS. A qualified, independent contractor would be selected to perform the pre- and post-construction testing. SNG/EEC would also offer pre- and post- construction testing to landowners outside of the monitoring area, if requested by the landowners.

No springs were identified that would be located within 150 feet of the Project area (GSA, 2025; MARIS, 2025; USGS, 2024).

4.3.1.4 Sources of Potentially Contaminated Groundwater

Areas of previous contamination, including Resource Conservation and Recovery Act (RCRA), Brownfields, Superfund, Toxic Release Inventory (TRI), and Toxic Substance Control Act (TSCA) sites that would have potentially degraded or contaminated sediments near MSX and SSE4 project areas are discussed below.

Mississippi Crossing Project

We received a public comment discussing concerns over potential groundwater contamination. A review of EPA and Mississippi and Alabama state records was conducted to identify potential sources of contamination to nearby groundwater resources that would be within the MSX area. No hazardous waste sites or landfills, nor known contaminated groundwater were identified and would be present within 0.25 miles of the Project area. If contaminated groundwater is encountered during construction, TGP would notify the affected landowner and coordinate with the applicable federal and state agencies. It would also implement measures included in TGP's SPCP¹⁰³ and the MSX Plan. These plans would include personnel training, secondary containment design, hazardous substance storage and disposal procedures, refueling areas, spill response procedures, mitigation measures, and BMPs designed to reduce or eliminate potential adverse effects on groundwater resources. Other appropriate mitigation measures would be implemented during construction, in accordance with applicable permitting and regulatory requirements.

At the time of finalizing this EIS, no private septic systems were identified along the proposed Project area. If septic systems adjacent to the construction workspace are identified, construction crews would be alerted to avoid inadvertent damage to the system to avoid

¹⁰³ TGP's Spill Prevention and Control Plan, June 30, 2025, Certificate Application, appendix 1.D.3 (Accession no.: 20250630-5152).

groundwater contamination. Where possible, TGP would avoid working around a septic system and its leach field.

South System Expansion 4 Project

We received several public comments discussing concerns over potential groundwater contamination. At the time of finalizing this EIS, SNG/EEC did not identify any potential sources of groundwater contamination within SSE4. If contaminated groundwater is encountered during construction, SNG/EEC would notify the affected landowner and coordinate with the applicable federal and state agencies. It would also implement measures included in SNG/EEC's SPCP and the SSE4 Plan. These plans would include personnel training, secondary containment design, hazardous substance storage and disposal procedures, refueling areas, spill response procedures, mitigation measures, and BMPs designed to reduce or eliminate potential adverse effects on groundwater resources. Other appropriate mitigation measures would be implemented during construction, in accordance with applicable permitting and regulatory requirements.

At the time of finalizing this EIS, no private septic systems were identified within SSE4. If septic systems adjacent to the construction workspace are identified, construction crews would be alerted to avoid inadvertent damage to the system to avoid groundwater contamination. Where possible, SNG/EEC would avoid working around a septic system and its leach field.

4.3.1.5 Groundwater Effects and Mitigation

Two primary activities could result in adverse effects on groundwater resources: accidental spills of hazardous liquids used during facility construction or operations and blasting to fracture rock in the pipeline trench or for construction of aboveground facility foundations. Additional effects could occur where karst topography is encountered. Secondary activities (work area clearing and grading; trenching; and trench dewatering) typically result in only temporary and localized effects.

Mississippi Crossing Project

Typical groundwater depths across the Project would be highly variable and would range from relatively shallow depths of <5 feet bgs to >80 feet bgs in some areas. The average depth to water is 22 feet bgs across all eleven counties (GSA, 2025; MARIS, 2025). We received a comment from one landowner expressing concern that the MSX project could alter existing beneficial groundwater flow paths near the property of the landowner.¹⁰⁴ We expect groundwater disturbance would be temporary and localized to the immediate area of the trenching and backfilling activity and would not be anticipated to affect the overall quality of groundwater in the Project area. Although groundwater could be intercepted during pipeline trenching, TGP would conduct trench dewatering in alignment with the MSX Plan, MDEQ and ADEM regulations, and any applicable federal, state, and local permits. We expect that groundwater flow would return to normal following construction.

We expect that MSX would have negligible effects on groundwater quality or supply. Potential effects on groundwater resources would be avoided or minimized through the use of both standard and specialized pipeline construction techniques, such as phased pipeline construction, to

¹⁰⁴ March 4, 2026, Comments of Ben Royce. FERC eLibrary Accession no.: 20260304-0007

ensure any lowering of localized groundwater levels from pumping and dewatering would be temporary. TGP would also conduct construction activities in accordance with our Plan to minimize potential effects to groundwater in the vicinity of the Project. At the time of finalizing this EIS, TGP has not identified proposed groundwater withdrawal locations that would be used for construction of MSX. TGP would engage in landowner negotiations to include the use of groundwater wells where appropriate and approved by the landowner. TGP would make reasonable efforts to ensure the use of the well would not affect groundwater supplies, flow, or quality. Additionally, BMPs set forth in the project plans to ensure there would be no contamination of the well due to construction equipment.

If public water supplies are not available at sites of the new compressor stations, TGP would install a well to be used during operation of the compressor stations. Each well would be permitted through TGP with intent to follow all applicable federal, state, and local requirements for use and withdrawal of groundwater during operation of the compressor stations would not have significant effects.

TGP would plan to work with individual landowners to locate public, unmarked, and private waterlines prior to construction. If construction would require temporary waterline shutoffs, TGP would coordinate with any affected landowners or other parties in advance and supply a temporary source of water by contracting with a local water supply firm to deliver potable water, for the duration of the shutoff.

In the event that waterlines are damaged due to construction activities, TGP would attempt a temporary repair on the same day. These temporary repairs may include replacing the damaged water supply system component, providing adequate temporary accommodations, or providing a temporary water supply to affected homeowners while the water line is being repaired or replaced. TGP would permanently repair damage to existing private or unmarked waterlines in coordination with the individual landowner.

Construction and operation would not be expected to affect public or private groundwater wells in the MSX area. If a well is identified within the construction work areas, it would be taken out of service throughout duration of construction. An alternate water source or mitigation plan would be provided by TGP with the landowner to offset any potential adverse effects. It is unlikely that construction activities would negatively affect a groundwater well; however, TGP would make necessary repairs to restore the well to its preconstruction function. If necessary, TGP would rework the existing well or install a comparable replacement. If the water supply would be offline for any repair, reworking, or replacement, TGP would provide a temporary source of water.

TGP has not identified any existing groundwater contamination within the MSX area (EPA 2025c; 2025d). Groundwater contamination could occur from accidental spills of fuels, solvents, and lubricants used during project construction. Any spill-related effects would be minimized by implementation of the measures used in TGP's SPCP,¹⁰⁵ and the MSX Plan and Procedures. These plans would address personnel training, secondary containment design, hazardous substance storage and disposal procedures, refueling areas, spill response procedures, mitigation measures, and BMPs designed to reduce or eliminate potential adverse effects on groundwater resources.

¹⁰⁵ SPCP for MSX was provided by TGP in the June 30, 2025, Certificate application, appendix 1.D.3. (Accession no.: 20250630-5152).

Other mitigation measures would be implemented during construction, in accordance with applicable permitting and regulatory requirements.

No significant effects would be anticipated to occur on groundwater resources from construction and operation of MSX. Potential effects on groundwater resources would be avoided or minimized by the use of both standard and specialized pipeline construction techniques. In areas where the water table is near the surface, dewatering may be necessary. However, these effects would be temporary as any lowering of localized groundwater from pumping would occur within the span of a few days. Additionally, construction activities would be phased within a particular location. To recharge the aquifer and prevent silt-laden waters from flowing into waterbodies and wetlands, TGP would discharge water from dewatering activities into well-vegetated upland areas through filter bags or dewatering structures. Implementation of these procedures would minimize groundwater effects during dewatering operations. TGP would conduct construction activities in accordance with the MSX Plan to minimize potential effects on groundwater in the vicinity of the project.

South System Expansion 4 Project

During construction of SSE4, groundwater withdrawals would occur at six compressor stations for hydrostatic testing purposes. Environmental effects from hydrostatic test water withdrawal would be minimized by utilizing measures outlined in the SSE4 Procedures.

SNG/EEC would ensure that these minor and temporary effects during construction are appropriately addressed through adherence to permit conditions and implementation of the protective measures in the SSE4 Plan, the project-specific HDD Contingency Plan, Fugitive Dust Control Plan,¹⁰⁶ and Blasting Plan.

Prior to and during construction, SNG/EEC would work with individual landowners to locate public, unmarked, and private wells and waterlines before ground-disturbing activities. If temporary waterline shutoffs are necessary during the construction of SSE4, SNG/EEC would coordinate with affected landowners or other parties in advance and would provide a temporary source of water (e.g., contracting with a local water supply firm to deliver potable water) for the duration of the shutoff.

If damage occurs to existing waterlines during construction, SNG/EEC would attempt to repair the damage the same day on a temporary basis. Temporary repairs would include replacing the damaged water supply system component, providing adequate temporary accommodations, or providing a temporary water supply to affected homeowners while the waterline is repaired or replaced if no other potable water source is readily available. SNG/EEC would permanently repair damage to existing private or unmarked waterlines in coordination with the individual landowner. Additionally, SNG/EEC would obtain applicable permits necessary to perform this work.

In general, effects on public or private water supplies would not be expected during operation. Maintenance activities during operation, such as pipe excavation or trenching, could

¹⁰⁶ SNG and EEC's Fugitive Dust Control Plan, July 3, 2025, Certificate Application, appendix 1.D.5 (Accession no.: 20250703-5175).

potentially affect water lines or wells unidentified prior to the activity. In such events, SNG/EEC would implement the mitigation measures discussed above.

Prior to construction, SNG/EEC would seek landowner permission to test wells within the appropriate buffer zones. SNG/EEC would plan to conduct pre- and post-construction monitoring of water quality and yield using a qualified, independent contractor to conduct well sampling.

Construction and operation of SSE4 would not be expected to affect public or private groundwater wells in the project vicinity. In the unlikely event that a well must be taken out of service or if construction activities would adversely affect the groundwater well, SNG/EEC would provide an alternate water source or negotiate a mitigation plan with the landowner to offset potential adverse effects. SNG/EEC would also make the necessary repairs to restore the well to its preconstruction function. If necessary, SNG/EEC would re-work the existing well or install a comparable replacement. If the water supply were offline for any repair, reworking, or replacement, SNG/EEC would provide a temporary source of water (e.g., contracting with a local water supply firm to deliver potable water). Within 30 days of placing the pipeline in service, SNG/EEC would file a report with the Commission discussing any complaints received concerning well yield or water quality and how each was resolved.

Although proposed construction activities could affect groundwater resources, most potential effects would be avoided or minimized by the use of both standard and specialized construction techniques. Aquifers could sustain minor temporary effects from changes in overland water flow and recharge caused by clearing and grading of the proposed rights-of-way. Once construction is complete, the right-of-way would be restored to pre-construction contours in accordance with the SSE4 Procedures. In forested areas, water infiltration, which is normally enhanced by vegetation, would be reduced until vegetation is re-established. In addition, near-surface soil compaction caused by heavy construction vehicles could reduce the ability of soil to absorb water. These minor effects would be temporary in nature and would not significantly affect groundwater resources. Affected areas would be returned to pre-construction conditions to the extent practicable, by revegetation and decompaction, after all project activities have ceased in the area.

Trenching and backfilling could potentially cause minor localized fluctuations in groundwater levels, and/or increased turbidity within the zone of shallow groundwater adjacent to the trench. Groundwater disturbance would be temporary and localized to the immediate area of the trenching and backfilling activity and would not be anticipated to affect the overall quality of groundwater in the SSE4 area. Although groundwater could be encountered during trenching associated with the proposed pipeline, SNG/EEC would conduct trench dewatering under the SSE4 Plan; state regulations; and applicable federal, state, and local permits.

If controlled blasting is required for rock removal, the preparation of rocks (i.e., drilling shot holes) may cause sufficient disturbance to displace aquatic organisms from the immediate vicinity of the controlled blast area and may result in a temporary increase in turbidity. As further described in section 4.1, SNG/EEC's construction contractor would use controlled blasting in waterbody crossings only after attempting to mechanically remove the rock. If controlled blasting would be required, SNG/EEC would remove any material or rock that may impede waterbody flow. These steps would avoid or minimize the effect of controlled blasting on waterbody flow.

and aquatic organisms. Controlled blasting procedures, including in waterbodies, are described in section 4.1.

Prior to construction, the construction contractor and EI would be trained according to their job titles. During this training, pre-construction notification requirements would be discussed with construction personnel. SNG/EEC would be responsible for ensuring that the appropriate agencies are contacted for the pre-construction notifications prior to any controlled blasting activities and would then forward confirmation of notifications to the EIs and the construction contractors. The Lead EI would be responsible for confirming that proper notifications and confirmation have been obtained and that the contractor follows the appropriate protocols.

4.3.1.6 Conclusion

Mississippi Crossing Project

Although proposed MSX construction activities could affect groundwater resources, most potential effects would be avoided or minimized by the use of both standard and specialized construction techniques. Aquifers would sustain minor temporary effects from changes in overland water flow and recharge caused by clearing and grading of the proposed MSX construction areas. Once construction is complete, the temporary workspaces and permanent easements for the pipeline facilities and the new aboveground facilities would be restored to pre-construction contours in accordance with the MSX Plan and Procedures. Permanent workspace for the new aboveground facilities would be graded and contoured as necessary for installation of buildings, PARs, parking areas, and other aboveground components. Until vegetation is re-established in forested areas, water filtration would be reduced as vegetation typically enhances this capacity. The ability of the soil to absorb water would also be reduced by near-surface compaction caused by heavy construction vehicles. These minor effects would be temporary in nature and would not significantly affect groundwater resources. Affected areas would be returned to pre-construction conditions to the extent practicable by revegetation and decompaction after all project activities have ceased.

Groundwater disturbance would be temporary and localized to the immediate area of the trenching and backfilling workspaces and would not be anticipated to affect the overall quality of groundwater in the MSX area. Shallow groundwater could be intercepted during pipeline trenching, TGP would conduct trench dewatering in accordance with the MSX Plan, MDEQ and ADEM regulations, and applicable federal, state, and local permits. No significant effects would be anticipated to occur to groundwater resources from construction and operation of the project.

Dewatering may be necessary but would be temporary and localized, due to the phased construction activities that would typically be completed within several days. To recharge the aquifer, TGP would discharge water from dewatering activities into well-vegetated upland areas through filter bags or dewatering structures. Implementation of these procedures would minimize groundwater effects during dewatering operations. TGP would conduct construction activities in accordance with the MSX Plan to minimize potential effects on groundwater in the vicinity of the project and we find this acceptable. For these reasons, we have concluded that adverse effects on groundwater would be temporary and minor, and limited to the construction phase of MSX.

South System Expansion 4 Project

Potential effects on groundwater resources would be avoided or minimized by the use of both standard and specialized pipeline construction techniques. Dewatering may be necessary in areas where there is a high water table. However, phased pipeline construction activities within a particular location are typically completed within several days, and any lowering of localized groundwater levels from pumping and dewatering would be temporary. To recharge the aquifer and prevent silt-laden waters from flowing into waterbodies and wetlands, SNG/EEC would discharge water from dewatering activities into well-vegetated upland areas through filter bags or dewatering structures. Implementation of these procedures would minimize groundwater effects during dewatering operations. SNG/EEC would conduct construction activities in accordance with the SSE4 Plan to minimize potential effects on groundwater in the vicinity of the project. Given the limited extent of potential groundwater disturbance, we conclude that overall effects on groundwater from construction and operation of SSE4 would be temporary, minor, and limited to the construction phases of the project.

4.3.2 Surface Water Resources

Waterbodies are characterized as perennial, intermittent, and ephemeral. Perennial waterbodies flow or contain standing water year-round and are typically capable of supporting populations of fish and macroinvertebrates. Intermittent waterbodies contain water seasonally and are typically dry for part of the year. Ephemeral waterbodies generally contain water only in response to surface runoff and rising water tables following precipitation or spring snowmelt.

Mississippi Crossing Project

MSX would cross 8 hydrologic unit code 8-digit (HUC) watersheds, and 58 HUC 12-digit subwatersheds (see table I.4.3-3 for a summary of watersheds).¹⁰⁷ MSX would cross 115 perennial streams, 236 intermittent streams, 500 ephemeral streams, and 18 ponds for a total of 869 waterbody crossings (this total includes multiple crossings of some waterbodies).¹⁰⁸ Information on each waterbody crossing for the Project, including name, MP, water quality classification, flow regime, crossing width, and crossing method is provided in table I.4.3-4.

Of the 869 total waterbodies crossed by MSX, 17 waterbody crossings are classified as major (100 feet wide or greater). These waterbodies include Main Canal (MP 1.9), Unnamed pond in Humphreys County (MP 6.8), Deer Creek (MP 10.6), Bogue Phalia (MP 12.5), Big Sunflower River (MP 21.6), Yazoo River (MP 41.1), Tchula Lake (MP 47.0), an Unnamed Stream in Holmes County (MP 64.4), Big Black River (MP 77.4), an Unnamed Pond in Attala County (MPs 83.2, 90.3, 90.6, 90.8), Yockanookany River (MP 92.5), Unnamed Pond in Leake County (MP 108.6), Pearl River (MP 116.2), and an Unnamed Stream in Clarke County (MP 190.4).

TGP proposes to use the HDD method at 15 locations, which would include crossings of 9 streams and 25 associated waterbodies for a total of 34 waterbody crossings. These waterbody

¹⁰⁷ Watersheds crossed by MSX were provided in TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

¹⁰⁸ Waterbodies crossed by MSX were provided in TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058)

crossings are listed in table 2.5-3. Any remaining major waterbodies would be crossed via dry crossing methods (see section 2.5.3.1 for details regarding crossing methods).

South System Expansion 4 Project

SSE4 would cross 9 HUC 8-digit watersheds, and 112 HUC 12-digit subwatersheds (see table I.4.3-5 for a summary of watersheds).¹⁰⁹ SSE4 would cross 400 perennial streams, 363 intermittent streams, 522 ephemeral streams, and 57 ponds for a total of 1,342 waterbody crossings (this total includes multiple crossings of some waterbodies).¹¹⁰ Information on each waterbody crossing, including name, MP, water quality classification, flow regime, crossing width, and crossing method is provided in table I.4.3-6.

Of the 1,342 waterbodies crossed by SSE4, 10 waterbody crossings are classified as major. These waterbodies include Unnamed Ponds (MPs 0.0, 9.5, 14.4, 20.4, N/A), an Unnamed Perennial Stream (MPs 0.5 and 0.6), Standing Boy Creek (MP 25.1), and White's Creek (MPs 13.5 and 13.6).

SSE4 proposes to use the HDD method for 7 major waterbody crossings, which would include crossings of Chickasawhay River, Cahaba River, Tallapoosa River, Little Uchee Creek, Chattahoochee River, Flint River, and the Oconee River. These waterbody crossings are listed in table 2.5-4. Dry crossing methods would be used for any remaining major waterbodies (see 2.5.3.1 for details regarding crossing methods). Crossings would occur in accordance with the SSE4 Procedures, which include requested deviations from the FERC Procedures for the King Creek and Tiger Creek crossings. These crossings are anticipated to require additional time due to the proximity of these waterbodies to a large wetland (WAWSJ1004). Therefore, completion of this crossing within 48 hours would be infeasible.¹¹¹

4.3.2.1 Impaired and Sensitive Waterbody Crossings

The Clean Water Act (CWA) requires that each state review, establish, and revise water quality standards for the surface waters within the state. States develop monitoring and mitigation programs to ensure that water standards are attained as designated. Waters that fail to meet their designated beneficial use(s) are considered impaired and are listed under a state Section 303(d) list of impaired waters.

Mississippi Crossing Project

MSX would cross three impaired waters in Mississippi that are included on MDEQ's Section 303(d) list: Okatibbee Creek (MP 171.0), Chunky Creek (MP 144.3), and Black Creek (MP 61.1). Okatibbee Creek and Black Creek were identified to be impaired due to high levels of fecal coliform bacteria from both point and non-point sources (MDEQ, 1999). The primary sources causing impairment for these waterbodies are residential runoff from subdivisions, and from nonpoint sources including failing septic systems, wildlife contributions, land application,

¹⁰⁹ Watersheds crossed by SSE4 were provided in SNG/EEC's August 8, 2025, Supplemental Filing (Accession no.: 20250826-5140).

¹¹⁰ A comprehensive list of waterbodies crossed by SSE4 was provided in SNG/EEC's February 17, 2026, Supplemental Filing, Appendix 2.B (Accession no.: 20260217-5265).

¹¹¹ Proposed deviations to FERC Procedures for SSE4 provided July 3, 2025 by SNG/EEC in the Application Filing. Accession no.: 202500703-5175.

and livestock. An additional impaired waterbody that would be in the project vicinity, but would not be crossed by the project, is Rocky Creek.

We received several public comments regarding concerns about potential surface water contamination. TGP's consultation with ADEM is still ongoing, and no impaired waterbodies have thus far been identified in Alabama. A review of records was conducted to identify areas with contaminated sediments or contaminated sites that may have associated contaminated sediments. A total of 17 sites that were TRI, TSCA, and/or RCRA sites that would be within a 0.25-mile radius of the Project area. The identified sites are listed in table I.4.3-7.¹¹² Of the sites identified, three would be within the MSX workspace: CertainTeed Gypsum and Ceiling Manufacturing, Inc., Producers Feed Company, and existing TGP Station 54. CertainTeed Gypsum and Ceiling Manufacturing, Inc., would be within the boundary for TAR-098.000 in Lauderdale County, Mississippi. These sites do not show any exceedance or history of leaks or spills that would suggest contamination of sediments.

A site owned by Producers Feed Company, an animal food manufacturing facility is located within the MSX-CY-13 boundary in Humphreys County, Mississippi. Copper and copper compounds have been reported in amounts exceeding the reporting threshold, with the latest occurrence in 2001. No waterbodies would be located within the MSX-CY-13 boundary and therefore, TGP would not anticipate encountering any contaminated sediments in this area. The nearest waterbody to the contractor yard for MSX-CY-13 would be an unnamed tributary approximately 400 yards northeast. BMPs would be implemented at the site to reduce potential contaminated soil runoff during construction activities. Additionally, ECDs, including silt fencing and other BMPs, would be installed to prevent soil contamination through stormwater runoff.

The existing TGP Station 54 in Washington County is considered a very small quantity generator of lead, mercury, benzene, and tetrachloroethylene, and has a history of PCB contaminated soils. Review of EPA files shows that the contaminated areas were remediated and finalized in September 1999. TGP would follow the PCB/Hazardous Substance List Remediation Program Maintenance Manual to guide future operations and maintenance activities at Station 54. No waterbodies would be located within the Station 54 boundary; therefore, TGP would not anticipate encountering contaminated sediments in this area.

In addition to the Section 303(d) list of impaired waterbodies, sensitive waterbodies include waters that have been specifically designated by the state as high quality or exceptional value waterbodies, Wild and Scenic Rivers, and waters supporting fisheries of special concern. Table I.4.3-8 lists the sensitive waterbodies crossed by MSX and their corresponding impaired pollutants. The Project would cross a total of 18 sensitive waterbodies in Mississippi and none in Alabama. Additionally, MSX would not cross any state-designated high-quality waterbodies in Mississippi or Alabama.

MSX would cross one NRI designated river, the Big Black River at approximately MP 77.4, as further discussed in section 4.8.2.5.

¹¹² TGP's Application Filing (MSX) dated June 30, 2025, identifies RCRA, TSCA, and TRI Facilities within 0.25 miles of MSX. Accession no.: 20250630-5152.

To minimize erosion and sedimentation to nearby impaired surface waters and surface waters designated for use as public drinking water supply, TGP would implement BMPs as outlined in the MSX Plan and Procedures and applicable state and federal permits. With the implementation of these measures, MSX is unlikely to cause any additional impairment to impaired waterbodies. Any adverse effects from project construction on these waterbodies would be temporary and minor.

South System Expansion 4 Project

We received several public comments discussing concerns over potential surface water contamination. SSE4 would cross one impaired waterbody in Mississippi, eight impaired waterbodies in Alabama, and 11 impaired waterbodies in Georgia, as determined through MDEQ, ADEM, and GAPED databases, respectively. The impaired waters crossed by SSE4 and the MPs proposed for each crossing are provided in tables I.4.3-9 and I.4.3-6, respectively.

A review of records was conducted to identify areas with contaminated sediments or contaminated sites that may have associated contaminated sediments. A total of 38 sites that were TRI, TSCA, and/or RCRA sites would be within a 0.25-mile radius of the Project area.¹¹³ The identified sites are listed in table I.4-3-10. Nine of these would be located within the SSE4 workspace.

Prystup Packaging Products Inc., a printing and paperboard manufacturing facility characterized as a very small quantity generator of hazardous waste, and a facility owned by Waste Management of Alabama for solid waste collection would be within the boundary for PAR-MR-B1-004. No exceedances, violations, or history of leaks or spills were reported by either site that would demonstrate contamination of sediments. The remaining seven sites within SSE4 are associated with compressor stations (Rose Hill, Enterprise, Gallion, Thomaston, Ocmulgee, Hall Gate, and Wrens) owned by SNG and are used for the transportation of natural gas. They are all characterized as Very Small Quantity Generators and, while they are considered to be RCRA facilities regulated by the RCRA program, are not known to be contaminated. None of the nine facilities discussed that were identified within SSE4 are located near waterbodies, and none of the identified sites were known to contain contaminated sediments even though they are listed as a TRI, TSCA, or RCRA site. SNG/EEC do not anticipate encountering contaminated sediments during SSE4 construction.

If contaminated sediments are encountered, SNG/EEC would implement SPCP and NPDES response measures as appropriate. BMPs would also be implemented throughout construction to minimize potential for contamination of waterbodies due to disturbed soil within SSE4 workspaces. These BMPs would include the installation of silt fencing and other erosion and sediment control devices to prevent any transport of potentially contaminated soil through stormwater runoff.

SSE4 would cross two sensitive waterbodies, the Cahaba River and the Tallapoosa River, which are listed as Outstanding Alabama Waters. Additionally, three rivers designated as NRI rivers would be crossed: the Flint and Oconee rivers in Georgia, and the Tallapoosa River in

¹¹³ The identified sites were reported by SNG/EEC in their December 10, 2025, Response to Environmental Information Request (see FERC eLibrary, Accession no.: 20251210-5208).

Alabama, as further discussed in section 4.8.2.5. Table I.4.3-6 lists the sensitive waterbodies crossed by SSE4. Any adverse effects from project construction on these waterbodies would be temporary. The project would not cross any state-designated high-quality waterbodies in Mississippi, Alabama, or Georgia.

4.3.2.2 Surface Water Intakes and Source Water Protection Areas

Consultations with state agencies in Mississippi, Alabama, and Georgia were performed to identify the locations of all surface water intakes within 3 miles of the MSX and SSE4 project areas. A source water protection area is defined as the drainage area around the point where a public water system withdraws water.

No public surface water intakes have been identified within the MSX or SSE4 areas, to date.¹¹⁴ However, it is possible that intakes may be identified at a later date, or unidentified intakes could be encountered during construction of MSX or SSE4. These surface water intakes could be affected by MSX or SSE4 during construction, through reduced availability of water, sedimentation/turbidity from Project stormwater runoff, or through contamination resulting from accidental releases of fuel and lubricants from construction equipment. TGP and SNG/EEC would implement sediment control BMPs to manage stormwater and minimize the effects of stormwater runoff on public water supplies. Contamination resulting from accidental hazardous material spills during refueling/maintaining construction equipment, fuel storage, or equipment failure in or near a waterbody could affect the waterbody downstream of the release point, including surface water intakes.

Any hazardous materials, chemicals, lubricating oils, solvents, or fuels used during construction would be stored in upland areas at least 100 feet from wetlands and waterbodies as required by TCP's and SNG/EEC's respective SPCP. TGP and SNG/EEC would inspect and maintain all equipment on a regular basis to minimize the potential for fuel and lubricant leaks. All hazardous materials and spills would be handled in accordance with TGP's and SNG/EEC's respective SPCP. Except where absolutely necessary or required to otherwise minimize overall effects on the environment, there would be no refueling or lubricating of vehicles or equipment within 100 feet of a waterbody (with site-specific exceptions identified in their requested deviations from our Procedures [appendix E.2 and F.2]).

If public surface water intakes are identified within MSX or SSE4, then project-related withdrawals from surface waters associated with these intakes could potentially reduce the water availability for the public water supply. Due to the quantity of water available within these water supplies, it is unlikely that MSX or SSE4-related surface water use would adversely affect public water supply.

¹¹⁴ A clarifying note: public surface water intakes are locations along surface waters where the public's drinking water may be sourced. It is not the same as the locations along the Projects where the Companies plan to withdrawal water for construction-related purposes.

4.3.2.3 Water Use

Mississippi Crossing Project

TGP would require about 14,500,000 gallons of water for HDD construction, including drilling mud preparation and hydrostatic test, and about 73,000,000 gallons for hydrostatic testing of the pipeline. Potential sources of water for HDD construction and hydrostatic testing have been identified and are summarized in table I.4.3-11. Prior to withdrawing from surface waters, TGP would acquire permission from the applicable state agency. TGP would obtain coverage under the Mississippi and Alabama General National Pollution Discharge Elimination System Permits for Discharges of Hydrostatic Test Water and comply with conditions of the permits.

Table I.4.3-11 identifies the potential sources and volumes of water for drilling mud preparation and hydrotest for proposed HDDs for MSX. However, specific uptake volumes from respective sources would be finalized by TGP prior to construction, with the filing of the Implementation Plan. Multiple withdrawals at the same MP(s) could be required to test multiple segments of the pipeline. To minimize water use, TGP would cascade test water between test sections, when possible, and use additional water to fill subsequent test sections if the construction sequence does not allow for cascading water. Testing would be completed by capping installed pipe segments with test manifolds, filling these segments with available water, and pressurizing this water to levels beyond the maximum operating pressure of the pipeline.

The pumping rate for water uptake would be less than 2,500 gpm, and the water would be passed through a mesh screen to block the uptake of debris and aquatic biota. No chemicals would be added to the test water. After pressure testing of the pipeline, TGP would perform any necessary water quality analysis to ensure compliance with permits and then discharge the water back into upland areas near the point of withdrawal through an energy dissipating structure. The rate of discharge would be between 2,500 and 3,000 gpm. Potential discharge locations of hydrostatic test water are identified in table I.4.3-12.

Environmental effects from the discharge of hydrostatic test water would be minimized by the adoption of the measures prescribed in TGP's ECMP, such as through use of energy dissipation devices and the installation of sediment barriers to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

The three potential hydrostatic test water withdrawal locations are all classified as sensitive or impaired surface waters. No water treatment additives would be planned for the use of water from these locations. TGP would not discharge hydrostatic test water withdrawn from impaired sources into a stream that is not impaired. TGP would be required to conduct water withdrawals in accordance with permit conditions, best management practices, and industry guidelines.

South System Expansion 4 Project

SSE4 would require about 18,500,000 gallons of water for HDD drilling activities, 89,400,000 gallons for hydrostatic testing, and about 29,000,000 gallons for dust control. The estimated volumes of water required are summarized in table I.4.3-13. Potential water sources have been identified and are listed in table I.4.3-14, with the final water sources confirmed prior to construction.

Consultations between SNG/EEC and state agencies are ongoing regarding water withdrawal for construction and operation. Currently, no sensitive waters were identified that would be potential sources for hydrostatic test water withdrawal; however, the result of agency discussions will determine if only surface waters would be used for source water or if municipal water supplies would also be required. SNG/EEC would obtain coverage under the applicable Alabama, Mississippi, or Georgia General National Pollution Discharge Elimination System Permits for Discharges of Hydrostatic Test Water and comply with the conditions of each permit. The pumping rate for water uptake would be less than 2,500 gpm, and the water would be passed through a mesh screen to block the uptake of debris and aquatic biota. SNG/EEC may use sodium thiosulfate or similar additives in the hydrostatic test water to lower the chlorine content in the discharge water in the event that municipal water is used as a source for the hydrostatic test. After pressure testing of the pipeline, water quality analysis would be performed to ensure compliance with permits. Water would then be discharged back into upland areas near the point of withdrawal through an energy dissipating structure. The rate of discharge would be between 2,500 and 3,000 gpm. Environmental effects from the discharge of hydrostatic test water would be minimized through use of energy dissipation devices and the installation of sediment barriers to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

Water withdrawals would not reduce water to a point that would impair flow and affect wildlife or public and recreational uses, and hydrostatic test water would not be anticipated to be a potential source of surface water contamination. Given these measures, we conclude that SSE4's potential effects associated with water use would be temporary and minimal.

4.3.2.4 Surface Water Effects and Mitigation

We received several public comments during the scoping periods with concerns that the Projects would result in sedimentation and contamination of surface water resources. Additional comments were submitted voicing similar concerns during the draft EIS comment period. Our responses to comments are provided in appendix L, which reiterate the proposed minimization and protective measures that the Companies would implement in order to reduce adverse effects on water quality, which we have found to be acceptable. As a result, no additional studies or recommendations have been added to the final EIS.

Construction activities in and near waterbodies could result in a temporary localized increase in turbidity levels, water temperature and downstream sediment deposition from disturbance of the streambed and bank, trench dewatering, and soil erosion of riparian zone within the construction right-of-way. In slack or slowly moving waters, increases in suspended sediment may increase the biochemical oxygen demand and reduce levels of dissolved oxygen in localized areas during construction. Pipeline construction could result in temporary effects on water quality due to increased turbidity and sedimentation from construction in or near flowing surface waters or potential spills. These effects would generally be limited to the period of construction, and conditions would be allowed to return to normal shortly after stream restoration activities are completed. TGP and SNG/EEC would cross all waterbodies in accordance with each project's ECMP and would comply with applicable state and federal regulations and permit conditions.

Mississippi Crossing Project

TGP would implement its construction, mitigation, and restoration plans, which include BMPs to minimize soil erosion into streams and to prevent and mitigate effects from a spill. TGP would install temporary erosion control devices to limit the potential for soil to leave the construction workspace; would install temporary equipment bridges/mats/pads, as appropriate, for equipment and personnel crossing to limit instream turbidity; and would discharge water through energy dissipation or sediment filtration devices in vegetated upland areas to reduce flow of sediment laden water back into the waterbody. Because TGP would use HDD or dry crossing methods to install the pipeline across sensitive waterbodies and would follow its project-specific plans, we conclude that MSX would not result in significant effects on waterbodies. Trench spoil would be placed at least 10 feet from the waterbody edge for use as backfill, and temporary erosion controls would be installed to prevent migration of trench spoil into the waterbody. TGP also would construct stream crossings during low-flow periods, when feasible, to minimize effects on turbidity and limit equipment working within the waterbody to the minimum necessary to construct the crossing.

Fuels and lubricants necessary for water pumps could have an adverse effect on water quality if a release should occur. In accordance with the MSX Procedures, TGP would use secondary containment and limit refueling and service of the pumps that are within 100 feet of a waterbody. If refueling or service must occur within 100 feet of a waterbody, an EI would oversee the operation to ensure no adverse effects to the adjacent waterbody. Potential effects on aquatic organisms as a result of water withdrawal are discussed in section 4.6.7.

Following construction, TGP would restore streambeds to their preconstruction elevations and grades. Spoil and other materials would be removed from the streambed to prevent interference with normal stream flow. Following grading, TGP would restore all stream banks as close as practicable to preconstruction conditions in accordance with permit requirements. TGP is requesting modifications to the FERC Procedures at site-specific locations as described in appendix E, based on site-specific conditions and we find these acceptable.

TGP is currently evaluating the Project route locations where blasting would be required. Prior to conducting blasting activities, every effort would be made to mechanically remove rock, using backhoes equipped with rippers. Following any required blasting, any rock or material that may impede stream flow would be removed. To the extent practicable, TGP would minimize the timeframe between blasting, pipeline installation, and stream restoration. These steps would avoid or minimize the effect of blasting on aquatic organisms.

TGP's proposed use of dry and HDD crossing methods would further minimize effects on waterbodies. Where waterbodies are crossed via HDD, disturbance of the bed and banks of the waterbody would generally be avoided. If an inadvertent release of HDD drilling fluid occurs within a waterbody, the resulting turbidity could temporarily affect water quality. TGP would implement the measures in its HDD Plan, which incorporates measures for prevention, detection, notification, and cleanup/mitigation for inadvertent releases. TGP does not anticipate that contaminated sediments would be encountered as a result of MSX construction. However, if contaminated sediments are identified during construction, TGP would implement protocols outlined in the SPCP and work with federal and state agencies to develop appropriate avoidance and mitigation procedures.

Permanent effects would occur at three waterbodies (one perennial and two ephemeral streams) at Station 606A and four waterbodies (one intermittent and three ephemeral streams) at Station 610. Additionally, permanent effects would occur to 18 waterbodies along PARs. Compensatory mitigation would be required for permanent effects at aboveground facilities and PARs, in consultation with the USACE, MDEQ, and ADEM to offset project effects to waterbodies.

TGP would implement its MSX Plan and Procedures (with approved deviations) and project-specific BMPs. Additionally, the project would adhere to conditions of Nationwide Permit 12 and any applicable conditions included in the state water quality certification. We anticipate that water quality effects from construction would be short-term and localized. TGP would operate MSX in accordance with permit conditions and regulatory agencies' rules and regulations to ensure that surface water effects associated with the project's operations would be appropriately permitted and mitigated.

As effects from MSX on surface waters would be avoided, minimized, or mitigated to the extent practicable, we conclude that MSX would not significantly contribute to effects on surface water resources.

South System Expansion 4 Project

To reduce effects on waterbodies, SSE4 would adhere to its ECMP and SPCP, which incorporates the SSE4 Procedures. SNG/EEC would implement BMPs as outlined in the SSE4 Plan and Procedures to minimize erosion and protect water adjacent to impaired surface waters and surface waters designated for use as public drinking water supply. These BMPs would include, but are not limited to, maintaining appropriate buffers as defined by the MDEQ, ADEM, and GAEPD; locating workspaces at least 50 feet back from waterbody crossings, where practicable; and utilizing additional rows of silt fencing and filter socks around impaired waterbodies. BMPs would be consistent with the appropriate state guidance (MDEQ, 2011; ADEM, 2022; GAEPD, 2016). Based on the implementation of the BMPs, the project would not be likely to affect sensitive or impaired surface waters or public water supplies.

Temporary effects on surface water could result from spills or leaks of hazardous materials during project construction. SSE4 would implement its SPCP to prevent and, if necessary, control inadvertent spills or leaks of hazardous materials or petroleum products, which could affect water quality. Hazardous materials, chemicals, lubricating oils, and fuels used during construction would be stored in upland areas at least 100 feet from waterbodies, and refueling of construction equipment would be conducted at least 100 feet from waterbodies (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]). Based on the above assessment, we conclude that effects on surface water from spills would not be significant.

Waterbodies proposed to be crossed via the HDD method are summarized in section 4.3.2. The remaining waterbodies would be crossed via the open-cut crossing methods. See table I.4.3-6 for a complete list of stream crossings, and section 2.5.3.1 for a description of crossing methods.

Water withdrawals from NRI-listed river segments have the potential to affect water quality in several ways. Fuels and lubricants necessary for water pumps could have an adverse effect on water quality if a release should occur and construction could result in temporary effects

on water quality due to increased turbidity and sedimentation from construction. As described for MSX above, SNG/EEC would comply with the measures of the SSE4 Procedures regarding fuel and spoil handling, installation of erosion controls, bank and streambed restoration, and blasting protocols. Secondary containment would be used and refueling and service of the pumps within 100 feet of a waterbody would be limited. If refueling or service must occur within 100 feet of a waterbody, an EI would oversee the operation to ensure no adverse effects on the adjacent waterbody. Site-specific exceptions are identified in their requested deviations from our Procedures (appendix F.2). Potential effects on aquatic organisms as a result of water withdrawal are discussed in section 4.6.7. SNG/EEC would monitor intake locations for recreational users, and they may use signage, flaggers, or other means to verify recreational users can safely traverse work areas. SNG/EEC are cooperating with the applicable agencies, including the NPS, regarding water withdrawal from NRI-listed rivers.

Water withdrawals that exceed the capacity of the water source can result in low water conditions, effects on downstream users, and effects on recreational users. In accordance with the SSE4 Procedures, SNG/EEC would maintain adequate flow rates in withdrawal streams to protect aquatic life, provide for all water uses, and provide for downstream withdrawals of water by existing users. Pipeline construction could result in temporary effects on water quality due to increased turbidity and sedimentation from construction in or near flowing surface waters. The proposed use of dry-ditch and HDD crossing methods would minimize effects on waterbodies. Additionally, erosion controls in accordance with the SSE4 Procedures and ECMP and SPCP would be installed to minimize effects during construction. Trench spoil would be placed at least 10 feet from the waterbody edge for use as backfill, and temporary erosion controls would be installed to prevent migration of trench spoil into the waterbody. SNG/EEC would construct stream crossings during low-flow periods, when feasible, to minimize effects on turbidity, and limit equipment working within the waterbody to the minimum necessary to construct the crossing.

To limit the amount of time a stream is affected during construction activities, vegetation would be cleared on each side of the waterbody (but not between the waterbody and the ATWS), sediment barriers would be installed, and prefabricated segments of the pipeline would be prepared prior to beginning the stream crossing. Stream crossings would be perpendicular to the flow to the extent practicable, to minimize the length of crossing. Implementation of the SSE4 Procedures during construction and post-construction monitoring would avoid and/or minimize effects on surface water resources.

Following construction, SNG/EEC would restore streambeds to their preconstruction elevations and grades, unless permitted to deviate. Spoil, debris, piping, construction materials, and any other obstructions resulting from or used during construction of the pipeline would be removed to prevent interference with normal stream flow. Any excavated material not used as backfill would be removed and disposed of in accordance with local, state, and federal conditions. Following grading, all stream banks would be restored as close as practicable to preconstruction conditions in accordance with permit requirements.

SNG/EEC is requesting modifications to the FERC Procedures at site-specific locations as described in appendix F. We have reviewed the alternative measures for the SSE4 Procedures and find them acceptable. SNG/EEC would implement sediment control BMPs to manage stormwater and minimize effects on the streams. BMPs would include super silt fencing, double rows of hay

bays, absorbent rolls, berms, or similar. All BMPs would be maintained in a timely manner so that they are functioning properly. If an inadvertent release of HDD drilling fluid occurs within a waterbody, the resulting turbidity could temporarily affect water quality. SNG/EEC would implement the measures in their HDD Plan, which incorporates measures for prevention, detection, notification, and cleanup/mitigation for inadvertent releases.

Crossing waterbodies using HDD and dry ditch methods would minimize effects on water quality. The use of equipment within any waterbody would be limited to instream excavation and backfilling. All other equipment would cross waterbodies on temporary equipment bridges, and SSE4 would stockpile excavated material at least 10 feet from the waterbody. Equipment bridges would be designed to accommodate normal to high stream flow and would be maintained to prevent flow restriction while the bridge is in use during construction.

SNG/EEC would be subject to water quality and stormwater discharge regulations at the federal and state levels GAEPD and would be required to adhere to similar permit restrictions regarding the minimization of surface water effects. As effects due to SSE4 on surface waters would be avoided, minimized, or mitigated to the extent practicable, we conclude that SSE4 would not significantly contribute to effects on surface water resource.

4.3.2.5 Conclusion

Mississippi Crossing Project

TGP would adhere to the MSX Plan and Procedures and project-specific BMPs. Additionally, the project would adhere to conditions of Nationwide Permit 12 and any applicable conditions included in the state water quality certification.

For hydrostatic test procedures, TGP would use municipal and surface water sources for HDDs and to test the new pipeline and related facilities. TGP would confirm final volume and source information prior to construction. Water withdrawals from surface waters would be conducted in accordance with all applicable federal and state permit requirements or consultations and by measures outlined in the MSX Plan and Procedures. In addition, water withdrawals would not reduce water to a point that would impair flow and affect wildlife or public and recreational uses. Hydrostatic test water would not be anticipated to be a potential source of surface water contamination.

Permanent effects to surface water would not be anticipated for the MSX Mainline facilities. Operational activities that would affect surface waters are restricted to stormwater discharges. Stormwater discharges would be regulated by a National Pollutant Discharge Elimination System Permit. Water quality effects associated with discharges would be expected to be minor. Permanent effects would occur to three waterbodies (one perennial and two ephemeral streams) at Station 606A and four waterbodies (one intermittent and three ephemeral streams) at Station 610. Additionally, permanent effects would occur to 18 waterbodies along permanent access roads.

Compensatory mitigation would be required for permanent effects at aboveground facilities and PARs. No waterbodies would be affected at the remaining aboveground facilities. TGP would operate MSX in accordance with permit conditions and regulatory agencies' rules and

regulations to ensure that surface water effects associated with the project's operations would be appropriately permitted and mitigated. TGP is consulting with the USACE, MDEQ, and ADEM to determine the level of mitigation that would be necessary to offset project effects on waterbodies. We anticipate that water quality effects from construction-related stormwater runoff, hydrostatic testing of pipelines, and site dewatering would be short-term and localized. Therefore, effects on surface waters would not be significant.

South System Expansion 4 Project

To control and minimize potential surface water effects, SNG/EEC would adhere to the SSE4 Plan and Procedures (with requested deviations), project-specific BMPs, and Pipeline and Hazardous Materials Safety Administration regulations at 49 CFR Part 192. Additionally, the project would adhere to applicable permit conditions including the Section 404 CWA Act permit issued by USACE, state-issued Section 401 Water Quality Certifications, and State Pollutant Discharge Elimination System permits. SNG/EEC anticipate that potential water quality effects from construction-related storm water runoff, hydrostatic testing of pipelines, and site dewatering would be short-term and localized.

In compliance with PHMSA regulations at 49 CFR Part 192, SNG/EEC would conduct hydrostatic testing on the pipeline and aboveground facilities prior to the Project being placed into service. For hydrostatic test procedures, SNG/EEC would use municipal and surface water sources during HDDs and to pressure test the new pipeline and related facilities. SNG/EEC plans to obtain the water for hydrostatic testing from sources as identified in table I.4.3-14, with the final water sources and volumes confirmed prior to construction. Water withdrawals from surface waters would be conducted in accordance with all applicable federal and state permit requirements and by measures outlined in the SSE4 Plan and Procedures. In addition, water withdrawals would not reduce water to a point that would impair flow and affect wildlife or public and recreational uses. Hydrostatic test water would not be anticipated to be a potential source of surface water contamination.

SNG/EEC would be subject to water quality and stormwater discharge regulations at the federal (USACE) and state levels (MDEQ, ADEM, and GAEPD) and would be required to adhere to similar permit restrictions regarding the minimization of surface water effects. As effects due to SSE4 on surface waters would be avoided, minimized, or mitigated to the extent practicable, we conclude that effects would be minor and temporary; no significant incremental contributions on surface water resources would be anticipated.

4.4 WETLANDS

4.4.1 Existing Wetlands

Field surveys for both the MSX and SSE4 project areas were conducted in accordance with the USACE Wetlands Delineation Manual (USACE, 1987), and the associated regional supplements and guidance for identifying and delineating wetlands.¹¹⁵ The Cowardin classification system (Cowardin et al., 1979; FGDC, 2013) was then used to classify wetland types.

¹¹⁵ Field surveys for MSX were initiated in September 2024. As of the date of filing this final EIS, field surveys are ongoing. Field surveys for SSE4 were conducted from September 23, 2024, to May 2025 and included 100 percent of all proposed construction workspaces where landowner access had been granted.

Wetlands crossed by the Projects are classified as palustrine (freshwater wetland) and are further defined by their dominant vegetation layer (emergent, scrub-shrub, or forested), as follows:

- **Palustrine Forested Wetlands:** Palustrine forested wetlands (PFO) are dominated by trees and shrubs at least 20 feet tall with a tolerance to a seasonally high water table. PFO wetlands typically have a mature tree canopy with a diverse range of understory and herbaceous community structure and species. The dominant vegetation identified in the PFO wetlands along the proposed pipeline routes generally included red maple, sweetgum, bald cypress, blackgum/black tupelo, swamp chestnut oak, sweetbay magnolia, water oak, American holly, and loblolly pine.
- **Palustrine Scrub-Shrub Wetlands:** Palustrine scrub-shrub wetlands (PSS) are dominated by shrubs and saplings less than 20 feet tall. The dominant vegetation identified in PSS wetlands along the proposed pipeline routes included red maple, sweetgum, sweetbay magnolia, water oak, loblolly pine, American holly, Chinese privet, Virginia sweetspire, black willow, blackberry, groundsel-tree, smooth alder, winged elm, yaupon, deciduous holly, and American beautyberry.
- **Palustrine Emergent Wetlands:** Palustrine emergent wetlands (PEM) are characterized by erect, rooted, herbaceous plants suited to growing in wet conditions. Vegetation may also include mosses and lichens. Vegetation in the PEM wetland type identified along the proposed pipeline routes included bluestem, soft rush, beaksedge, blackberry, tall goldenrod, dog fennel, knotweed, primrose, beaked panicgrass, giant plume grass, switchgrass, buttercup, woodoat, true sedges, flatsedges, woolgrass, rosette grasses, rushes, and crown grasses.

4.4.2 Wetland Effects and Mitigation

During the comment period for the draft EIS, the Ogeechee Riverkeeper submitted questions regarding wetland effect determinations and the process used to select crossing methods. In particular, the Riverkeeper asked how the FERC determines when a method other than a trenchless technique, such as HDD, constitutes the least environmentally damaging practicable option. Although the Ogeechee River is associated with SSE4, the explanation provided here applies to both Projects.

The purpose of this EIS is to present our evaluation of the potential environmental effects associated with the crossing methods proposed by each Applicant. While FERC staff may recommend alternative crossing methods where appropriate, the analysis must address the Projects as proposed. In doing so, we rely on the results of geotechnical investigations and our professional judgment to determine which methods are technically feasible and reasonably implementable.

Trenchless methods generally result in fewer direct effects on the specific resource being crossed. However, they are not universally feasible. Factors that may limit the use of trenchless techniques include the availability of adequate workspace, soil and geologic suitability, the presence of protected resources, the duration and complexity of completing the crossing, and the substantially higher cost associated with specialized equipment and construction expertise.

When trenchless methods are not practicable, open-cut wetland crossings can be implemented in a manner that minimizes effects. Through adherence to SPCC Plans, FERC's

Procedures, and other established best management practices, we consider open-cut methods acceptable when designed and executed to avoid, minimize, and restore affected wetlands to the greatest extent practicable.

The Riverkeeper also asked whether FERC staff analyzed each individual wetland crossing and the associated effects from construction and long-term operation. As part of their applications, the Companies provided FERC staff with comprehensive wetland crossing tables and maps. They also provided us with copies of their USACE permit applications. FERC staff review each crossing, its proposed crossing method, and the requested workspaces in the vicinity of each resource. Additionally, we require the Companies to obtain all of the necessary Clean Water Act permits from the USACE and applicable State Water Quality Certifications prior to construction.

4.4.2.1 Mississippi Crossing Project

We received several public comments during the scoping periods expressing concern that MSX would damage wetlands and alter surface drainage patterns. The primary effect of MSX construction on wetlands would be the potential alteration of wetland vegetation due to the clearing, excavation, rutting, compaction, and mixing of topsoil and subsoil. Construction and clearing techniques utilized within wetlands are elaborated in section 2.5.3.2. Construction could also affect water quality within wetlands due to sediment loading or inadvertent fuel or chemical spills. Temporary construction effects on wetlands could include the loss of vegetation; soil disturbance associated with grading, trenching, and stump removal; and changes in the hydrological profile due to excavation or compaction.

The pipeline would be installed across wetlands using open-cut methods as described in section 2.5.3.2. For the majority of the wetlands crossed by the MSX Mainline, TGP would plan to decrease the construction right-of-way to approximately 75 feet wide; however, some construction areas would have constraints that would require a right-of-way width of 125 feet. Wetlands within the temporary construction workspace would be cleared during construction but would be allowed to revegetate to pre-construction cover types. In accordance with the MSX Procedures, TGP would implement restoration efforts that encourage natural revegetation. TGP would perform post-construction monitoring to monitor restoration efforts and to prevent nuisance or exotic vegetation from invading the areas. No indirect effects on any downgradient wetlands from construction activities would be expected.

Effects on wetlands would be the greatest during and immediately following construction, during which all temporary and permanent workspaces would be cleared of woody vegetation. The use of access roads during construction would also temporarily affect wetlands located within the areas of travel. In PEM wetlands, the herbaceous vegetation would regenerate quickly (typically within 1 to 3 years). In the case of wetland conversion, effects on PFO and PSS wetlands would include long-term regeneration or permanent conversion to PEM and/or PSS wetland types through tree removal.

Construction effects would be mitigated by using protective measures described in the standard and conventional wetland construction methods (2.5.3.2). These mitigation measures would include: minimizing vegetation clearing and soil disturbance, avoiding unnecessary vehicular traffic and equipment use, installing and maintaining erosion and sedimentation control devices, restricting the duration of construction to the extent practicable, using timber construction

mats to create a temporary work surface in wet conditions, and using low pressure ground equipment in wet conditions to minimize vegetation damage, soil compaction, and rutting.

During operation, the permanent right-of-way for the pipeline facilities and operational areas for the compressor stations, meter stations, OPP facilities, and appurtenant facilities would be kept clear of trees and woody shrubs to allow for ongoing pipeline operation, inspection, and maintenance. Approximately 66.9 acres¹¹⁶ of PSS and PFO wetlands would be permanently converted to PEM and/or PSS wetlands within the new permanent easement for the pipeline facilities to facilitate periodic corrosion and leak detection surveys. Operation of MSX would result in permanent fill of a single 0.1-acre PFO wetland within the new Station 606A. An additional 1.9 acres of wetlands would be permanently filled to construct PARs. Crushed stone or rock would be added to PARs to create permanent access for the project, resulting in permanent fill of wetlands.

Affected PEM wetland areas would be allowed to revegetate from existing adjacent seed banks. Wetland areas would not be amended with fertilizer, lime, or mulch unless required by appropriate federal and state agencies. TGP would monitor wetlands, and the successful achievement of pre-construction conditions would be determined according to the MSX Procedures. TGP would comply with the conditions of Nationwide Permit 12 regarding restoration of wetlands. For locations where pre-construction conditions are not achieved in accordance with the timeline set forth in the MSX Procedures, TGP would continue to monitor wetlands until restoration is achieved and would work with the USACE, MDEQ, and ADEM to determine the appropriate follow-up measures, if needed.

During MSX design, attempts were made to avoid and minimize effects on PFO wetlands. Where avoidance was not possible, TGP would aim to reduce the construction of right-of-way width to 75 feet, unless expressly required due to construction constraints. No ATWS would be sited in PFO wetlands. TGP would purchase mitigation credits from approved mitigation banks to address permanent effects, such as permanent fill of wetlands and conversion of PFO and PSS wetlands to PEM wetland type within the permanent easement. A summary of the proposed compensatory mitigation for wetlands affected by MSX is provided in tables I.4.4-1 and I.4.4-2. Currently, TGP is still completing consultations and credit calculations with USACE. It is anticipated that TGP would finalize a credit agreement with the banks and complete mitigation purchases prior to the start of construction.

TGP would employ BMPs to minimize disturbance, including reducing right-of-way widths in forested wetlands, using timber mats to avoid rutting and compaction, and restoring disturbed areas to preconstruction contours. We conclude that, with adherence to federal and state permit requirements and effective implementation of restoration as discussed in the MSX Procedures and revegetation monitoring, MSX would not result in significant adverse effects on wetland function.

¹¹⁶ Acres of affected wetlands for MSX obtained from tables 2.4-1 and 2.4-2 of TGP's September 23, 2025, Supplemental Filing. Reference Accession no.: 20250923-5058. These values are also summarized in tables I.4.4-1 and I.4.4-2.

4.4.2.2 South System Expansion 4 Project

During the scoping periods, we received several public comments expressing concern about the project's effects on wetlands and requesting that avoidance and minimization measures be implemented. As mentioned above regarding MSX, SSE4 construction would similarly affect wetlands from clearing, excavation, rutting, compaction, and mixing of topsoil and subsoil. Construction could also affect water quality within wetlands due to sediment loading or inadvertent spills of fuels or chemicals. Temporary construction effects on wetlands could include the loss of vegetation; soil disturbance associated with grading, trenching, and stump removal; and changes in the hydrological profile due to excavation or compaction. SNG/EEC have indicated that wetland areas would be allowed to revegetate naturally per the SSE4 Procedures. Additionally, any open trenches remaining after SSE4 is constructed would be backfilled to grade. Following restoration, wetlands would eventually transition back into a community similar to the preconstruction state, as discussed for MSX.

Approximately 39.0 acres of PFO wetlands and 7.4 acres of PSS wetlands would be permanently converted to PEM wetlands and/or PSS wetlands within the new permanent easement for the pipeline facilities, in order to facilitate periodic corrosion and leak detection surveys. Further, operation of SSE4 would result in permanent fill of 0.7 acre of PFO wetlands, 1.2 acres of PSS wetlands and 1.4 acres of PEM wetlands for structures.¹¹⁷ SNG/EEC would compensate for unavoidable permanent losses through a mitigation plan developed in coordination with the USACE and state agencies. A summary of the wetland effects for SSE4 is presented in table I.4.4-3.

Where soils are stable and not saturated at the time of crossing, SNG/EEC would install the pipeline using methods similar to those in upland areas. Tree stumps and root systems would be removed from areas directly over the trenchline. In areas not directly over the trenchline, stumps and root systems would be left in place unless required for removal due to safety-related construction constraints. SNG/EEC would segregate up to 12 inches of topsoil over the trenchline in wetlands where hydrologic conditions permit. Trench soil would be temporarily stockpiled in a ridge along the pipeline trench. Gaps in the spoil pile would be left at appropriate intervals to provide for natural water drainage. While the trench is being dug, the pipeline would be assembled in a staging area in an upland location. After the pipeline is lowered into the trench, wide-track excavators (e.g., specialized amphibious excavator) or specialized construction techniques supported on timber mats would be used for backfilling, final cleanup, and grading. This method minimizes equipment travel in wetland areas.

The pipeline would be installed across wetlands using open-cut methods as described in section 2.5.3.2. SNG/EEC would implement the measures in the SPCP and applicable permit conditions to minimize the potential for spills and contamination in wetlands. Refueling and fuel storage would be restricted within 100 feet of any wetland (with site-specific exceptions identified in their requested deviations from our Procedures [appendix F.2]). Pumps used for water withdrawal would be sited at least 100 feet from the edge of any wetlands to the extent practicable.

¹¹⁷ Acres of affected wetlands for SSE4 obtained from Appendix 2.C of the February 17, 2026, Supplemental Filing. Reference Accession no.: 20260217-5265. These values are also summarized in table I.4.4-3.

If conditions such as seasonal fluctuations in river flow require placement of pumps within 100 feet of wetlands, secondary containment controls would be used at those pumps.

Blasting may be required in wetland habitats for pipeline installation. If blasting in wetlands is required, fracturing the bedrock could affect the hydrology of the wetlands, especially in karst areas. To minimize the blast radius and depth, and subsequent potential effects on wetlands, the number and size of blasting charges would be kept to the minimum required. Once construction is complete, wetlands would be monitored for at least 3 years in accordance with the SSE4 Procedures and as required by USACE authorizations. If monitoring requirements are not met, SNG/EEC would implement adaptive management plans in accordance with USACE permit conditions. If the adaptive management measures are unsuccessful, SNG/EEC would work with USACE to mitigate the wetland loss through compensatory mitigation.

SNG/EEC would follow established construction practices to minimize ground disturbance, such as using low-ground-pressure equipment and timber mats in saturated soils, limiting work duration, and stabilizing disturbed areas promptly. Blasting in wetland areas, if required, would be carefully controlled to protect hydrology, and post-construction monitoring would verify successful recovery. We conclude that, with the planned avoidance and minimization measures, as well as implementation of the SSE4 Procedures, SSE4 would not result in significant degradation of wetland resources.

4.4.3 Conclusion

4.4.3.1 Mississippi Crossing Project

MSX would temporarily and permanently affect wetlands along the pipeline route, primarily through vegetation clearing, grading, and construction of access roads and facilities. Most effects on wetlands would occur during construction and would be short term, while a small number of wetlands would be permanently filled or converted within operational areas and access roads. TGP would employ BMPs to minimize disturbance, including reducing right-of-way widths in forested wetlands, using timber mats to avoid rutting and compaction, and restoring disturbed areas to preconstruction contours. Long-term effects would be limited to narrow corridors where woody vegetation could not regenerate. Compensatory mitigation would be provided through approved wetland mitigation banks to offset unavoidable losses. We conclude that, with adherence to federal and state permit requirements and effective implementation of restoration as discussed in the MSX Procedures and revegetation monitoring, MSX would not result in significant adverse effects on wetland function or extent.

4.4.3.2 South System Expansion 4 Project

SSE4 would also affect wetlands along the construction corridor, with most effects being temporary and addressed through natural revegetation and restoration measures. Permanent effects would occur where wetland areas must be converted or filled to support aboveground facilities or access roads. SNG/EEC would follow established construction practices to minimize ground disturbance, such as using low-ground-pressure equipment and timber mats in saturated soils, limiting work duration, and stabilizing disturbed areas promptly. Blasting in wetland areas, if required, would be carefully controlled to protect hydrology, and post-construction monitoring would verify successful recovery. SNG/EEC would compensate for unavoidable permanent losses through a mitigation plan developed in coordination with the USACE and state agencies. The

USACE would require documentation that SNG/EEC has satisfied its mitigation obligations prior to conducting work within waters of the U.S. authorized by the CWA Section 404 permit. We conclude that, with the planned avoidance, minimization, and compensatory measures, as well as implementation of the SSE4 Procedures, SSE4 would not result in significant or long-term degradation of wetland resources.

4.5 VEGETATION

4.5.1 Existing Vegetation Resources

Ecoregions, distinct natural communities based on regional geology, landforms, soils, vegetation, climate, land use, wildlife, and hydrology (EPA, 2025a), can be helpful in describing vegetation resources across the United States. Effects on vegetation for each Project would be dependent on the type of vegetation affected, whether the effects would be temporary or permanent, the rate at which the vegetation would reestablish after construction, and the frequency of vegetation maintenance performed during project operations.

4.5.1.1 Mississippi Crossing Project

MSX is within the following ecoregions: the Northern Holocene Meander Belts, Northern Pleistocene Valley Trains, Northern Backswamps, Loess Plains, Bluff Hills, and Southern Hilly Gulf Coastal Plain (Chapman et al, 2004; Griffith et al, 2001). Table I.4.5-1 provides a description of these ecoregions.

MSX would temporarily disturb vegetation across a range of cover types, with the most meaningful effects occurring where forested areas would be converted to maintained open land. Construction of the MSX Mainline would result in effects on 4,202.2 acres of vegetated land within the Project area. Of this total, approximately 1,588.7 acres is agricultural/rangeland, 821.7 acres is upland forest, 330.1 acres of developed land, and 428.6 acres is open land.¹¹⁸

4.5.1.2 South System Expansion 4 Project

SSE4 is within the following ecoregions: the Buhrstone/Lime Hills, Southern Hilly Gulf Coastal Plains, the Flatwoods/Blackland Prairie Margins, Southeastern Floodplains and Low Terraces, Blackland Prairie, Fall Line Hills, Southern Outer Piedmont, the Sand Hills, and the Coastal Plain Red Uplands (Chapman et al, 2004; Griffith et al, 2001). Table I.4.5-2 provides a description of these ecoregions.

SSE4 would also result in temporary vegetation loss and long-term conversion of some forested areas to herbaceous or scrub-shrub communities. Construction of SSE4, including the construction right-of-way and aboveground facilities, would result in effects on 6,854.8 acres of vegetated land. This total includes 216.9 acres of agricultural/rangeland, 1,409.6 acres of upland forest, 912.4 acres of developed land, and 2,896.3 acres of open land.¹¹⁹

¹¹⁸ Acres of vegetation and habitat types affected by MSX obtained from Attachment DR-34 of TGP's October 6, 2025, Data Response. Accession no.: 20251006-5171.

¹¹⁹ Acres of vegetation and habitat types affected by SSE4 obtained from appendix 3.A (145-146) of SNG/EEC's February 17, 2026, Supplemental Filing. Accession no.: 20260217-5265.

4.5.2 Noxious and Invasive Weeds

Invasive plant species display rapid growth and spread, becoming established over large areas. These species can change or degrade natural vegetation communities and thus reduce the habitat for native plant species. Noxious weeds are defined as species that are detrimental to crops, livestock, or natural habitats and typically grow aggressively in the absence of controls (NRCS, 2026). Ground disturbance during construction activities may cause vegetation communities to be susceptible to infestations by noxious or invasive weed species. The introduction of noxious weeds could prevent vegetation from returning to preconstruction conditions, increase the risk of wildfire, and degrade the natural beauty of landscapes. The species listed in tables I.4.5-3 and I.4.5-4, for MSX and SSE4 respectively, could become abundant in areas with prior surface disturbances, such as agriculture fields, roadsides, existing utility rights-of-way, and wildlife concentration zones.

Both projects have project-specific Noxious and Invasive Weed Control Plans.¹²⁰ These plans include ways to reduce the spread of noxious and invasive weeds such as: having an EI inspect and verify that construction equipment is clean and free of soil and plant debris prior to arriving on site; mowing during clearing and grading activities to reduce the spread of noxious weeds during construction, using certified weed free mulch, straw and haybales; and implementing erosion control measures described in the project-specific Plan and Procedures to minimize sediment movement. Adherence to these guidelines would minimize the potential to introduce or spread noxious or invasive weeds during construction and operation of MSX and SSE4.

4.5.3 Vegetation Effects and Mitigation

Appendix I includes detailed breakdowns of the acreages of vegetation and habitat types affected by construction and operation for MSX (table I.4.5-5) and SSE4 (table I.4.5-6). Acreages described within this section were obtained from the Companies' supplemental filings.^{121,122}

4.5.3.1 Mississippi Crossing Project

During the scoping and draft EIS comment period, we received public comments concerning deforestation and the project's potential effects on properties with active timber management, the southern pine beetle, and wildflower pollination practices. Construction activities would result in temporary, short-term, and permanent effects on vegetative resources. Additional effects on vegetation may include soil erosion, increased potential for the introduction and establishment of invasive weed species, and depletion of wildlife habitat at a local scale.

The southern pine beetle has been documented in multiple counties crossed by the proposed Projects. The Companies have committed to monitoring updated occurrence data, specifically during warmer months. Based on their responses to our requests for additional information, the Companies would implement measures to align with the recommendations from the USDA Forest

¹²⁰ The MSX Noxious and Invasive Weed Control Plan was filed as appendix I.D.7 with TGP's Certificate Application. It is available for the public to review on FERC's eLibrary at Accession no.: 20250630-5152. The SSE4 Noxious and Invasive Weed Control Plan was filed as appendix I.D.7 with SNG/EEC's Certificate Application. It is available for the public to review on FERC's eLibrary at Accession no.: 20250703-5175.

¹²¹ Impact numbers obtained from Table 3.5-2 of TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

¹²² Impact numbers obtained from SNG/EEC's December 10, 2025, Data Response Attachment EIR 10 Table 3.1-2 (Accession no.: 20251210-5208).

Service, the Alabama Forestry Commission (AFC), the Georgia Forestry Commission (GFC), and the Mississippi Forestry Commission (MFC), which recommend removal of felled trees. The USDA Forest Service suggests the most effective and recommended treatment for southern pine beetle suppression is to cut and remove infected trees, which has an efficacy rate of 97 percent and successfully removes developing beetles from the area (USDA 2009). The AFC and MFC emphasize control through timely removal and utilization of merchantable infested material (AFC 2019 and MFC 2024). Felled trees within the construction workspaces would be disposed of using several different methods in accordance with applicable federal, state, and local regulations, including timber use by the construction contractor, chipping and spreading, or transporting to an approved facility for disposal.

Project construction would cause temporary disturbances to non-forested vegetation like agricultural land, open land, and wetlands. Further discussion of these areas can be found in section 4.8.1 and section 4.4, respectively. While farmland typically recovers within a season, herbaceous areas need 1 to 3 years to regrow, and scrub-shrub areas take 3 to 5 years. In contrast, the effect on forests can be long-term to permanent, as restoring trees to their pre-construction state can take 25 years or more.

Construction of the MSX Mainline and laterals would temporarily disturb 725.9 acres of upland forest where clearing would be needed for the right-of-way and workspaces. Although most of these areas would be allowed to naturally reestablish after construction, 269.6 acres would be permanently converted to maintained right-of-way/open land to allow safe operation of the buried pipeline.

Construction of the aboveground facilities would disturb approximately 62.8 acres of forest and permanently convert 33.9 acres of upland forest for operation of new compressor stations. MSX would also affect 32.9 acres of upland forest during construction and 23.6 acres of forest during operation related to contractor yards and access roads. The contractor yards and TARs would be restored following construction and allowed to return to pre-construction conditions, and 23.6 acres would be maintained as PARs.

In response to public concern regarding timber management and the invasive southern pine beetle, TGP would, within the guidelines of applicable local regulations and landowner requirements, remove trees, logs, brush, and rocks, while timber would be removed as needed for construction. These items may be stacked at the edge of the right-of-way and disposed of in accordance with local regulations. Tree clearing windows for certain species are discussed in sections 4.6.5 and 4.7.1, and silviculture is further discussed in section 4.8.1. To mitigate occurrences of southern pine beetle infestations during construction, TGP would implement measures to align with recommendations from the USDA, U.S. Forest Service, and state agencies, including the removal of felled trees, as described above. We received public comments regarding potential effects on pollinators. Temporary to short-term effects would occur during construction due to the clearing of existing pollinator habitat. However, all temporary workspaces would be allowed to return to pre-construction conditions. Permanent effects to pollinator habitat would be localized to areas of permanent conversion to unvegetated/industrial land uses.

Topsoil segregation would be completed in accordance with the MSX Plan and Procedures to facilitate post-construction revegetation success. Segregating topsoil minimizes the potential

for long-term erosion due to a lack of vegetation cover. If construction is active during the fall and winter months, a temporary seed mix would be applied to provide vegetative cover until spring.

The MSX Plan and Procedures would drive post-construction revegetation, thus minimizing the potential for long-term erosion due to the limited presence of vegetation. TGP would not continue to use temporary workspaces and would return land to pre-construction conditions. In response to public concerns about erosion and habitat destruction, forested areas within the permanent right-of-way would be cleared and maintained as herbaceous or shrub habitat. While construction and operation of the MSX Mainline and associated facilities would result in both temporary and permanent clearing of upland forest, the affected acreage represents a small portion of the regional forest cover. Therefore, we conclude that construction and operation of MSX would result in minor, long-term effects on mature forests. These effects would be minimized by collocating the new pipeline with existing linear rights-of-way to the greatest extent practicable and by adherence to the MSX Plan and Procedures.

4.5.3.2 South System Expansion 4 Project

We received public comments during the scoping periods that expressed concerns about vegetation effects from tree clearing, destruction of landscaping, gardens, and pollinator habitats, as well as the loss of wooded areas and vegetation that contribute to property value and ecological balance. Construction of the project would cause both temporary and permanent effects on vegetation communities. Temporary effects would result from tree removal, clearing, and grading in construction areas before the installation of pipelines. Cleared forest would be affected to a greater extent due to the amount of time needed to reestablish mature wooded areas. Construction of the SSE4 new pipeline loops would temporarily disturb 1,205.7 acres of upland forest land, with much of the route designed to follow existing rights-of-way. Most areas would be restored after construction; however, forest within the permanent right-of-way (320.8 acres) would be converted to open land to allow ongoing inspection and maintenance of the pipelines.

SSE4 construction at compressor and meter stations would occur mainly within or adjacent to existing industrial or cleared areas. Aboveground facility construction would result in 89.3 acres of effect on upland forest and 9.4 acres of operational effects. SSE4 would also affect 114.7 acres of upland forest during construction related to contractor yards, access roads, and appurtenant facilities and 89.2 acres of forest during operation.

Forest clearing would alter existing habitat and convert wooded areas to open or developed land. The removal of trees would cause a loss of forest cover, and full regrowth to pre-construction conditions could take several decades. Following construction, disturbed upland forest areas would be seeded with appropriate seed mixes and allowed to naturally revert to forested conditions over time. Effects on upland forest would be long-term given the length of time required for woody vegetation to regenerate.

Trees would be cut only when necessary for construction. Other vegetation debris may be stacked at the edge of the right-of-way, mulched for use as erosion control, or otherwise disposed of in accordance with applicable regulations and landowner requirements and requests.

Topsoil segregation following the SSE4 Plan and Procedures would be implemented to facilitate post-construction revegetation success, which in turn, would reduce long-term erosion. Restoration and revegetation would also be conducted following these guidelines. If construction occurs during the fall and winter months, a temporary seed mix would be applied to provide vegetative contours to reduce erosion.

Temporary workspace would not be used after construction is complete. Therefore, all temporary workspace and ATWS would be allowed to return to pre-construction conditions.

Construction and operation of SSE4 would involve both temporary and permanent clearing of vegetation along the right-of-way and at associated facilities. While clearing and grading would reduce canopy cover and fragment habitat, the effects of vegetation clearing would be minimized through the use of existing rights-of-way and adherence to the SSE4 Plan and Procedures, and the Noxious and Invasive Weed Control Plan. Portions of forested land would be converted to maintained or developed areas, these changes would affect a limited share of the overall forest resources in the region. Adjacent forested tracts would remain largely intact. We conclude that the long-term conversion of forested land associated with SSE4 has been minimized to a level that would not result in significant effects on upland forest communities or related habitat functions.

4.5.4 Conclusion

4.5.4.1 Mississippi Crossing Project

Clearing and grading would reduce canopy cover and fragment habitat. The effects of vegetation clearing would be minimized through the use of existing rights-of-way and adherence to the MSX Plan and Procedures, and the Noxious and Invasive Weed Control Plan. Portions of forested land would be converted to maintained or developed areas; these changes would affect a limited share of the overall forest resources in the region. TGP would implement topsoil segregation, temporary seeding, and revegetation measures to stabilize soils and promote regrowth. Agricultural and open land areas would be restored to preconstruction conditions once construction is complete, while forested areas would require more time to reestablish. We conclude that, with appropriate restoration, monitoring, and control of invasive species, vegetation effects from MSX would be short- to long-term and not significant.

4.5.4.2 South System Expansion 4 Project

Most disturbance would occur within the construction right-of-way, while permanent effects would remain localized around facilities and maintained corridors. SNG/EEC would minimize effects by collocating the pipeline with existing corridors, limiting tree clearing, and restoring disturbed lands in accordance with the SSE4 Plan and Procedures, and the Noxious and Invasive Weed Control Plan. Topsoil management, erosion control, and the use of approved seed mixes would support revegetation and prevent invasive species establishment. We conclude that these measures would support the recovery of vegetation communities over time and that project-related effects on vegetation remain short- to long-term and not significant.

4.6 WILDLIFE AND FISHERIES

4.6.1 Existing Wildlife Resources

The Projects are located in the southeastern U.S., where wildlife communities correspond closely to the habitats provided by local plant communities described in section 4.5.1. Habitat descriptions in this section are based on desktop analyses and field surveys conducted by The Companies. The Projects would traverse terrestrial and wetland habitats that support a diversity of wildlife species.

Wildlife habitat in the vicinity of the Projects includes upland forest and pine plantation, agricultural and rangeland, open land, open water, wetlands, and developed land. With the exception of developed lands, each of these cover types may provide nesting, cover, and foraging habitat for a variety of wildlife species. Effects on aquatic resources are described in section 4.6.6.

Upland forests and pine plantations include deciduous, evergreen, and mixed stands dominated by mature trees greater than five meters tall. Upland forests provide habitat for a variety of mammals, birds, amphibians, reptiles, and invertebrates. Tree cavities, dead wood on the forest floor, and mast (nuts, acorns, and fruit) support species including woodpeckers, black bears, squirrels, other small mammals, and invertebrates. Amphibians are well adapted to the moist microhabitats created by closed canopies, leaf litter, and coarse woody debris on the forest floor.

Open land refers to all non-forested vegetation, including herbaceous areas such as rights-of-way and open spaces, and may include remnant pasture grasses, early successional plant species, or saplings. Additionally, dense grasses and shrubs provide nesting habitat and seed resources for songbirds and small mammals such as warblers cottontail rabbits, and eastern moles. Upland meadows also support raptors which hunt songbirds and small mammals.

Agricultural land includes cropland, hayfields, and non-forested land used for livestock grazing (rangeland). Although row crops typically offer moderate cover, they provide forage areas for wildlife species. Pastures support grazing by white-tailed deer and other mammals, while hayfields and pastures create nesting habitat for grassland-nesting birds. Irrigation ditches, ponds, and shallow water features associated with agricultural lands may provide habitat for wading birds and waterfowl.

Wetland habitat within the Projects includes PEM, PSS, and PFO wetlands. Wetlands typically support a diverse ecosystem that provides nutrients, cover, shelter, and water for a variety of terrestrial and aquatic wildlife species including raptors, waterfowl, mammals, reptiles, and amphibians. PFO wetlands are dominated by woody vegetation and provide food and water sources for wildlife. Mammals such as nutria, foxes, and deer use these as foraging habitats. Waterfowl use PFO wetlands adjacent to PSS and PEM wetlands for nesting and foraging. PSS wetlands provide cover for small mammals, reptiles, and amphibians, making them prime hunting grounds for predator species. PEM wetlands provide habitat for waterfowl, reptiles, and amphibians.

The Projects would cross open water cover types including creeks, streams, and rivers. These areas provide important foraging and breeding habitat for various terrestrial species including waterfowl, reptiles, amphibians, and some mammals.

Developed areas have 30 percent or more of constructed materials, which include asphalt, concrete, and buildings. They are developed for industrial, commercial, and residential uses, with minimal habitat for wildlife species. Wildlife diversity is often limited to species that are adapted to human presence.

4.6.2 Sensitive or Managed Wildlife Habitats

Wildlife resources of special concern include significant or sensitive habitats that provide breeding, rearing, nesting, or calving areas; migration routes; or overwintering coverage of foraging areas. Significant wildlife habitats include National Wildlife Refuges, National Park System units, NRI designated rivers, state game refuges, state conservation or management areas, Wildlife Management Areas (WMA), wildlife sanctuaries, rookeries, waterfowl colonies, wildlife viewing areas, nature preserves, and other unique or sensitive areas.

4.6.2.1 Mississippi Crossing Project

The recreational value of wildlife within MSX includes wildlife viewing, bird watching, hunting, and trapping. Common game species known to occur in the region include white-tailed deer, coyotes, wood ducks, and wild hogs, among others (Mississippi Department of Wildlife, Fisheries, and Parks [MDWFP], 2025b). MSX does not cross any state or federal WMAs or known public hunting grounds. MSX would cross three NPS-managed resources that provide important wildlife habitat in Mississippi: the Big Black River and the Natchez Trace Parkway.

At the Big Black River, the vegetation is composed of indigenous swamp plants and hardwood tree species, interspersed with land used for agricultural cultivation. This area supports an array of flora and fauna, including deer, wild turkey, waterfowl, North American river otters, American beavers, squirrels, wild hogs, coyotes, and occasional black bears. Abundant fish supply within the river sustains avian communities such as herons, bald eagles, ospreys, and cormorants (MDEQ, 2025b).

MSX would cross the Natchez Trace Parkway. This area forms an almost continuous greenway that extends from the lower Mississippi River to the Appalachian foothills of Tennessee, with nearly 75 percent of its total acreage maintained in natural, undeveloped conditions. Habitats range from streams, lakes, swamps, riparian woodlands, bottomland hardwood forests, upland hardwood forests, pine and mixed hardwood forests, prairie, fallow fields, and agricultural croplands. This parkway provides a safe corridor for mammals such as bears, deer, foxes, and beavers, and other animals such as reptiles, amphibians, and birds (NPS, 2025b).

4.6.2.2 South System Expansion 4 Project

Sensitive and managed wildlife habitats can provide recreational and commercial opportunities for hunting of species including foxes, coyotes, white-tailed deer, and wild ducks (MDWFP, 2025b; eRegulations, 2025; GADNR, 2025a). SSE4 would cross rivers listed on the NRI. These include the Tallapoosa River, Flint River, and Oconee River. Additionally, SSE4 would cross the Bartram Forest WMA (GADNR, 2025d) and a portion of the Little Creek Community Preserve.

Loop E2 would cross the Tallapoosa River. The associated watershed receives few nutrients from natural sources, creating clear waters that are not as productive as other waters in

the state. Its largely undeveloped condition provides a range of values, including cultural, historic, recreational, scenic, fishery, and wildlife resources. SSE4 would cross south of Lake Martin, Thurlow reservoir, and Thurlow Dam, where the river flows over the Fall Line and transitions from the Piedmont to the Coastal Plain ecoregion (NPS, 2025c; ADCNR, 2025a).

Loop F2 would cross the Flint River, part of the Apalachicola-Chattahoochee-Flint Basin, which supports the greatest diversity of fish fauna among Gulf Coast river drainages east of the Mississippi River. SSE4 crosses the upper segment of the Flint River, which flows through a gorge providing Class I-IV rapids, and supports darters, freshwater mussels, and plants such as the rocky shoal spider-lily (*Hymenocallis coronaria*). Flora in this area is a unique transitional mixture of Piedmont and Coastal Plain species (NPS, 2025c; Macon County, 2025).

Loop I1 would cross the Oconee River in the Lower Oconee watershed, which reaches from Barnett Shoals Dam to GA 15 bridge, then from GA22 bridge to confluence with the Altamaha River. This river is an outstanding float stream with wilderness stretches, prolific flora, historic sites, and excellent fishery. This river supports a diverse mix of terrestrial and aquatic habitats, and is popular with fishermen and hunters of turkey, deer, hogs, and waterfowl (NPS, 2025c; Georgia Rivers, 2025).

Loop I1 would cross the Bartram Forest WMA. This 1,343-acre property is managed by the GADNR Wildlife Resources Division and provides hunting opportunities for the public for deer, turkey, and small game. This area has swampy wetlands, evergreens, conifers, and large areas of loblolly pines. Lake fishing, birdwatching, and wildlife viewing are also popular activities supported in this area and its associated habitats. SSE4 crosses through both the WMA (western section) and recreation area (northeastern section) (GADNR, 2025d; Deep South Magazine, 2021).

Loop H2 would cross the Little Creek Community Preserve. This area is a privately owned 1,450-acre hunting preserve and equestrian conservancy outside of Macon, Georgia. It consists of common areas owned by member owners and long-term leases for conservation and wildlife management (Little Creek Community Preserve, 2025).

4.6.3 General Wildlife Effects and Mitigation

The Companies would implement measures outlined in their project-specific Plans and Procedures, which are specifically designed to avoid or minimize effects on wildlife species and/or their habitats. Construction of the pipeline systems and associated facilities may affect the wildlife resources and habitat through clearing, excavation, and backfilling. During construction, more mobile species would be temporarily displaced from the construction right-of-way to similar habitats nearby. Less mobile species may experience direct mortality or permanent displacement. During operation and maintenance activities, access to pipelines and related facilities would be limited to periodic inspections and maintenance activities.

As discussed in section 4.3, MSX would cross one NRI- listed river, and SSE4 would cross three NRI-listed rivers. MSX would additionally cross the Natchez Trace Parkway. As a cooperating agency, NPS is processing permit applications for the Natchez Trace Parkway crossing in order to ensure potential effects there are avoided or minimized to the greatest extent possible. No construction would be authorized for crossing the Natchez Trace Parkway until the NPS right-of-way permit and special use permit have been obtained. NPS consulted with the

Companies to ensure the Projects' activities would not have an adverse effect on the values for which the NRI rivers have been listed, nor would the Projects preclude the rivers from future designation in the National Wild and Scenic River System. Additional information is provided in section 4.8.2.5.

Noise and human activity during construction are expected to discourage wildlife from entering project workspaces. A series of BMPs during construction would be implemented, including maintaining a clean work site through proper trash disposal, providing environmental awareness training for all personnel, and enforcing site-specific rules such as speed limits and prohibiting firearms or pets. BMPs specific to protected species are discussed in section 4.7. To prevent direct harm to wildlife, crews would check for animals in workspaces and equipment before beginning operations, and any wildlife that enters the work area would be allowed to leave on its own. Crews would also install escape ramps and limit the time trenches are left open.

Contractor yards for both projects would be returned to previous conditions or as requested by the landowner. The small amount of temporary effects on forested areas from contractor yards is not anticipated to cause direct effects on wildlife.

Nighttime work proposed for both projects could disrupt nocturnal wildlife and migratory birds. Construction-related noise and light may disorient species, affecting nocturnal behaviors such as travel, foraging, and breeding patterns. These species are likely to relocate to move away from the noise or to avoid disturbance. To the extent practicable, artificial lights would be limited to what is necessary for safe operation and focused on active work area.

4.6.3.1 Mississippi Crossing Project

We received comments from the public and state agencies during scoping and draft EIS comment periods expressing concern regarding potential effects, including habitat destruction, fragmentation affecting local wildlife and native pollinators, and disruption to hunting areas. Temporary to short-term effects would potentially include displacement of individuals from construction areas and adjacent habitats, including pollinator species such as birds, bees, and butterflies, and the direct mortality of smaller, less mobile species. Long-term and permanent effects would include periodic disturbance of wildlife during operation and maintenance, as well as the permanent conversion of forested habitat to scrub-shrub or open areas. Indirect wildlife effects associated with construction noise, lighting, and increased activity would be temporary and could include abandoned reproductive efforts, displacement, and avoidance of work areas. Clearing and grading, human presence, vehicular transit, and periodic disturbance could result in direct effects on wildlife including mortality, injury, and stress.

Construction and operation of MSX would result in various short- and long-term effects on wildlife habitat. Table I.4.5-5 in appendix I quantifies effects of each vegetation and habitat type.

Portions of the MSX Mainline and MSX laterals are proposed to be collocated with other existing pipeline and electric transmission line rights-of-way, thereby minimizing alteration of undisturbed areas where possible. Long-term effects would be limited to tree clearing for temporary workspace, permanent easements, and facility installation. While construction may temporarily affect wildlife movement and increase exposure, right-of-way corridors can also

facilitate movement for certain species. Additionally, transitional zones between habitat types, known as edge habitat, may offer benefits such as diverse food sources, nesting and breeding opportunities, and travel pathways and may enhance habitat for species that are hunted.

The majority of MSX would occur in or adjacent to upland forest, agricultural, and developed land, both of which provide poor quality habitat. MSX is not expected to inhibit large movements of wildlife during construction or operation and maintenance activities. Within the pipeline easement, forested wetlands would be converted to emergent and scrub-shrub wetland types. Wetlands within the temporary workspaces would be allowed to revegetate to pre-construction cover types following restoration efforts. Additional discussion regarding compensatory mitigation discussions with the USACE is provided in section 4.4.2.

Long term effects from aboveground facilities would be limited to tree clearing at Station 606A, Station 610, MSX Meter Station 4, and the SNG South System 4 Interconnection. Operational areas within the fenced boundaries of these proposed facilities would be paved or graveled, providing no wildlife habitat value; however, the loss of these areas does not substantially reduce the amount of available habitat in adjacent areas. Some wildlife may avoid the areas immediately surrounding the facilities due to minor noise emissions during operation. For access roads, temporary and permanent effects on wildlife habitat would primarily occur where trimming trees, cutting of saplings and shrubs, and installation of temporary waterbody bridges are anticipated. TARs used for construction would be returned to previous conditions or as requested by the landowner.

Nighttime work is proposed for activities such as HDD, pipeline drying, and hydrostatic testing. Controlled blasting would not occur at nighttime, but preparation for controlled blasting may necessitate nighttime work, extended work hours, or extended work on Sundays and holidays. Lights would be turned off during downtime to reduce effects on nearby habitats. Machinery would be shut down when not in use to minimize noise. Only essential machinery would be present on site, reducing both noise and light sources. Both light and noise effects on nocturnal species are anticipated to be limited to construction, temporary, and minimal with implementation of mitigation measures.

TGP proposes to HDD under the Big Black River and the Natchez Trace Parkway which would minimize potential effects on wildlife populations and habitat in the area. TGP consulted with the NPS with respect to the NRI listing for the Big Black River, which includes the river's outstandingly remarkable wildlife values. In a letter to TGP from the NPS dated January 16, 2026, the NPS indicated that after careful review of the proposed HDD and TGP's proposed mitigation measures, MSX "would not have an adverse effect on the values for which the Big Black River has been listed on the NRI, nor would the project as proposed preclude the river from future designation into the System." NPS also made recommendations to TGP to incorporate into the project in order to further protect and enhance the remarkable values of the River and TGP has committed to implement these conditions. The NPS recommendations are consistent with TGP's Plan and Procedures. NPS is also processing permit applications for the Natchez Trace Parkway crossing in order to ensure potential effects there, including to wildlife, are avoided or minimized to the greatest extent possible. No construction would be authorized for crossing the Natchez

Trace Parkway until the NPS right-of-way permit and special use permit have been obtained. TGP has committed to implementing all conditions identified in the January 16, 2026, NPS letter.¹²³

Overall, we conclude that MSX construction and operation would not adversely affect the distribution or regional abundance of wildlife given the amount and distribution of similar habitat types available in the immediate area.

4.6.3.2 South System Expansion 4 Project

We received comments from the public and state agencies during scoping and draft EIS comment periods expressing concern regarding potential effects, including harmful effects on the removal of wildlife habitat (particularly in wooded areas), habitat fragmentation, disruption of wildlife trails and corridors, and disturbance to hunting lands. As described in section 4.6.3.1, temporary and permanent effects would occur to wildlife as a result of this project.

Construction and operation of SSE4 would result in various short- and long-term effects on wildlife. Table I.4.5-6 in appendix I details effects of each vegetation and habitat type.

SNG/EEC would minimize alteration of undisturbed areas by generally locating SSE4 along the existing right-of-way with minimal greenfield construction, thereby avoiding additional fragmentation of contiguous habitats. The existing right-of-way is currently permanently affected by routine vegetation maintenance. The forested areas adjacent to the right-of-way already exist as edge habitat rather than interior forested habitat. Therefore, although some conversion of forested vegetation would occur, effects on habitat for interior forest-dwelling wildlife would be minimal. SNG/EEC have agreed to seasonal clearing restrictions where possible for tree clearing outside of April 15 to August 1 to avoid effects on breeding birds during nesting season. Additional tree clearing timeframes for protected species are discussed in section 4.7. The clearing and grading of the existing right-of-way would result in a temporary loss of vegetative cover during construction, and temporarily displace some wildlife. However, the cleared right-of-way would be revegetated with herbaceous and shrub cover that would provide food, cover, and breeding habitat for species that use open habitats and may enhance habitat for species that are hunted. Wildlife is expected to avoid using areas during active construction but would be able to use these areas post-construction.

Construction activities within wetland habitats would temporarily affect wildlife using the area. In wetlands, vegetation maintenance would consist of an up to 10-foot-wide corridor centered on the pipeline that would be annually maintained in an herbaceous state. Woody vegetation within 15 feet of the pipeline would also be removed to avoid root damage to the pipeline. Construction activities within wetlands are discussed further in section 4.4.

Effects on wildlife from the construction of aboveground facilities, both in developed and undeveloped areas, would be similar to those associated with construction of the pipeline facilities. Following construction, SNG/EEC would restore temporary workspaces outside the fence lines.

¹²³ TGP's implementation of NPS conditions provided in TGP's April 23, 2026 Supplemental Filing (Accession no.: 20260423-5193).

Species sensitive to noise may avoid the stations; however, most species would become acclimated to the noise over time.

Three new meter stations would be constructed as part of SSE4. The MSX Interconnect meter station would affect one acre of upland forest for construction and operation. This meter station is directly off of the established right-of-way on a plot of land that was previously cleared between 2011 and 2015, according to aerial imagery. It is surrounded by open fields containing manicured lawn, herbaceous, and shrubby vegetation. It is unlikely that this one acre of disturbance would negatively affect wildlife in the area. The Smarr meter station would be constructed on land that is currently classified as upland forest; however, the Smarr Combined Cycle Energy Facility would be built at the site prior to SSE4. As a result, construction and operation of this meter station would affect 3.7 acres of developed land. Since the site would be developed at the time of construction, effects on wildlife are not anticipated. Construction of the Port Wentworth meter station would affect 3.9 acres of upland forest and 1.3 acres of open land. Permanent effects would total 0.8-acre of upland forest and 0.6-acre of open land.¹²⁴ Located adjacent to the established right-of-way and surrounded by industrial activities, the 1.4-acre permanent disturbance is unlikely to negatively affect wildlife in the area.

Certain activities such as HDD, hydrostatic testing, or controlled blasting may require nighttime work. To the extent practicable, SNG/EEC would direct lighting downward and would shield lights to minimize unnecessary illumination. Sound control devices on equipment may be used to minimize noise disturbances at night. With these mitigation measures in place, light and noise effects on nocturnal species are anticipated to be temporary, limited to construction, and minimal.

SNG/EEC have consulted with NPS for the NRI-listed rivers to be crossed by the Project, as detailed in section 4.8.2.5. SNG/EEC would ensure that SSE4 activities would not affect potential eligibility of these rivers for inclusion in the National Wild and Scenic River System. The Flint, Tallapoosa, and Oconee rivers would also be crossed via HDD, and SNG/EEC's HDD Contingency Plan would be followed to reduce effects on these resources.

Overall, we conclude that SSE4 construction and operation would not adversely affect the distribution or regional abundance of wildlife given the amount and distribution of similar habitat types available in the immediate project area.

4.6.4 Migratory Birds and Bald and Golden Eagles

Migratory bird species¹²⁵ nest in the U.S. and Canada during the summer months and then migrate south to the tropical regions of Mexico, Central and South America, and the Caribbean for

¹²⁴ Vegetation numbers obtained from table 3.A-2 of SNG/EEC's February 17, 2026, Supplemental Filing.

Accession no.: 20260217-5265..

¹²⁵ Migratory birds are protected under the MBTA, which prohibits the intentional take or killing of individual migratory birds, their eggs and chicks, and active nests. The MBTA provides that it is unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg of any such bird. Executive Order 13186 directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse effects on migratory birds. It also states that emphasis should be placed on species of

the non-breeding season. Some species migrate from breeding areas in the north to the Gulf Coast for the non-breeding season.

The bald eagle was officially removed from the federal threatened and endangered species list in 2007 but is still protected under the federal Bald and Golden Eagle Protection Act (BGEPA) and MBTA. The BGEPA protects bald and golden eagles by prohibiting anyone without a permit issued by the Secretary of the Interior from taking a bald or golden eagle, including their parts, nest, or eggs (16 U.S. Code 668-669c). Golden eagles are mostly found in the western United States and are scarce in Mississippi, Alabama, and Georgia (All About Birds, 2025).

The FWS has designated four administrative flyways across North America to support coordinated management of migratory birds and their habitats (FWS, 2021). Each flyway represents a primary migration corridor used by bird species during spring and fall migrations. Both Projects are within the Mississippi Flyway. Within the protections of the MBTA, FWS identifies Birds of Conservation Concern (BCC).¹²⁶ To apply priorities, the FWS partners with the North American Bird Conservation Initiative (NABCI) to delineate Bird Conservation Regions (BCR). BCRs are ecologically based areas that reflect similarities in bird communities, habitats, and conservation challenges across the landscape (NABCI, 2020).

4.6.4.1 Mississippi Crossing Project

MSX is located in the BCRs of Mississippi Alluvial Valley (BCR 26) and Southeastern Coastal Plain (BCR 27). The FWS Information for Planning and Consultation (IPaC) report identified 28 BCC that potentially occur within the Project area as detailed in table I.4.6-1 in appendix I. Overall, nesting habitat for these BCC include pine, deciduous, and mixed forests, freshwater forested and emergent wetlands, open herbaceous and cleared uplands, and manmade structures such as utility poles, chimneys, barns, and silos (Audubon, 2025). For those species in which suitable habitat exists within the MSX area, individuals potentially present during construction would likely avoid the area or displace to similar adjacent habitats.

Bald eagles may occur within the MSX area due to their reliance on large waterbodies for foraging and nearby tall trees suitable for nesting. Field surveys confirmed the presence of this species, with two transient observations recorded in Humphreys County and Newton County, Mississippi and one active bald eagle nest documented approximately 2.2 miles south of MSX along the Big Sunflower River in Washington County, Mississippi. Alabama Department of Conservation and Natural Resources (ADCNR) stated all efforts should be made to lessen the disturbance of eagles and eagle nests during the winter and spring nesting season.

concern, priority habitats, and key risk factories, and that particular focus should be given to addressing population-level effects. On March 30, 2011, the FWS and the Commission entered into a Memorandum of Understanding that focuses on avoiding or minimizing adverse effects on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two agencies. This voluntary Memorandum of Understanding does not waive legal requirements under the MBTA, Bald and Golden Eagle Protection Act (BGEPA), ESA, or any other statute, and does not authorize the take of migratory birds.

¹²⁶ BCC are species, subspecies, or populations of migratory nongame birds that are not currently listed under the ESA but are considered vulnerable and could warrant future ESA listing without additional conservation measures (FWS, 2021)

4.6.4.2 South System Expansion 4 Project

SSE4 is in the BCR of the Southeastern Coastal Plain (BCR 27) and Piedmont (BCR 29). The FWS IPaC report identified 27 BCC potentially occurring within the Project area, as detailed in table I.4.6-1. Overall, these species could occur in forested/woodland, agriculture land, open land, and wetlands (Audubon, 2025). For those species in which suitable habitat exists within the SSE4 area, individuals potentially present during construction would likely avoid the area or displace to similar adjacent habitats.

Bald eagles may occur within or near SEE4 given the presence of suitable habitat in the form of large waterbodies and tall trees. The GADNR identified the presence of bald eagle nests within the vicinity of SSE4.

4.6.5 Migratory Birds and Bald and Golden Eagles Effects and Mitigation

Construction would affect migratory birds and raptors, with the primary concern being the mortality of eggs and/or young, as mature birds would likely avoid active construction. Tree clearing and other ground-disturbing activities conducted between breeding and nesting periods could potentially lead to the loss of nests, eggs, or fledglings. Construction activities outside of the breeding and nesting season may temporarily displace birds to adjacent habitats. Construction effects on migratory-bird habitat would be similar to wildlife habitat effects, as discussed in section 4.6.3.

The Companies would implement measures to protect migratory birds, active nests, and their habitats during construction and operation. Some of these measures include having qualified biologists conduct nest surveys before construction begins, placing buffers around active nest areas, deferring work activities within areas of an active nest until the young have fledged, conducting vegetation clearing outside of nesting season to the extent feasible, and having an EI present during construction. Additional consultation with FWS may be needed if active bird nests are found on site. The Companies would comply with the National Bald Eagle Management Guidelines if a bald eagle nest is observed prior to or during construction (FWS, 2007). The Companies would also adhere to the measures outlined in their respective project-specific Plans and Procedures during construction and operation.

4.6.5.1 Mississippi Crossing Project

We received comments from the public and state agencies during scoping and draft EIS comment periods concerning potential effects on migratory bird habitats, including spring nesting areas and wintering habitat for waterfowl and shorebirds, as well as bird sanctuaries. One such area is the Sky Lake Nature Reserve managed by Delta Windbirds in Humphreys County, Mississippi, located approximately 2 miles southeast of the CGT Lateral. Additionally, comments were made regarding the importance of the region's bottomland forests and wetlands for waterfowl, citing their reliance on Delta habitats during migration. Temporary and permanent effects on avian species and their habitats are expected to be similar to those described for wildlife in section 4.6.3.

TGP would implement the following measures to protect migratory birds, active nests, and their habitats during construction and operation:

- To the greatest extent feasible, collocating the proposed MSX Mainline parallel and adjustment to approximately 52.8 miles of existing pipeline and electrical transmission line easements;¹²⁷
- To the greatest extent feasible, collocating the proposed CGT Lateral with approximately 1.9 miles of existing pipeline and electrical transmission line easements;¹²⁸
- Adhering to the measures outlined in the MSX Plan and Procedures during construction and operation of the Project Facilities; and
- Conducting pre-construction bird nest surveys prior to initiating construction activities for certain areas that may require vegetation clearing or tree felling during nesting season.

For the approximately 53 miles of MSX pipeline and approximately 2 miles of the CGT Lateral that are collocated with existing rights-of-way, potential effects on migratory birds are anticipated to be minimal, as collocation reduces the amount of forest clearing and limits additional forest fragmentation. In areas where collocation is not feasible, some forest fragmentation may occur; however, uninterrupted forest habitat is generally present adjacent to MSX, which provides suitable habitat for migratory bird species that rely on forested areas. Additionally, migratory bird species that use edge habitats may benefit from the creation and maintenance of the new right-of-way.

Further, while approximately half of North America's birds depend on the Mississippi Flyway, waterfowl are dependent on a mosaic of wetland types, and the specific value of a habitat is determined by local conditions, food availability, and the degree of disturbance. Although MSX would intersect riparian corridors, which are recognized as valuable stopover habitats, these river systems are extensive and the narrow construction footprint represents a small fraction of the total available habitat in the region. MSX would not traverse high-quality waterfowl habitats such as national wildlife refuges. TGP would minimize disturbance to hydrology where possible.

Therefore, we conclude that although individual birds or nests may be affected, we do not expect population-level effects on migratory birds or significant measurable negative effects on migratory bird habitat, including bald eagles.

4.6.5.2 South System Expansion 4 Project

We received comments from the public and state agencies during scoping and draft EIS comment periods expressing concern regarding potential effects on migratory bird habitats, including spring nesting areas and wintering habitat for waterfowl and shorebirds, bald eagle nests, and bird sanctuaries. Temporary and permanent effects on avian species and their habitats are expected to be similar to those described for wildlife in section 4.6.3.

¹²⁷ Collocation miles obtained from table 1.2-5 of TGP's September 23, 2025, Supplemental Filing. Accession no.: 20250923-5058.

¹²⁸ Collocation miles obtained from table 1.2-5 of TGP's September 23, 2025, Supplemental Filing. Accession no.: 20250923-5058.

SNG/EEC would implement the measures detailed in section 4.6.3 above. Potential effects on migratory birds and their habitats are expected to be minimal, as the majority of SSE4 would be collocated with existing right-of-way, leases, and fee owned property, which minimizes the amount of additional forest clearing and limits forest fragmentation. Therefore, we conclude that although individual birds or nests may be affected, we do not expect population-level effects on migratory birds or significant measurable negative effects on migratory bird habitat, including bald eagles.

4.6.6 Fisheries and Aquatic Resources

Fisheries of concern include those waterbodies with important recreational value that support coldwater fisheries, are included in special state fishery management regulations, or provide habitat for federally or state-listed threatened or endangered species. No fisheries of concern would be affected by the Projects. Discussion of habitat for federally or state-listed species is provided in section 4.7.

The Projects would cross a variety of freshwater waterbodies and wetlands that provide aquatic habitat for fish and a variety of invertebrate species including freshwater clams (i.e., mussels), crayfish, insects and other invertebrate taxa. The Companies used publicly available datasets and field surveys initiated in 2024 to identify fisheries and aquatic resources. Survey work is ongoing for MSX and SSE4.¹²⁹ The Companies will provide additional survey information as it becomes available.

Waterbodies that would be crossed by the Projects are classified as warmwater streams under state designations. No coldwater trout streams would be crossed. Large rivers can provide habitat and migratory pathways for recreational and commercial fish species. Essential Fish Habitat regulated by NOAA Fisheries is not present within the Projects (NOAA, 2025b). Presence of protected species, including fish and mussels, is provided in section 4.7. Waterbody crossing methods are discussed in section 2.5.3.1. Directional boring techniques remove direct effects to streams during construction, whereas open trenching techniques can introduce excessive sedimentation, destabilize substrates, and negatively affect geomorphology of streams. The Companies would reduce negative effects from construction by utilizing directional boring techniques where feasible. Consultations are ongoing with state and federal agencies to detail specific BMPs for waterbody crossings.

The Companies would follow their respective project-specific Plan and Procedures to minimize effects on aquatic species. Work within warmwater fisheries would occur between June 1 and November 30 unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis. The Companies are currently consulting with federal and state agencies to seek approval to conduct in-stream construction activities in warmwater fisheries year-round, instead of restricting activities to December 1 through May 31.

¹²⁹ Survey completion information obtained from Resource Report 3 of the Companies' Certificate Applications. Accession nos.: 20250630-5152 and 20250703-5175.

4.6.6.1 Mississippi Crossing Project

MSX includes freshwater waterbodies that are classified as perennial, intermittent, ephemeral, or open water (see section 4.3.2), as well as freshwater wetlands. As discussed in section 4.3.2 and 4.8.2.5, MSX would cross one NRI-listed river segment, the Big Black River.

MSX would cross large river systems including the Deer Creek, Bogue Phalia, Big Sunflower River, Yazoo River, Tchula Lake, Big Black River, Yockanookany River, and Pearl River, as detailed in table I.4.3-4. Prominent species include crappie, bass, bluegill, catfish, and gar.

The closest hatcheries are Turcotte Fish Hatchery approximately 30 miles south of MSX in Mississippi within the Pearl River WMA and Marion Fish Hatchery approximately 80 miles northeast of MSX in Alabama. The nearest warmwater stocking locations are nine miles north of Meridian for MSX in Mississippi and Coffeerville Reservoir approximately 14.4 miles south of MSX in Alabama (MDWFP, 2024; ADCNR, 2025b).

In Humphreys County, Mississippi, the MSX Mainline and CGT Lateral would cross commercial catfish aquaculture operations. TGP would consult directly with affected landowners to mitigate potential construction-related effects on these facilities.

TGP would implement BMPs to address the presence of known invasive aquatic species, which include four species of Asian carp (bighead, silver, black, and grass), northern snakehead, and zebra mussels. BMPs include removing visible mud, plants, fish, or animals before transporting equipment, eliminating water from equipment before transport, and cleaning equipment that makes contact with waterbodies as necessary.

Protected aquatic species and their effects, determinations, and mitigation measures are further discussed in section 4.7.

4.6.6.2 South System Expansion 4 Project

SSE4 crosses freshwater waterbodies that are classified as perennial, intermittent, ephemeral, or open water (see section 4.3.2), as well as freshwater wetlands. As discussed in section 4.3.2 and 4.8.2.5, SSE4 would cross three NRI-listed river segments, the Flint River, Oconee River, and Tallapoosa River.

SSE4 would cross large river systems including Chinaquapin Creek (Loop B2), Long Creek (Loop B2), Oakmulgee Creek (Loop C1), Tallapoosa River (Loop E2), Chewacla Creek (Loop E1), Little Uchee Creek (Loop F1), White's Creek (Loop F1), and Standing Boy Creek (Loop F1), as detailed in table I.4.3-6. Predominant species across all three states include crappie, bass, bluegill, catfish, and gar. Additionally, Georgia has a large diversity of minnows, darters, sunfishes, and suckers.

MDWFP manages two fish hatcheries to manage stocking needs, the closest being the Turcotte Fish Hatchery approximately 70 miles west within the Pearl River WMA (MDWFP, 2025a). In 2025, MDWFP stocked rainbow trout, largemouth bass, and channel catfish. MDWFP provides these warmwater fish to various stocking locations, including community fishing

assistance program ponds, state fishing lakes, state park lakes, and managed public waters such as reservoirs, rivers, and oxbows (MDWFP, 2024).

ADCNR manages the state's fish and wildlife resources, with three hatcheries in the state and the closest being the Marion Fish Hatchery approximately 10 miles north of the SSE4 Project. The Alabama Wildlife and Fisheries Division stocks state-owned public waters including fishing lakes and reservoirs with rainbow trout, largemouth bass, striped bass, hybrid striped bass, channel catfish, bluegill, and redear sunfish.

GADNR manages ten fish hatcheries (GADNR, 2025c) in the state, in which SSE4 would be the closest to McDuffie Fish Hatchery approximately 10 miles north of Loop I2 and Richmond Hill Fish Hatchery approximately 23 miles south of the Rincon compressor station (GADNR, 2025c). The GADNR focuses on stocking trout in cold-water fisheries. Stocking frequency depends on the available area, fishing pressure, and summer water temperatures (GADNR, 2025b).

Additionally, the FWS maintains a National Fish Hatchery System. Loop G1 would be approximately 14 miles south of the Warm Spring National Fish Hatchery (FWS, 2025c).

SNG/EEC would equip intake hoses with screens and floatation devices to withdraw water from the middle of the water column and prevent the entrapment of stocked fish. Therefore, effects on stocked fish in Mississippi, Alabama, and Georgia are not anticipated.

SNG/EEC would implement specific BMPs to address the presence of known invasive aquatic species, which include alligator weed, common reed, parrot feather, purple loosestrife, marsh dayflower, various species of carp, zebra mussels, nutria, lionfish, and tubeworm. These BMPs include screens on intake hoses to minimize entrainment of aquatic species, limiting in-water activities to what is necessary to safely complete the activity, and inspecting all equipment and materials prior to and following any in-water activities to ensure they are free of vegetation or debris.

Protected aquatic species and their effects, determinations, and mitigation measures are further discussed in section 4.7.

4.6.7 Fisheries and Aquatic Resources Effects and Mitigation

The potential effects on water quality that are discussed in section 4.3.2.4 would similarly affect fish habitat and aquatic resources. The Companies would implement measures outlined in their project-specific Plans and Procedures to minimize effects on fisheries and aquatic resources. Effects would primarily occur during construction and may include temporary effects on waterbodies crossed by the pipeline or located within the associate workspace and facilities. Sedimentation may decrease dissolved oxygen concentrations in the affected area. Lower dissolved oxygen concentrations could cause temporary displacement of mobile organisms, such as fish, and may adversely affect non-mobile organisms within the affected area. These effects are expected to be short-term and should dissipate as normal water flow resumes and sediment settles. Because the pipeline would be buried, operation effects would generally be limited to infrequent maintenance activities that could entail vehicle disturbance or excavation of small segments of pipe. These temporary maintenance activities would be similar to, but more limited than, effects from construction.

Most fish species are highly mobile and would be expected to leave the area during excavation activities. Excavation can introduce sedimentation and would result in direct mortality of benthic organisms such as macroinvertebrates and insect larvae, which are important food sources for many species of fish. The effects of displacement and mortality during trenching would be localized to the work area and minimized for downstream areas due to water transportation across the trench line via either a pump or through a flume to separate the water flow from the construction area that creates turbidity and sedimentation. Following construction activities, the affected area would be returned to its pre-construction conditions using the existing substrate in the trenchline. Therefore, we expect more mobile species would quickly return to the area. Less mobile species may take additional time to return to preconstruction conditions.

Although the spread of invasive species is expected to be negligible during construction, the Companies would provide environmental training for all construction personnel working on the Projects to reduce the risk of introducing or spreading noxious or invasive aquatic species during the construction and operation.

Construction effects on fisheries and aquatic resources are expected to be temporary and localized to the immediate vicinity of construction activities. Although pipeline construction would take place over an extended duration, the duration of conventional open-cut waterbodies (24 hours for minor waterbodies and 48 hours for intermediate waterbodies, except for Tiger Creek and King Creek at SSE4, as set forth in the project-specific Procedures, as discussed in section 4.3.2) would reduce the level and duration of effects. In general, large waterbodies would be crossed using the HDD method.¹³⁰ Effects on aquatic organisms within waterbodies that would be crossed by trenchless construction methods (conventional bore and HDD) would generally be avoided because the waterbody and its banks would not be directly disturbed by clearing or trenching. HDD crossings include the potential for an inadvertent return of drilling fluids, which could cause increased turbidity, water quality effects, streambed disruptions, and direct mortality of aquatic organisms through smothering. When not installing the pipeline by HDD, the Companies would use dry crossing methods to minimize sediment suspension during trench excavation, pipeline installation, and backfill activities. The Companies may also use a wet open cut method for minor and intermediate waterbodies as permitted. Stormwater runoff from upslope construction workspace into aquatic habitat would be minimized as described in section 4.3.

The Companies would use BMPs to protect and minimize potential adverse effects on fisheries and aquatic resources, some of which include limiting the amount of time and equipment in waterbodies, constructing waterbody crossing perpendicular to the waterbody channel when possible, reducing the amount of vegetation clearing on stream banks, and permanently stabilizing stream banks and adjacent upland areas after construction, among others. If possible, the Companies would complete these activities during low-flow periods. Construction and operation of the Projects would include direct and indirect effects on fish habitat and associated food sources, as described above. The Companies would mitigate effects aquatic resources during wetland and waterbody crossings through implementation of BMPs from the ECMP, as described in section 4.3.2.3, and through implementation of the Project-specific Plan and Procedures. Short-term effects from pipeline excavation would disrupt stream banks, remove vegetation, and excavate,

¹³⁰ Horizontal Direction Drilling Contingency Plans are provided in the Companies' Certificate Applications. Accession nos.: 20250630-5152 and 20250703-5175.

stockpile, and backfill stream substrates. Disturbed areas would be restored to their pre-construction condition. Water withdrawal for HDD to create drilling mud and water for hydrostatic testing also would create short term effects. The withdrawal of surface water can lead to impingement (trapping against an intake screen) and entrainment (drawing into the water system) of aquatic life, particularly fish eggs and larvae, which may be present in the water. Potential water sources and volumes of water use for the Projects are detailed in tables I.4.3-12 and I.4.3-16. Potential effects to federal and state protected species are discussed in section 4.7.

4.6.7.1 Mississippi Crossing Project

We received comments from the public during scoping and draft EIS comment periods expressing concern regarding potential effects on fisheries from spills or construction activities, effects on landowner managed fishponds, and potential impairment of fish reproduction and juvenile survival.

TGP is working with landowners for resources of concern, including individual fishponds. The MSX Plan and Procedures and BMPs noted above would be implemented to mitigate these effects. TGP would implement its project-specific SPCP, as discussed in section 4.3.2.4, to control potential spills. Further, TGP proposes 15 HDD crossing locations to reduce potential effects on aquatic species, their habitats, and protected species. TGP would abide by time-of-year restrictions requested by the agencies. The FWS Alabama Ecological Services Field Office (ESFO) has approved TGP's request to conduct in-stream construction activities in warmwater fisheries between the time window of December 1 through May 31 in addition to the time window of June 1 through November 30 unless specific issues are identified for a particular stream crossing.

To facilitate construction access and minimize effects on aquatic resources along access roads, TGP would install temporary bridges, or permanent bridges and culverts where necessary along access roads. The proposed PARs would cross 29 ephemeral streams, 13 intermittent streams, and 6 perennial streams.¹³¹ While field surveys identified the presence of small fish species in one of these perennial streams in Alabama, no suitable habitat for protected species was observed. Therefore, access roads are not anticipated to affect fishery resources.

With the measures described herein, we conclude that effects of MSX on fisheries would be less than significant. Accordingly, MSX would result in minor temporary effects on aquatic species and their habitats.

4.6.7.2 South System Expansion 4 Project

We received comments from the public during scoping and draft EIS comment periods expressing concern regarding potential effects, including potential effects on local fish populations such as landowner managed fishponds and potential impairment of fish reproduction and juvenile survival. SNG/EEC are working with landowners for resources of concern, including individual fishponds. The SSE4 Plan and Procedures and BMPs noted above would be implemented to mitigate effects on water resources, including those containing fisheries.

¹³¹ PAR counts from Environmental Data Request #18 of TGP's October 6, 2025, Supplemental Filing. Accession no.: 20251006-5171.

The waterbodies that would be crossed or affected by SSE4, as well as the proposed crossing method and water quality classification for each feature, are included in table I.4.3-6. SNG/EEC is proposing multiple trenchless crossings of water resources to reduce potential effects on aquatic species, their habitats, and protected species. Due to the presence of wetland WAWSJ1004 at Loop J1, the Tiger Creek and King Creek crossings would require additional time outside of the standard 24 and 48 hour duration, respectively, as discussed in 4.3.2. SNG/EEC are working with agencies regarding these crossings and would abide by required time-of-year restrictions.

With the measures described herein, we conclude that effects of SSE4 on fisheries would be less than significant. Accordingly, SSE4 would result in minor temporary effects on aquatic species and their habitats

4.6.8 Conclusion

4.6.8.1 Mississippi Crossing Project

MSX would temporarily disturb terrestrial and aquatic habitats during construction, resulting in short-term displacement of wildlife and minor habitat loss. Forest clearing would reduce cover and food availability for some species, though many would relocate to nearby habitats. Long-term effects would be limited to areas permanently converted to open land or maintained rights-of-way. TGP would implement numerous measures to minimize effects, including restricting clearing during breeding seasons, using HDD to protect major waterways and sensitive habitats, including the Big Black River, and restoring disturbed areas to natural conditions. TGP would manage noise and light during construction to reduce disruption to nocturnal and migratory species. Given the avoidance and minimization measures as well as availability of suitable habitat nearby, we conclude that, MSX would not result in significant adverse effects on wildlife populations, habitat functions, or fisheries.

4.6.8.2 South System Expansion 4 Project

SSE4 would cause temporary habitat disturbance and minor long-term conversion of forested areas, primarily within existing rights-of-way. Wildlife would experience short-term displacement during construction but would return once restoration and revegetation occur. SNG/EEC would reduce effects through collocation of new pipelines, seasonal restrictions on tree clearing, and implementation of BMPs such as noise and light control, erosion prevention, and monitoring of waterbody crossings. Sensitive habitats, including the Tallapoosa, Flint, and Oconee rivers, would be crossed using trenchless methods to avoid direct effects. Aquatic species and fisheries would experience only brief, localized disturbance, with full recovery expected following restoration. Given the avoidance and minimization measures as well as availability of suitable habitat nearby, we conclude that SSE4 would not result in significant or lasting effects on wildlife populations, habitat functions, or fisheries.

4.7 PROTECTED SPECIES

4.7.1 Special Status Species

Special status species are those species for which federal or state agencies afford an additional level of protection by law, regulation, or policy. Included in this category are federally listed and proposed species that are protected under the ESA, as amended, or are considered as

candidates for such listing by the FWS, and those species that are state listed as threatened, endangered, or other special status. State species lists are provided by state natural resource agencies, which maintain databases of species that are considered threatened, endangered, or of special concern at the state level. The MDWFP, ADCNR, and GADNR maintain this information across the Projects for species that may not be federally listed under the ESA but are recognized by the state as requiring special management or protection.

Tables I.4.7-1 and I.4.7-2 in appendix I detail federal and state-listed species occurring within the Projects' area. Federal species that have been identified through consultations with state agencies, but do not occur on IPaC official species lists, are discussed with other state-listed species in section 4.7.1.2 and in table I.4.7-2.

4.7.1.1 Federally Listed Species

Federal agencies are required under section 7 of the ESA, as amended, to ensure that any actions authorized, funded, or carried out by the agency would not jeopardize the continued existence of a federally listed endangered or threatened species, or result in the destruction or adverse modification of the designated critical habitat of a federally listed species.¹³² Specifically, section 7(a)(2) of the ESA requires the Commission to ensure that any action it authorizes would not jeopardize the continued existence of federally listed or proposed listed species or result in the adverse modification or destruction of critical habitat for federally listed and proposed species.

As the lead federal agency for the Projects, FERC is responsible for ESA consultation with FWS. To assist in compliance with section 7 of the ESA, the Companies, acting as FERC's non-federal representative for the proposed Project (18 CFR § 380.13), initiated informal consultation with the applicable FWS Field Offices as described below.

Bald and golden eagles are protected under the BGEPA and were previously discussed in section 4.6.

Mississippi Crossing Project

TGP initiated informal consultation with the FWS field offices Mississippi ESFO and Alabama ESFO. The official species list for the MSX Mississippi Project area, identified three endangered, five threatened, one proposed endangered, and three proposed threatened species. The official species list for the MSX Alabama Project area, identified one endangered, three threatened, one proposed endangered, and two proposed threatened species. No critical habitat was identified within the MSX area. Table I.4.7-1 includes federal species that may occur within the MSX area. Effects determinations are based on location, survey findings, and implementation of conservation measures proposed by TGP. Table I.4.7-1 discusses federal species that may occur in MSX due to the presence of suitable habitat and their effect findings.

Presence/absence surveys for aquatic species were completed in 2025 at ten Mississippi stream crossings that potentially support populations of federally and/or state listed fish and/or

¹³² Although federally proposed and under review species and proposed critical habitat do not receive federal protection under the ESA, we consider potential effects on these species and habitat so that Section 7 consultation can be facilitated in the event these species become listed before or during Project construction.

mussel species. No aquatic species currently listed as threatened or endangered were found in any of the surveyed waterbodies. One live undescribed hickorynut (*Obovarias p. cf. unicolor*) was collected in Lobutch Creek.

Surveys for bat species were completed in 2025, and included acoustic surveys and culvert surveys. Additional acoustic analysis to include manual identification was completed in 2026 from the detector locations and identified 15 detectors that contained calls that were considered equally likely to have been produced by a northern long-eared bat (*Myotis septentrionalis* [NLEB]) and a southeastern myotis (*Myotis austroriparius*). Therefore, the calls were potentially attributable to NLEB and presence is assumed.

Through this final EIS, FERC is initiating formal consultation with the FWS to address effects to the NLEB.

South System Expansion 4 Project

SNG/EEC initiated informal consultation with the FWS field offices of Georgia ESFO, Daphne (Alabama) ESFO, and Mississippi ESFO to verify the official species list and obtain feedback on field survey protocols for species that may require survey. The official species list identified 26 federally listed species and 7 proposed species potentially present in the SSE4 area. The whooping crane (*Grus americana*) is not included in this analysis, as it has a listing status of Experimental Population, Non-Essential in this area and is therefore, not afforded federal protections. Additionally, SNG/EEC has made a determination for the eastern diamondback rattlesnake (*Crotalus adamenteus*) in their Biological Assessment,¹³³ however, this species is assigned a federal status of At Risk/Under Review and is not afforded federal protections, and therefore, has not been included in this analysis.

During the draft EIS comment period, we received a comment from the Ogeechee Riverkeeper (comment ID CO-6) regarding concerns with potential effects on the federally protected Atlantic and shortnose sturgeon, and designated critical habitat for the Atlantic sturgeon. SNG has proposed a trenchless construction method across the Ogeechee and Oconee Rivers, which would minimize the likelihood of direct effects on these species. Based on the NOAA consultation letter dated May 20, 2026, no temporary or permanent barriers to fish passage would be placed in the Ogeechee River, and additional mitigation measures would be implemented that would be protective of both sturgeon species, as detailed in table I.4.7-1.

Table I.4.7-1 details critical habitat that was identified to be wholly or partially within the SSE4 area. Presence/Absence surveys for Alabama freshwater mussels were conducted in 2025 at 39 stream crossings that were recommended for surveys by the FWS. SNG/EEC identified one federally endangered mussel species, the ovate clubshell (*Pleurobema perovatum*), in the mainstream of Kinterbish Creek (occurring in the downstream buffer of a tributary to Kinterbish Creek) and would implement additional conservation measures to avoid any effects to this species while working within Kinterbish Creek.

¹³³ Biological Assessment as filed to the FERC docket on February 2, 2026 (Accession nos.: 20260202-5005 and 20260202-5006).

Plant surveys for Michaux's Sumac (*Rhus michauxii*) along Loop F1 (Harris and Muscogee counties) and Ocmulgee Skullcap (*Scutellaria amphantha*) along Loops H1, L1, G1, F2, and G2 (Bibb and Monroe counties) were conducted in fall of 2025 in the SSE4 Georgia Project area identified neither species. Pitcher plant surveys were conducted in August 2025 from previously identified potential habitat on Loop D1 and found no suitable habitat or pitcher plants within the surveyed area. Additional plant surveys were conducted in spring of 2026 for the relict trillium (*Trillium reliquum*), fringed campion (*Silene polypetala*), black-spored quillwort (*Isoetes melanospora*), mat-forming quillwort (*Isoetes tegetiformans*), little amphanthus (*Gratiola amphantha*), and Georgia rockcress (*Arabis georgiana*). SNG/EEC observed relict trillium along the project route within the Alabama Project area during the spring of 2026 surveys.

Presence/Absence surveys for federally and state listed bat species performed between May 22 and September 12, 2025 by mist netting in Alabama and mist netting and acoustical analysis in Georgia identified the tricolored bat (*Perimyotis subflavus*) (FWS, 2025g) representing 25 bat captures and 19 acoustic locations. NLEB was not found to be present.

SNG/EEC have made preliminary effect determinations for protected species under FWS jurisdiction, and consultation with FWS is ongoing. Through this final EIS, FERC is initiating formal consultation with the FWS to address effects to the relict trillium.

SNG/EEC identified two federal species under the jurisdiction of NOAA with potential to occur near SSE4, the shortnose sturgeon (*Acipenser brevirostrum*) and Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) (NOAA, 2025a).

Table I.4.7-1 discusses federal species that may occur in SSE4 due to the presence of suitable habitat.

4.7.1.2 State Listed Species

Mississippi Crossing Project

On June 27, 2025, TGP coordinated with the MDWFP and ADCNR, Wildlife and Freshwater Fisheries Division to identify state-listed species that may be affected by MSX.

Based upon our review of publicly available information, agency correspondence, and field survey data, there are state protected species present within MSX, as presented in table I.4.7-2. Some species have both a federal- and state-listed status. All state-listed species with the potential to occur in MSX are discussed in the table. TGP completed field habitat assessment surveys on all accessible parcels in summer 2025. Table I.4.7-2 discusses state protected species that could be affected by MSX. Based on location, survey findings, and the conservation measures proposed by TGP, MSX is not expected to affect the remaining state-protected species, however, consultations are ongoing.

South System Expansion 4 Project

Based upon our review of publicly available information, agency correspondence, and field survey data, there are state protected species present within SSE4, as presented in table I.4.7-2. Some species, as detailed in table I.4.7-1, have a federal- and state-listed status. All state-listed species with the potential to occur in SSE4 are discussed in the table.

During the draft EIS comment period, we received a comment from the Ogeechee Riverkeeper (comment ID CO-6) regarding concerns with potential effects on the robust redhorse and the Savannah lilliput, which are listed as endangered and threatened by the State of Georgia. Based on conversations with the FWS, at the Oconee River where water intake is needed, SNG/EEC would implement a floating intake that is protective of fishes and select a sandy pool location where fewer fish would be located. Additionally, effects to these species would be avoided with trenchless crossing methods per GADNR's recommendation. Both species are under the jurisdiction of the GADNR and we find the mitigation measures acceptable.

SNG/EEC is completing field habitat assessment surveys on all accessible parcels, and conducting species surveys through spring of 2026, however, no additional state-protected plant species surveys will occur; SNG/EEC would implement BMPs for erosion, sediment, and stormwater control to avoid or minimize effects to rare species, natural communities, and the environment. Table I.4.7-2 discusses state protected species that may occur in the SSE4 area where potentially suitable habitat is present. Collocation along most of SSE4 and wildlife habitat mitigation measures described in section 4.6.3 would minimize potential effects on protected species. FERC's evaluations are based on the SSE4's location, survey findings, and conservation measures proposed by SNG/EEC.

The Companies would implement the measures described in table I.4.7.2 and section 4.7.2.2.

4.7.2 Conclusion

Given that ESA Section 7 consultation for the Projects is not complete, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that the Companies not begin construction activities until ESA consultation with the FWS for both Projects is complete** (see section 5.2, recommended condition no. 14).

4.7.2.1 Mississippi Crossing Project

Species surveys are complete and TGP is consulting with FWS, MDWFP, and ADCNR to minimize potential effects on federal- and state-listed species. TGP would implement the following mitigation measures¹³⁴:

- implementing all avoidance and conservation measures provided in the Lobutchka Creek Construction Plan and the Pearl River Construction Plan¹³⁵, as approved by the FWS;
- implementing measures to avoid effects on aquatic species during water withdrawal activities, including the use of quarter-inch to half-inch mesh screens to block the uptake of debris and biota;
- restore waterbodies subjected to temporary effects via dry open-cut to pre-construction conditions;

¹³⁴ Conservation measures as described in TGP's May 8, 2026, Biological Assessment, Accession no.: 20260508-5053.

¹³⁵ Construction Plans as described in TGP's May 22, 2026, Supplemental Filing, Accession no.: 20260522-5161.

- developing a contractor training program to educate construction personnel on species life history, identification, and protection protocols;
- covering excavations, holes, or trenches created during construction overnight or inspecting them every morning to ensure no wildlife have been trapped;
- conducting operational right-of-way vegetation management and operations and maintenance of project facilities in accordance with the MSX Plan and Procedures;
- minimizing long-term habitat effects by collocation of pipeline and existing utility rights-of-way; and
- implementing all avoidance and conservation measures as determined through consultation with federal and state agencies, such as gopher tortoise measures.

TGP would adhere to time of year clearing restrictions from the FWS for the NLEB, tricolored bat, and migratory birds, and therefore, would follow the clearing schedules detailed below:

- NLEB: August 1 through May 14 for three 1.5-mile buffered locations within hibernating range (MP 0 to 80) and July 16 through April 30 for the twelve buffered locations within the Year-Round Active Zone range (MP 80 to 198), to avoid clearing during pup season for buffered locations with assumed presence;
- Tricolored bat: Same clearing schedule as the NLEB assumed presence locations; and
- Migratory birds: August 2 – April 14 for the entire project for maintenance functions such as routine vegetation mowing or clearing.

Effects on aquatic resources are discussed in section 4.6.7.

TGP would not be able to commit to avoiding tree clearing during NLEB winter torpor (December 15 through February 15) due to MSX schedule. As a result of research, coordination with government agencies, and field investigations, FERC has determined MSX is *likely to adversely affect* NLEB and tricolored bat and *may affect, but is not likely to adversely affect* six federally listed species and three proposed species. If a proposed species is listed and an individual of this species is detected in the MSX area, TGP would reinitiate consultation with FWS.

MSX would have *no effect* on the remaining federally listed species. These determinations are based on existing presence or absence data, habitat surveys completed by TGP, and a commitment by TGP to implement conservation measures developed in consultation with state and federal agencies. To comply with section 7 of the ESA, FERC is requesting that the FWS consider this final EIS and the Project Biological Assessment for MSX (see appendix O) and enter into formal consultation for the NLEB, and conferencing for the tricolored bat. We also request FWS concurrence with the above listed effect determinations.

4.7.2.2 South System Expansion 4 Project

In addition to the wildlife minimization and mitigation measures discussed in section 4.6.3, SNG/EEC would utilize trenchless crossings of waterbodies containing critical habitat to avoid direct effects on these habitats to the extent possible. SNG/EEC have completed all applicable species surveys and are currently consulting with FWS, MDWFP, ADCNR, and GADNR, and will provide additional measures, if appropriate, after consultation concludes. SNG/EEC would implement the following mitigation measures:

- Implementing measures to avoid effects on aquatic species during water withdrawal activities;
- Utilizing a floating water intake device that does not require instream work would be used for critical habitat;
- Restoring waterbodies subjected to temporary effects via dry open-cut to pre-construction conditions;
- Communicating to contractors that if protected species are observed, nearby work would be halted, appropriate agency contacted if applicable, and wildlife would be allowed to leave the construction area on their own; and
- all avoidance and conservation measures as determined through consultation with federal and state agencies, such as gopher tortoise measures.

Chewacla Creek, which is final critical habitat for the finelined pocketbook (*Hamiota altilis*) (FWS, 2025b), southern clubshell (*Pleurobema decisum*) (GADNR, 2019b), and ovate clubshell (*Pleurobema perovatum*), would be crossed via trenchless construction methods.¹³⁶ Consultations are ongoing regarding effects to these resources.

Direct effects on Ocmulgee skullcap critical habitat would be avoided via HDD to install the segment of Loop L1 at Little Deer Creek. Further, SNG/EEC would adhere to time of year clearing restrictions from the FWS for the NLEB, tricolored bat, and migratory birds, and therefore, would follow the clearing schedule detailed below:

- Northern long-eared bat and tricolored bat:
 - Mississippi: February 16 through April 30 and July 16 through December 14 (Year-round Active Range for Zone 1 winter torpor and pup season, respectively)
 - Alabama and Georgia: No NLEB identified during species surveys, and SNG/EEC would be unable to adhere to clearing restrictions for the tricolored bat

¹³⁶ In a document filed to the FERC docket on February 17 2026, SNG/EEC agreed to using trenchless construction techniques for crossing Chewacla Creek (Accession no.: 20260217-5266).

- Migratory birds: August 2 – April 14 for the entire project for maintenance functions such as routine vegetation mowing or clearing.

Effects on aquatic resources are discussed in section 4.6.7.

As a result of research, coordination with government agencies, and field investigations, FERC has determined that SSE4 is *likely to adversely affect* relict trillium and tricolored bat, and *may affect, but is not likely to adversely affect* twenty-three federally listed species and five proposed species under FWS' jurisdiction. If a proposed species is listed and an individual of this species is detected in the SSE4 area, SNG/EEC would reinitiate consultation with FWS. SSE4 would have *no effect* on the remaining federally listed species.

In addition, FERC has determined SSE4 is *not likely to adversely affect* critical habitat for the federally listed Ocmulgee skullcap. SSE4 would have *no effect* on the remaining federally listed species. These determinations are based on existing presence or absence data, habitat surveys completed by SNG/EEC and a commitment by SNG/EEC to implement conservation measures developed in consultation with state and federal agencies. To comply with section 7 of the ESA, FERC is requesting that the FWS consider this final EIS and the Project Biological Assessment for SSE4 (see appendix P) and enter into formal consultation for the relict trillium, and conferencing for the tricolored bat. We also request FWS concurrence with the above listed effect determinations.

4.8 LAND USE, RECREATION, SPECIAL INTEREST AREAS, AND VISUAL RESOURCES

4.8.1 Land Use

The Projects would affect eight general land use types and are defined as follows based on a review of Multi-Resolution Land Characteristics Consortium National Land Cover Database (2019) and field observations:

- Upland Forest
- Silviculture
- Agricultural/Rangeland
- Open Land
- Open Water
- Wetlands
- Residential Land
- Industrial/Commercial

Appendix I includes detailed breakdowns of acreages of land use affected by construction and operation for MSX (table I.4.8-1) and SSE4 (table I.4.8-2). Acreages described within this section were obtained from the Companies' supplemental filings and/or responses to our

Environmental Information Requests.^{137,138} During the draft EIS comment period, we received questions from landowners regarding payment from the Companies for land that would be temporarily used for construction and/or the permanent pipeline easements. The Commission has no jurisdiction over these matters and therefore it is outside the scope of this EIS. The Companies would seek to negotiate a mutually acceptable agreement for temporary and permanent easements. If terms are not reached, the Companies could initiate condemnation proceedings in court and compensation would be determined by a judge in accordance with state law.

4.8.1.1 Upland Forest

Mississippi Crossing Project

Potential effects on upland forest from construction and operation of MSX are discussed in section 4.5.3.1.

South System Expansion 4 Project

Potential effects on upland forest from construction and operation of SSE4 are discussed in section 4.5.3.2.

4.8.1.2 Silviculture (Pine Plantation)

Mississippi Crossing Project

Construction of the MSX Mainline and laterals would temporarily affect 771.7 acres of silviculture areas, primarily pine plantations, due to clearing for rights-of-way, temporary workspace, and access roads. Permanent effects would occur on 289.5 acres where the right-of-way would be maintained in an open condition to ensure safe operation and maintenance of the pipeline.

MSX aboveground facility construction would affect 18.2 acres of silviculture land, and operations would affect 9.1 acres, primarily at Stations 606A and 610, as well as at the SNG SSE4 Interconnection. These effects would result from clearing of pine plantation areas to accommodate station footprints and associated operations areas.

MSX would also affect 54.3 acres of silviculture land during construction of contractor yards and TARs; however, these areas would be restored following construction and allowed to return to pre-construction conditions. Approximately 46 acres would be needed for the operation of PARs and would be permanently converted from silviculture.

Temporarily affected silviculture lands would be stabilized in accordance with the FERC Plan and landowner agreements after construction, though forest regrowth would take several decades to reach pre-construction maturity. The permanently converted areas would remain cleared and maintained for facility operations. TGP is consulting with landowners and/or

¹³⁷ Impact numbers obtained from Attachment DR-47 of TGP's October 6, 2025, response to our September 15, 2025, Environmental Information Request (Accession no.: 20251006-5171).

¹³⁸ Impact numbers obtained from SNG/EEC's December 10, 2025, Data Response Attachment EIR 10 table 8.2-1 (Accession no.: 20251210-5208).

operators regarding MSX's effects on lands used for silviculture and would compensate landowners and/or operators for Project effects.

MSX would result in short-, long-term, and permanent effects on silviculture resources. However, with continued forestry use in adjacent areas, collocation with existing utility corridors, and TGP's commitments to landowners, we conclude that the Project would not result in significant effects on regional silviculture resources.

South System Expansion 4 Project

Construction of the SSE4 pipeline loops would temporarily disturb 854.9 acres of managed pine plantations and other silvicultural lands. Most of these areas would be restored after construction, but 197.6 acres within the new permanent right-of-way would be maintained free of trees for operational safety, resulting in a permanent conversion to open land.

At compressor stations, clearing of pine plantations would occur where existing sites require expansion or new appurtenances installed. Construction of these facilities would affect 58.1 acres of silviculture land, and operations would affect 12.6 acres. These sites would permanently convert previously forested or planted areas to industrial use. Clearing of pine plantations would not occur at any existing or new meter stations.

SSE4 would also affect 184.5 acres of silviculture land during construction of contractor yards, TARs, and appurtenant facilities; of which, 170.8 acres would be maintained as PARs and appurtenant facilities during operation. SNG/EEC would restore temporarily affected silviculture lands after construction, though forest regrowth would take several decades to reach pre-construction maturity. The permanently converted areas would remain cleared and maintained for facility operations. The SNG/EEC are consulting with landowners and/or operators regarding the Project's effects on lands used for silviculture and have committed to compensate landowners and/or operators for Project effects.

The Project's effects on managed pine plantations and other silvicultural areas would result in short-, long-term, and permanent effects. However, given the collocation along existing utility corridors, SNG/EEC's ongoing coordination with landowners and operators, along with compensation for affected silviculture lands, we conclude that construction and operation of the SSE4 Project is not expected to result in a significant effect on regional silviculture resources.

4.8.1.3 Agricultural/Rangeland

Mississippi Crossing Project

MSX pipeline construction would temporarily disturb 1,325.5 acres of agricultural land and rangeland. Following construction, most agricultural and rangeland areas would be restored and returned to their previous use. Approximately 447.5 acres of agricultural land and rangeland would remain within the maintained rights-of-way needed for pipeline operation; however, these areas would be allowed to revert to use for grazing and agricultural production.

MSX aboveground facility construction, including compressor stations and meter stations, would affect 62.3 acres of agricultural land and rangeland, and operations would affect 26.9 acres. Workspace outside of permanent facilities would be restored and allowed to revert to pre-

construction conditions once construction is complete. MSX would also affect 200.8 acres of agricultural and pasture land during construction of contractor yards and access roads and 44.7 acres during operation of access roads.

TGP did not identify any agricultural drain tiles or irrigation systems along the MSX Mainline or lateral routes. If drain tiles or irrigation systems are discovered during construction, TGP would consult with the landowner to avoid these or to mitigate for any damage that incurred.

TGP would coordinate with landowners to coordinate safe and approved livestock movement and grazing during the project's construction. TGP would maintain hard plugs in the ditch line and install gaps in soil piles and pipeline strings to allow cattle movement, and install exclusion fencing, or reimburse for grazing relocations or alternative grazing sources during the project's construction.

The Royce Family provided comments regarding their land in Humphreys County, Mississippi due to the property having participated in the NRCS Environmental Quality Incentives Program (EQIP). EQIP provides technical and financial assistance to agricultural producers to address natural resource concerns. According to the comments provided by the Royce Family, the property underwent precision land forming (shaping) under EQIP. The agricultural land was intentionally sloped from south to north to evenly distribute water across the property which is a conservation practice that increases the efficiency of irrigation (and rainfall) while decreasing the rate of evaporation. The Royce Family is concerned that construction of MSX would result in subsidence, which would require additional land forming, and that disturbance would require entire tracts of agricultural land to be affected due to the precision of the slope and drainage patterns being disrupted. The Royce family is concerned that this disturbance could extend beyond the construction period to affect up to three growing seasons. TGP responded to the Royce Family concerns in September 2025, by revising the proposed route to avoid co-location with the existing Texas Gas pipeline corridor which crosses diagonally through a number of agricultural fields. The Royce Family proposed an alternative route in their March 2026, comment letter which is discussed further in the Alternatives section of this EIS (section 3.5.1.1). TGP has committed to returning the land to pre-construction contours in accordance with the MSX Plan and Procedures, as further discussed below, and to return drainage patterns to previous conditions during restoration.

Although effects on agricultural land use are generally temporary, typically occurring over only one to two growing seasons, several short-term effects, generally observed following restoration of affected lands, could occur as a result of the Project. These effects include unsuitable drainage and the spread or introduction of non-native plant species, as well as soils effects such as compaction, uneven grade, ponding, and mixing of soils as discussed in section 4.2.3. In addition, replacing topsoil or de-compacting through the topsoil may free some rocks and bring them to the surface. Occasionally observed long-term effects on soils (changes to soil composition and chemistry) could also affect agricultural land use and crop production. Project-related activities, which could occur over several months, would temporarily preclude the use of agricultural lands. It is possible that saturated soil conditions could delay decompaction, topsoil replacement, and final grading until conditions allow for proper soil handling and restoration. During this time, affected lands would likely be encumbered, preventing or deterring agricultural-related grading, planting, soil enhancement, harvesting, and other activities. Also, hydrostatic testing discharges

on agricultural lands could saturate soils resulting in scouring, erosion, and other effects, including hindering or otherwise delaying revegetation of temporary work areas and the pipeline rights-of-way. TGP would compensate landowners for crop losses in accordance with the terms of individual landowner agreements.¹³⁹

An important element of right-of-way restoration in active agricultural areas is timely replanting of crops or other cover vegetation. Resumption of agricultural operations following Project construction and/or planting of a cover crop would aid in the restoration of soil structure and productivity that could take several years to achieve success, depending on site-specific conditions and land use practices. FERC staff would monitor restoration efforts and require corrective action where necessary to ensure compliance with the Commission's orders. Per the FERC Plan, revegetation of agricultural areas would be considered successful when crop growth and vigor, based on visual inspection, are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise. FERC also requires the size, density, and distribution of rock remaining on the construction area following restoration should be the same as adjacent areas not disturbed by construction.

Because most agricultural and rangeland areas would be restored following construction and could continue to be used for their existing purposes during operation, we conclude that construction and operation of the MSX would not result in permanent adverse effects on agricultural or rangeland resources.

South System Expansion 4 Project

Construction of the SSE4 pipeline loops would temporarily disturb 139.3 acres of agricultural fields and pasture areas. Approximately 22.1 acres of agricultural fields and pasture would remain within the permanent right-of-way and could continue to be utilized as agricultural or rangeland.

Modification of the existing Louisville meter station would affect 0.3-acre of agricultural land; however, there would be no permanent effects on agricultural land to operate the aboveground facility.

SSE4 would also affect 77.2 acres of agricultural and rangeland during the construction of contractor yards, TARs, and appurtenant facilities, and 7.3 acres would be permanently converted for the operation of PARs and appurtenant facilities.

SNG/EEC have not identified any existing agricultural drain tiles or irrigation systems. If drain tiles or irrigation systems were discovered or damaged during construction, SNG/EEC would coordinate with the landowner to repair to pre-damaged conditions or better.

Most agricultural lands would be restored after construction and returned to their prior use for crops, hay production, or livestock grazing once the soil is stabilized and reseeded. SNG/EEC

¹³⁹ We note the Commission is not a party in easement negotiations or eminent domain proceedings and does not adjudicate disputes regarding compensation for damage-related issues.

would coordinate with landowners to ensure proper restoration and continued agricultural productivity.

Given this, we conclude that the construction and operation of SSE4 would not have a significant effect on agricultural/rangeland.

4.8.1.4 Open Land

Mississippi Crossing Project

Construction of the MSX Mainline and laterals would temporarily affect 270.5 acres of open land, including existing pipeline and electric transmission line rights-of-way and fallow fields. Following construction, 98.3 acres would be permanently maintained within the pipeline right-of-way to allow for safe operation and access, while the remaining temporarily disturbed open land would be restored and allowed to return to pre-construction conditions.

Construction of the MSX aboveground facilities would affect 1.8 acres of open land, and operations would affect 1.0 acre. Construction would temporarily disturb small portions of open land for site preparation and equipment staging, while permanent operational areas, such as those at Station 610, would be maintained as part of the facilities. Open land outside of permanent footprints would be restored and revegetated after construction completion.

MSX would also affect 156.3 acres of open land during construction and 18.5 acres during operation for contractor yards and access roads. The contractor yards and TARs would be restored following construction and allowed to return to pre-construction conditions. The 18.5 acres would be maintained as PARs.

Given that the majority of the open land disturbance would occur within the MSX Mainline right-of-way, there would be no land use conversion in these areas due to construction and operation of the project. Therefore, we conclude that the construction and operation of MSX would not have a significant effect on open land.

South System Expansion 4 Project

Construction of the SSE4 pipeline loops would temporarily disturb 1,940.4 acres of open land, which include existing utility corridors, grasslands, and maintained clearings. About 210.4 acres of open land would remain within the permanent right-of-way. These areas would be restored and revegetated following construction, allowing them to return to their prior open conditions.

Construction of the compressor and meter station sites would affect 52.0 acres of open land. About 7.4 acres of open land would be permanently converted to developed industrial areas to accommodate new equipment and minor site expansions.

SSE4 would also affect 903.8 acres of open land during construction for contractor yards, access roads, and appurtenant facilities, and 73.2 acres during operation for, of access roads and appurtenant facilities. The contractor yards and TARs would be restored following construction. About 73.2 acres would be maintained for PARs and appurtenant facilities, such as mainline

valves, cathodic protection systems, and pipeline inspection gauge tool launchers/receivers along the pipeline loops.

Given that most open land would be restored and allowed to revert to its previous land use, we conclude that the construction and operation of SSE4 would not have a significant effect on open land.

4.8.1.5 Open Water

Mississippi Crossing Project

MSX pipeline construction would temporarily disturb 31.7 acres of open water, such as streams and ponds where the pipeline crosses or parallels these areas. TGP would use approved crossing methods and BMPs to minimize sedimentation and effects on water quality. Once operational, 9.2 acres would remain within the permanent right-of-way, and open water conditions would return to their pre-construction state. For further details on the project's effects on open water areas, refer to section 4.3.¹⁴⁰

Construction of the MSX aboveground facilities would affect 2.3 acres of open water, and operations would affect 1.6 acres. Open water effects at MSX aboveground facilities would occur only in isolated locations where small ponds or drainage channels are present near construction sites or access roads. MSX would also affect 2.3 acres of open water during construction and 0.5 acre during operation for contractor yards and access roads.

With the exception of 2.1 acres of open water associated with operation of the aboveground facilities and permanent access roads, open water affected during operation of the Project would not result in a change of land use designation. As described in section 4.3, compensatory mitigation would be required for these permanent effects.

Given the implementation of the MSX Procedures, we conclude that construction and operation of MSX would not result in significant or long-term effects on open water.

South System Expansion 4 Project

Construction of the SSE4 pipeline loops would temporarily affect 25.1 acres of open water, such as ponds, streams, and drainage channels where crossings are required. SNG/EEC would cross these areas of open water using established construction methods, including trenchless construction methods, dry open cut, or wet open cut where appropriate, to maintain water quality and stability. Approximately 5.9 acres of open water would be within the permanent pipeline right-of-way; however, open water areas would be allowed to return to their pre-construction conditions during SSE4 operation.

A combined approximately 2.6 acres of open water are present within several compressor station sites; however, SNG/EEC have committed to avoiding all open water during construction, therefore, no temporary effects would occur on these compressor stations. There would be no effects to open water during operation. A combined 34.4 acres of open water are present within

¹⁴⁰ From TGP's September 23, 2025, Supplemental Filing, attachment 3, appendix 2.B (Accession no.: 20250923-5058).

the contractor yards and TARs; 33.8 acres of open water located within contractor yards would be avoided during construction, therefore, no temporary effects would occur. Approximately, 0.5 acre would be permanently filled for PARs during the operation of the project. Once construction is complete, disturbed banks and streambeds would be restored to their pre-construction contours, allowing natural hydrology and aquatic conditions to reestablish with no anticipated long-term changes to open water resources. For additional details on SSE4's effects on open water areas, refer to section 4.3.

As described in section 4.3, compensatory mitigation would be required for these permanent effects. Given implementation of SNG/EEC's Procedures, we conclude that the construction and operation of SSE4 would not result in significant effects on open water.

4.8.1.6 Wetlands

Mississippi Crossing Project

Potential effects on wetlands from construction and operation of MSX are discussed in detail in section 4.4.2.1.

South System Expansion 4 Project

Potential effects on wetlands from construction and operation of SSE4 are discussed in detail in section 4.4.2.2.

4.8.1.7 Residential Land and Planned Developments

Construction and operation of both projects could potentially affect residential and planned development areas. Effects on these areas include temporary inconveniences caused by construction noise and dust generation; disruption of access to homes due to trenching within driveways and related construction activities; increased traffic from workers, equipment, and material deliveries; disturbance of lawns and the overall visual character during construction, as well as potential damage to septic systems or water wells. We received comments from the public during scoping and during the draft EIS comment period pertaining to construction in residential areas including private septic systems (see section 5.3.1.4), private wells and associated groundwater infrastructure (see section 5.3.1.3), neighborhood access and safety during construction (see below), and interference with reasonably foreseeable land use (see below). Site-specific route variations designed to address landowner concerns are discussed in section 3.5. Individual responses to all public comments are provided in appendix L.

Mississippi Crossing Project

A review of public online information and TGP's direct correspondence with the counties revealed that there are no planned developments within 0.25-mile of MSX. Construction of the MSX Mainline and access roads would affect 8.5 acres of residential land, and operation of MSX Mainline would affect 2.6 acres. There are 20 residences within 50 feet of the proposed MSX construction corridor; of which, seven are within 25 feet of the MSX workspaces.¹⁴¹ Table I.4.8-3 lists by MP the location of residences within 50 feet of the edge of the proposed MSX

¹⁴¹ Obtained from TGP's December 1, 2025, Response to our November 20, 2025, EIR, table 8.3-1 (Accession no.: 20251201-5781).

construction work area. TGP has developed site-specific residential construction plans for all residences within 25 feet of the MSX workspace.¹⁴² These plans (available in appendix G) outline workspace configurations, distances to structures, locations for safety fence installation, and mitigation measures that would be implemented by TGP to reduce effects on residents during construction.

TGP identified NSAs, including residences, within 1 mile of each of the modified compressor stations and the proposed meter stations. The closest residence to each aboveground facility is provided in table 4.8-1.

Table 4.8-1: Distance Between MSX Compressor and Meter Stations and Closest Residence

| Facility | Distance to Closest Residence (feet) ¹⁴³ |
|--|---|
| Station 602 and MSX Meter Station 1 (CGT) | 23 ^a |
| Station 606A and MSX Meter Station 2 (Tetco) | 477 ^a |
| Station 610 | 592 ^a |
| MSX Meter Station 3 (Texas Gas) | 900 ^b |
| MSX Meter Station 4 (Transco) | 500 ^b |

a/ Distances obtained from TGP’s December 1, 2025, Response to our November 20, 2025 EIR (Accession no.: 20251201-5781).

b/ Distances obtained from Table 9.3-1 of TGP’s June 30, 2025 Application (Accession no.: 20250630-5152).

Construction through or near residential areas would be done in a manner to ensure that all construction activities minimize adverse effects on residences and that clean-up is prompt and thorough. TGP would notify affected landowners using a combination of mailings, phone calls, and/or in-person visits at least five days before construction commences unless more advanced notice is required pursuant to a landowner agreement. TGP would maintain access for landowners to their homes and private property at all times except for the brief periods required for laying the new pipeline into the trench. They would advise landowners in advance of any planned temporary access limitations.

TGP would install safety fence along the edge of construction work areas that are within 50 feet of a residence, for a total of 100 feet on either side of the residence. For any construction across driveways, TGP would complete construction within one day and would provide a temporary surface to maintain access. Topsoil in landscaped lawns would be segregated and replaced, or topsoil would be imported. Following pipe installation, TGP would require its contractors to backfill trenches in residential areas as soon as practicable after installation of the pipeline. Further, cleanup and restoration in residential areas would take place within 10 days of backfilling in accordance with the MSX Plan. Immediately after backfilling, and with appropriate weather and soil conditions, residential areas would be restored and all construction debris removed. Private property, such as mailboxes, fences, gates, and other structures that have been

¹⁴² Site-Specific Residential Construction Plans were filed by TGP on September 23, 2025, as part of its Supplemental Filing (Accession no.: 20250923-5058). Additional and revised Site-Specific Residential Construction Plans were filed by TGP on December 3, 2025, as part of its Revised Site-Specific Residential Drawings (Accession no.: 20251203-5161).

¹⁴³ Distances obtained from TGP’s December 1, 2025, Response to our November 20, 2025 EIR (Accession no.: 20251201-5781).

removed would be restored, unless alternate plans have been made with the landowner. Sidewalks, driveways, and roads disturbed by pipeline construction would be restored to their original condition upon completion of construction activities. After construction, a TGP representative would contact the residential landowners to confirm agreement conditions have been fulfilled. After construction, affected landowners would have use of the permanent pipeline right-of-way. However, TGP would not allow new, permanent structures within the pipeline right-of-way without prior agreement.

TGP addressed several landowner concerns regarding workspace proximity and access road alignments; these adjustments to address site-specific landowner concerns are described in table J.3.0-1. Table 4.8-2 summarizes the specific tracts, mileposts, and resulting actions reflected in the September 23, 2025, Supplemental Information filing, associated with residences within 25 feet of project workspaces.¹⁴⁴

Table 4.8-2: Summary of TGP Responses to Landowner Concerns

| MP / TAR | Tract No. | Issue / Concern | Action Taken | Status in Sept 23, 2025, Filing |
|-------------|-----------------------------|--|---|--|
| 62.1 | TAR-037.000 / MS-D1-RCD-004 | Landowner opposition | Access road removed from project (MSX-MOC-0704); removed residential drawing MS-D1-RCD-004 | Resolved |
| 83.0 | MS-AT-0353.000 | Temporary workspace near residence | Reduced workspace (MSX-MOC-0670); removed residential drawing MS-D1-RCD-005 | Resolved |
| 83.1 | MS-AT-0354.000 | ATWS proximity (<50 ft) | Reduced workspace; retained MS-D1-RCD-006 | Resolved |
| 91.4 | MS-AT-0413.000 | ATWS proximity (>50 ft after reduction) | Reduced workspace (MSX-MOC-0693); removed MS-D1-RCD-008 | Resolved |
| 146.4 | MS-NW-0667.000 | Residence within ATWS | Pipeline redesign (MSX-MOC-0700); residence now >50 ft; removed MS-D1-RCD-012 | Resolved |
| 162.4 | MS-LA-0733.230 | Bore site near residence; extended work duration | Mitigation via temporary noise caps; easement executed; retained MS-D1-RCD-013 | Resolved |
| 191.9 | MS-CL-1022.000 | Bore site near residence; extended work duration | Temporary access coordination planned | Ongoing (MS-D1-RCD-015) |
| TAR-055.100 | MS-LE-0476.300 | Access road 2 ft from residence | Ongoing discussions; alternative routes proposed; planned improvements near residence: tree trimming, road widening, and gravel | Pending – May relocate or remove (MS-D1-RCD-010) |

Given the limited acreage of residential land affected, the implementation of site-specific construction plans, and adherence to mitigation and restoration procedures, we conclude that construction and operation of the MSX would not result in significant effects on residential land use.

¹⁴⁴ A full discussion of landowner concerns can be found in TGP’s September 23, 2025, Supplemental Filing for MSX (Accession no.: 20250923-5058).

South System Expansion 4 Project

Construction of SSE4 pipeline loops, Wrens Compressor Station, contractor yards, TARs, and appurtenant facilities would affect 179.7 acres of residential land. Approximately 44.4 acres of residential land would be affected by the operation of the pipeline loops, PARs, and appurtenant facilities. There are 149 residences within 50 feet of the proposed SSE4 pipeline construction corridor including houses, mobile homes, and multi-unit dwellings or apartment complexes; of which, 36 are within 25 feet of the project workspaces.¹⁴⁵ Table I.4.8-4 identifies the location of structures within 50 feet of construction workspace by MP and their distance to work areas.

SNG/EEC developed site-specific residential construction plans for the residences within 25 feet of the construction work area, found in appendix H.¹⁴⁶ The site-specific plans include workspace configurations, distances to structures, locations for safety fencing installation, and mitigation measures that would be implemented by SNG/EEC to reduce effects on residents during construction. These site specific plans also detail structures such as sheds, outbuildings, or other storage buildings that SNG/EEC proposes to remove. We encouraged the owners of these residences to provide comments on the plan for their individual property during the draft EIS comment period. We did not receive any comments on the site specific plans.

We received comments during the scoping period, and comments on the draft EIS, about plans for barns and new homes that could be affected by SSE4, and project effects on reasonably foreseeable future land use. A review of public online information revealed that there are no planned developments within 0.25-mile of SSE4; however, we received comments during the scoping period about plans for barns and new homes that could be affected by SSE4. SNG/EEC is actively in discussions with individual landowners regarding existing and planned structures. The existing structures would be relocated or demolished, and SNG/EEC has committed to compensating the individual landowner for a structure of similar value or greater.

SNG/EEC would implement the construction, mitigation, and restoration measures within residential areas consistent with the measures described above for the MSX facilities. Temporary effects from construction would include increased noise, traffic, and dust. No direct effects are anticipated during operation.

Given the implementation of site-specific construction plans, and adherence to mitigation and restoration procedures, and our review of the surrounding area attributes, we conclude that construction and operation of SSE4 would not result in significant effects on residential land use.

4.8.1.8 Industrial/Commercial

Mississippi Crossing Project

Construction of the MSX Mainline and laterals would affect 127.4 acres of industrial and commercial land, and operations would permanently affect 38.4 acres. The MSX aboveground facilities would affect 49.0 acres of industrial and commercial land, and operations would affect 2.3 acres. MSX would also affect 153.6 acres of industrial and commercial land during

¹⁴⁵ Obtained from SNG/EEC's February 17, 2026 Supplemental Filing #3 (Accession no.: 20260217-5265)

¹⁴⁶ Site-Specific Residential Construction Plans were filed by SNG/EEC on November 5, 2025, as part of their Supplemental Filing (Accession no.: 20251105-5163).

construction of contractor yards and TARs; however, the contractor yards could revert to their previous land use after construction and 33.1 acres of commercial and industrial land would be converted to PARs during operation of the project. TGP would work with property owners to maintain operations and restore disturbed areas after construction. Landowners would be able to use the easement provided it does not interfere with the MSX Mainline or lateral facilities. Landowners would not be allowed to install any structures or obstructions within the operational right-of-way without TGP's written consent.

Aboveground facilities and PARs would permanently convert areas of industrial and commercial property to operational footprints. TGP would restore other temporarily disturbed areas in accordance with the MSX Plan and Procedures following construction.

Traffic control measures for roadways would be coordinated with the counties that would be crossed by the project, as well as the Alabama Department of Transportation and Mississippi Department of Transportation, as needed. Additionally, TGP would follow the procedures described in its Traffic Management Plan. Details on project related traffic flow studies and mitigation required are detailed in section 4.9.3.

Given that a majority of the industrial and commercial land use could revert to its current use and TGP would coordinate with property owners, we conclude that the construction and operation of MSX would not adversely affect industrial/commercial land.

South System Expansion 4 Project

Construction of the SSE4 pipeline loops would affect 126.5 acres of industrial and commercial land, including existing utility corridors, roads, and railways, and operation would permanently affect 22.8 acres. Since these areas are already developed or disturbed, construction activities would cause only short-term effects related to ground disturbance and equipment access. SNG/EEC would restore these areas in accordance with the SSE4 Plan. Once the pipeline is installed and the workspace restored, industrial and commercial operations in these areas would continue with minimal disruption, and no long-term changes to land use is expected.

SSE4 aboveground facilities, including compressor stations and new and existing meter stations, would affect 234.1 acres of industrial and commercial land, and operations would affect 26.6 acres. Most aboveground facility work would occur within or adjacent to existing compressor and meter stations, which are already industrial in nature. Facility upgrades and expansions would permanently convert small portions of previously cleared land to continued industrial use but would not introduce new land use conflicts.

SSE4 would also affect 372.0 acres of industrial and commercial land during construction of contractor yards, TARs, and appurtenant facilities. Approximately 215.3 acres would be permanently used as PARs and appurtenant facilities during operation of the project. SNG/EEC would coordinate with landowners and restore temporarily disturbed areas in accordance with the SSE4 Plan and Procedures.

SNG/EEC would work with applicable agencies and landowners to ensure construction activities would not prevent emergency vehicle flow. Mitigation measures would include temporary travel lanes, detours, or the placement of steel plate bridges to allow for continuous

traffic flow during construction activities. If a road requires an extensive construction duration, efforts would be made for approved detours. Details on project related traffic flow studies and mitigation required are detailed in section 4.9.3. The affected roads would be restored to pre-construction conditions. There are no known planned commercial areas within 0.25-mile of the project.

Given that a majority of the commercial and industrial land that would be disturbed for the construction and operation of aboveground facilities and pipeline loops occurs within or adjacent to facilities and rights-of-way, which is already industrial in nature, we conclude that the construction and operation of SSE4 would not adversely affect industrial/commercial land.

4.8.1.9 Conclusion

Mississippi Crossing Project

MSX would temporarily and permanently alter a range of land uses, primarily within upland forest, silviculture, and agricultural areas. Much of the construction disturbance would occur along existing rights-of-way, which would limit new clearing and help maintain land use compatibility. Forest and pine plantation areas would be most affected through clearing, though natural regrowth and restoration would gradually restore visual and habitat conditions after many decades with the exceptions of areas within the permanent right-of-way. Agricultural lands would be restored following construction, with coordination to ensure continued farming and livestock use. Temporary effects on residential and industrial properties would be managed through access maintenance, safety fencing, and landowner coordination. Wetlands and open water areas would be protected through permit conditions and BMPs, ensuring restoration to functional conditions. With implementation of the proposed avoidance and minimization measures, including use of existing corridors, site-specific residential mitigation, and revegetation plan, we conclude that MSX would not result in significant long-term land use effects.

South System Expansion 4 Project

SSE4 would similarly affect multiple land use types, though its alignment along existing corridors would substantially limit new disturbance. Forested and silvicultural lands would be cleared within the construction workspace but would largely recover given decades to establish pre-construction conditions. Agricultural and pasture lands would be restored for continued productivity, and any affected irrigation or drainage systems would be repaired. Temporary effects on residential areas would be addressed through safety fencing, workspace restrictions, and restoration agreements, while industrial and commercial effects would be addressed through coordination and restoration measures. Wetland and open water crossings would follow approved methods and mitigation plans to minimize effects on hydrology and vegetation. We conclude that, with adherence to approved restoration and mitigation commitments, SSE4 would maintain overall land use compatibility and would not result in significant long-term effects on existing land uses.

4.8.2 Public Land, Recreation, or Special Use Areas

The Projects would cross multiple public land, recreation, and special use areas, as described below. Construction activities would temporarily affect these areas by generating dust, noise, and vehicle traffic that could interfere with or diminish the quality of recreational experiences, disturb visitors, reduce aesthetic enjoyment, and temporarily limit access to certain

locations. Equipment operation and human presence may disrupt wildlife movements and behaviors, which could in turn affect the recreational use of parks, trails, and natural areas that rely on wildlife viewing. The Projects pipeline rights-of-way would have a permanent effect on these areas by removing existing vegetation and changing the visual character of the landscape. Permanent aboveground facilities would also have a permanent visual effect on these areas.

We received public comments discussing concerns over potential effects on recreational areas for both Projects during construction. The Companies would work to minimize effects on recreational areas by adhering to their project-specific Plans and Procedures, and continuing coordination with federal, state, and local agencies.

Tables I.4.8-5 and I.4.8-6 list public lands, recreational areas, conservation lands, and other special use areas that are crossed by MSX and SSE4, respectively. Acreages and lengths described within this section were obtained from the Companies' responses to our Environmental Information Requests^{148,149}. Potential effects on visual resources are further discussed in section 4.8.3.

4.8.2.1 Federally Managed Lands

Mississippi Crossing Project

The MSX Mainline would cross three resources managed by the NPS: the Natchez Trace Parkway (MP 92), the Natchez Trace National Scenic Trail (MP 92) and the Big Black River (MP 77.4). These are discussed in section 4.8.2.5.

The CGT Lateral in Sunflower County, Mississippi would be constructed within 0.25-mile of a property that is managed for habitat / species management by the FWS (Farm Service Agency). The Farm Service Agency offers a variety of services to support agricultural operations, including loan programs and disaster assistance. The property is approximately 608 feet from the CGT Lateral workspace; therefore, the CGT Lateral would not directly affect the property during construction or operation. The increased construction traffic and noise near the property (along E Caile Rd and PAR 603.000, an existing access road with proposed improvements) could disturb local wildlife.

South System Expansion 4 Project

SSE4 would cross three rivers listed on the NRI: the Flint River and Oconee River in Georgia, and the Tallapoosa River in Alabama. Potential effects on these rivers are discussed in section 4.8.2.5.

The Bold Destiny Horse Trail, which is part of the Tuskegee National Forest in Macon County, Alabama, is approximately 0.22-mile from an existing PAR (ID: PAR-MC-E1-005), which would be improved to accommodate the Project. There is over 1,000 feet of forested buffer between the horse trail and the PAR. Trail users may experience increased noise and traffic during

¹⁴⁸ Acreages and lengths obtained from TGP's October 6, 2025 data response to our September 15, 2025 Environmental Information Request #45 (Accession no.: 20251006-5171).

¹⁴⁹ Acreages and lengths obtained from the revised table 8.3-1 of SNG/EEC's October 6, 2025 Data Response (Accession no.: 20251006-5172).

construction. However, given the distance from the project, effects on this trail are not anticipated during operation.

4.8.2.2 Coastal Zone Management Program Areas

Mississippi Crossing Project

The project facilities are not within any Coastal Zone Management areas.

South System Expansion 4 Project

There are two project facilities in the Coastal Zone Management Program areas, the Rincon Compressor Station and Port Wentworth Meter Station. On June 18, 2025, the Companies submitted a Consistency Certification Statement to the GADNR Coastal Resources Division for modifications to the existing Rincon Compressor Station in Effingham County and construction of the new Port Wentworth Meter Station in Chatham County. On August 7, 2025, the GADNR Coastal Resources Division responded that the two Project facilities are not likely to affect coastal uses or resources.

4.8.2.3 State Managed Lands

Mississippi Crossing Project

MSX would cross four Mississippi 16th Public School Trust Lands within Holmes, Leake, Neshoba, and Clarke counties, Mississippi. Mississippi 16th Section Public School Trust Lands are lands held in trust by the state for support of public education. Title to the 16th Section Public School Trust Lands is vested in the State of Mississippi, in trust for the support of public education. The Mississippi State Legislature place jurisdiction and control over leasing and day-to-day management of the lands in the hands of the local school board where the land is located. The land is typically leased out to silviculture or agricultural operations with the lease payments going to funds that support public education programs in the respective districts. There are ten state resource management areas (Mississippi 16th Section Public School Trust Lands) within 0.25-mile of MSX. MSX intersects four of these areas within Holmes, Leake, Neshoba, and Clarke counties, Mississippi. Of the four crossed by MSX, three Mississippi 16th Section Public School Trust Lands owned by Leake County Board of Education, Johnny L. Patchin, and the Enterprise School District, are leased out to silviculture operations. The land owned by Larry Killbrew Farms is used for agricultural operations.

TGP would adhere to the MSX Plan and Procedures during construction and restoration of the project to minimize potential effects on state lands. TGP is coordinating with each of the land managers associated with the Mississippi 16th Section lands for right-of-way agreements and would provide updates on the status of consultations in the Implementation Plan.

South System Expansion 4 Project

SSE4 would cross 1.4 miles (21 acres) of the Bartram Forest WMA along Loop 11 at MP 4.8, which is managed by the GADNR. The Bartram Forest WMA is a 1,343-acre property that provides archery hunting opportunities for deer, turkey, and other small game (GADNR, 2025d). Fishing, birdwatching, and wildlife viewing are also supported in this area. Hunters would be adversely affected if construction within the WMA coincides with hunting season. Effects to the WMA would be minimized through collocation with existing corridors, maintaining buffers, and

restoring disturbed areas after construction. SNG/EEC coordinated with the GADNR and the Georgia Forestry Commission (GFC) regarding the SSE4 effects on the Bartram Forest WMA. On April 10, 2025, SNG provided Maggie Hunt (GADNR) with shapefiles of SSE4. The Companies provided GFC with Loop 11 alignment sheets through Bartram Forest WMA and requested that GFC provide any special considerations/conditions to state-owned properties that GFC may require for Project effects to Bartram WMA. In its September 18, 2025, email to SNG/EEC, the GFC stated that they have reviewed the project and did not have any questions or concerns.¹⁵⁰

Given SSE4's implementation of the Plan and Procedures during construction and restoration of the project and coordination with the GFC and GADNR, we conclude SSE4 would not have significant effects on state lands.

4.8.2.4 Conservation Easements

We received multiple comments from the public regarding potential effects on conservation easements on their property. Site-specific route variations designed to address landowner concerns are discussed in section 3.5. Conservation easements are voluntary agreements through which landowners limit the use and development of their property to preserve natural and recreational features. The following sections identify known conservation easements and conservation programs that may be affected by the Projects and how the Companies would mitigate adverse effects.

Mississippi Crossing Project

Wetlands Reserve Program Easement areas can reduce flooding, protect biodiversity, provide habitat for migratory waterfowl and other wildlife species, and provide opportunities for educational and recreational activities (NRCS, 2025b). A total of five Wetlands Reserve Program Easements are within 0.25-mile of MSX. MSX would affect three of these properties, all in Humphreys County, Mississippi: MSX Mainline (MP 43.7) through an area with an existing right-of-way, an existing access road (approximately MP 45.2), and a CGT Lateral temporary workspace. Table I.4.8-5 provides further information, including name, owner, acreage, and length of crossing. These areas would experience temporary effects, such as increased noise and traffic, during construction and would be restored to preconstruction conditions upon completion, except for forested areas within the permanent right-of-way, which would be maintained as open land. TGP would adhere to the Plan and Procedures (with requested deviations) and to all USACE permit requirements for construction, operation, and mitigation of wetland resources. Additional landowner requirements identified during TGP's easement negotiations would be included in construction documents and reported to the Commission and other federal and state agencies, as applicable.

In addition, the MSX Mainline would cross properties with conservation easements (Clifton Plantation Hunting Preserve, Inc., at MP 55.2 and Private Fox Sanctuary [Mark James Chaney, Jr.] at MP 146.6).¹⁵¹ Temporary effects during construction would include increased

¹⁵⁰ Email correspondence can be found in SNG/EEC's October 6, 2025, Data Response Attachment EIR 6 page 20-21. Accession no.: 20251006-5172.

¹⁵¹ Conservation easements obtained from TGP's October 6, 2025 response to question 45 of FERC's September 15, 2025 Environmental Information Request. Accession no.: 20251006-5171.

traffic, noise and dust. TGP would restore these areas in accordance with the Plan and Procedures to pre-construction conditions, except for forested areas in the permanent right-of-way that would remain open. We received public comments discussing concerns over disturbance of the enclosed 100 acre fox sanctuary. TGP has reached an agreement with the landowner of the Private Fox Sanctuary to avoid effects on the fox sanctuary, as well as to minimize effects on areas immediately adjacent to the fox sanctuary. TGP is currently in negotiations with the landowner of Clifton Plantation Hunting Preserve, Inc. to minimize effects on hunting activities, the type of revegetation to apply during restoration, and the timing of construction versus hunting seasons. Any mitigation obligations for this area would be addressed in the easement agreement.

South System Expansion 4 Project

Loop H2 would cross 1.2 miles of the Little Creek Community Preserve in Jones County, Georgia at MP 8.8. Little Creek consists of approximately 1,450 acres of common area including lots, maintenance area and horse pasture, and a shared recreational area consisting of woods, creeks, paths, and natural openings (Little Creek Community Preserve, 2025). Approximately 530 acres of Little Creek is within a conservation easement and managed by the Oconee River Land Trust (Little Creek Community Preserve, 2025). The Companies consulted with the Oconee River Land Trust on August 27 and September 11, 2025, about Project effects on the Little Creek Community Preserve conservation easement. Special construction or restoration measures to mitigate effects on the conservation easement have not been requested to date. All areas would be revegetated after construction; however, a long-term loss of forested land within temporary workspace would occur and may take up to 30 years to mature to preconstruction conditions. There would be a permanent loss of forested land within the permanent right-of-way. Loop H2 would be collocated with an existing right-of-way to reduce adverse effects. Coordination with the Oconee River Land Trust is ongoing to determine any additional mitigation measures that should be implemented during construction.

4.8.2.5 Natural, Recreational, or Scenic Rivers and Trails

Mississippi Crossing Project

The Natchez Trace Parkway is a 444-mile recreational road and scenic drive through Alabama, Mississippi, and Tennessee that roughly follows “Old Natchez Trail”, an historic corridor used by Native Americans. The Natchez Trace National Scenic Trail is a hiking trail that parallels the Natchez Trace Parkway; however, only five segments of the trail, totaling about 65 miles of the national scenic trail have been completed. Public recreational uses along the trail include hiking, biking, horseback riding, and camping (NPS, 2025a). Developed sections of the Natchez Trace National Scenic Trail do not occur within the area where MSX would cross the NPS boundaries.

TGP proposes to cross the Natchez Trace Parkway using HDD. This method would allow the MSX Mainline to pass beneath the parkway without disturbing the surface; therefore, direct effects on the parkway are not anticipated. The HDD entry and exit locations would be outside the Natchez Trace Parkway boundaries, about 310 feet and 0.7-mile from the park’s east and west boundary, respectively. Figure C.4.8-1 (appendix C) depicts the proposed alignment and HDD entry and exit points for this area. Except for a small amount of non-mechanized clearing for HDD guide wire system installation, there would be no surface effects, clearing, or access within the

NPS boundaries. Therefore, due to the existing forest conditions surrounding the workspaces, with the exception of required pipeline markers, no visual effects on parkway users would occur during construction or operation. A right-of-way permit along with a special use permit for construction from the NPS (16 U.S.C. § 460a) would be needed for the Natchez Trace Parkway crossing, and no surface disturbance would be conducted within the Natchez Trace Parkway boundaries without NPS consultation and approval. During TGP's coordination with the NPS, the NPS noted that while all existing scenic trail segments are entirely within the Natchez Trace Parkway's boundary, the NPS has the option to develop future trail segments outside of the Parkway boundary. One possible opportunity for trail expansion is the Old Trace segment immediately outside the Parkway boundary near park milepost 157.5, which could connect to a future scenic trail segment. TGP would continue to consult with the NPS regarding the potential development of the Old Trace segment to ensure MSX does not impede future trail connections. No construction would be authorized for crossing the Natchez Trace Parkway until the NPS right-of-way permit and special use permit have been obtained.

The NRI, maintained by the NPS, identifies more than 4,500 free-flowing river segments in the United States that possess outstandingly remarkable natural or cultural values (ORVs) of regional or national significance and are eligible or potentially eligible for inclusion in the National Wild and Scenic Rivers System (NPS, 2025c).

MSX would cross one NRI-listed river segment, the Big Black River (MP 77.4). Of the eight potential ORV categories identified by the NPS Wild and Scenic Rivers Program (Interagency Wild & Scenic Rivers Coordinating Council, 2004), six apply to the Big Black River: cultural, fish, historic, recreational, scenic, and wildlife. Specifically, the 242-mile river segment includes numerous prehistoric occupation sites. Cultural resources and tribal consultations are discussed in section 4.10. TGP would install the pipeline beneath the river and riparian area using HDD; therefore, there would be no direct effect on the river. The HDD entry point would be approximately 590 feet from the river and exit point would be 0.27 mile¹⁵² from the river and would not be visible to the public using the river for recreation (further described in section 4.8.3.1). The disturbed areas would be restored to previously existing contours and revegetated. Indirect effects such as increased noise and traffic during construction could occur; however, disruptions would be short-term.

TGP has consulted with the NPS to ensure the Projects' activities would not affect the potential eligibility of the Big Black River for future wild and scenic river designation. In a letter to TGP from the NPS dated January 16, 2026, the NPS indicated that after careful review of the proposed HDD and TGP's proposed mitigation measures, MSX "would not have an adverse effect on the values for which the Big Black River has been listed on the NRI, nor would the project as proposed preclude the river from future designation into the System." NPS also made recommendations to TGP to incorporate into the project in order to further protect and enhance the remarkable values of the River and TGP has committed to implement these measures. We therefore consider consultations for Section 5(d) of the National Wild and Scenic Rivers Act complete for MSX. The NPS recommendations are consistent with TGP's Plan and Procedures.

¹⁵² See MS-D1-ALIGN-093 in appendix 1.A1 of TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

South System Expansion 4 Project

SSE4 would cross three rivers listed on the NRI: the Tallapoosa River (Loop E2, MP 3.8) in Alabama and the Flint River (Loop F2 MP 0.6) and Oconee River (Loop I1, MP 6.3) in Georgia. Of the eight potential ORV categories identified by the NPS Wild and Scenic Rivers Program, six apply to all three rivers: cultural, fish, historic, recreational, scenic, and wildlife. In addition, the Flint and Oconee Rivers are also recognized for their geologic ORVs. SSE4 would cross these NRI-listed rivers via HDD. SNG/EEC has proposed water withdrawal from NRI-listed rivers during construction of SSE4. No direct adverse effects are anticipated. Any indirect effects such as increased noise and traffic would be short-term. Geologic effects related to HDD feasibility are discussed in section 4.1.6. The NPS provided recommendations to SNG/EEC regarding NRI listed rivers, which SNG/EEC has committed to implement.¹⁵³ NPS determined through the implementation of water withdrawal limits and other project recommendations, SSE4 would be unlikely to have an adverse effect on the values for which the Tallapoosa, Flint, and Oconee Rivers have been listed on the NRI, nor would the Project preclude the rivers from future designation into the National Wild and Scenic River System. In SNG/EEC's response to our April 9, 2026, Environmental Information Request, a copy of the letter was filed along with SNG/EEC's implementation approach for each NPS recommendation. We agree with these conclusions and consider consultations for Section 5(d) of the National Wild and Scenic Rivers Act complete for SSE4.

The Ravine Golf Course, managed by Demopolis Parks & Recreation, is approximately 528 feet from SSE4 Loop B1 workspace in Marengo County, Alabama.

SSE4 Loop M1 crosses a portion of Dundee Lake Park (MP 5.7), owned and managed by Spalding County, Georgia. This park consists of approximately 184 acres of land used for recreation. SNG/EEC would retain a buffer of about 200 feet of existing forested land between Dundee Lake Park and the proposed pipeline right-of-way therefore reducing the visual effects during construction and operation. SNG/EEC met with the county engineer on September 18, 2025, and no special construction or restoration measures were requested.¹⁵⁴

There would be no direct effects to The Ravine Golf Course and Dundee Lake Park; however, golfers and park users would likely experience increased noise levels from heavy equipment and the presence of construction traffic during the construction phase. There would be no effects on the golf course or the park during operation.

4.8.2.6 Special Use Lands

Mississippi Crossing Project

Seven cemeteries are within 0.25-mile of MSX. All of these cemeteries would be outside the proposed workspace; there would be no direct effects. Additional discussion of cemeteries is provided in section 4.10.

¹⁵³ Copies of consultations between SNG/EEC and NPS were filed to the docket by the Companies and are available to the public via Accession no.: 20260423-5197.

¹⁵⁴ Information on meetings with the county engineer can be found in SNG/EEC's October 6, 2025, Data Response page 89 (Accession no.: 20251006-5172).

South System Expansion 4 Project

Two landfills are within 0.25-mile of SSE4. The Tallassee Waste Disposal Center is about 0.1-mile from the project and would not be affected. Richmond County Solid Waste would be crossed by Loop K1 at MP 6.8. SSE4 parallels an existing road right-of-way (Richmond Landfill Rd) through Richmond County Solid Waste.¹⁵⁵ SNG/EEC are in ongoing consultations with the Richmond County Solid Waste landfill company and would identify if any special construction techniques would be required. Temporary effects such as increased noise, dust, and presence of construction traffic and equipment would be limited to the construction phase in this area. No effects are expected during operation.

SSE4 would cross three airports in Alabama, the Vaiden Field Airport in Perry County, Alabama (Loop C1), the Wetumpka City Airport in Elmore County, Alabama (Loop D1) and the Reeves Airport in Tallapoosa County, Alabama (Loop E2). Loop C1 would cross the Vaiden Field Airport runway via bore¹⁵⁶. Loop D1 would cross the Wetumpka City Airport south of the asphalt runway through a grass runway via open cut¹⁵⁷. Loop E2 would cross Reeves Airport south of the existing runway¹⁵⁸. Ownership of the Reeves Airport has been transferred from The City of Tallapoosa to Mavhawk, LLC, a private owner. The airport is currently not operational but Mavhawk, LLC is working to restore operational status. SSE4 has been in communication with the airport owners/operators (Mavhawk, LLC, City of Wetumpka, and Perry County Airport and Industrial Authority) about construction methods and has commenced easement negotiations. SSE4 has not received any construction restrictions from the landowners to date.¹⁵⁹ Temporary effects during construction include increased traffic, noise and dust. No effects to these airports are expected during operation.

Loop H1 crosses the north side of the property of Academy of Classical Education (ACE) Senior High School in Bibb County, Georgia (MP 5.8). SNG/EEC have had ongoing consultations with ACE Senior High School and are working on finalizing the terms of the crossing agreement with the school. The project would have only minor temporary effects on the school during construction (visual, noise, dust). The project would not affect any school buildings, parking lots, or recreational areas. SNG/EEC would revegetate and restore the temporary workspaces to as near pre-construction conditions as practicable to minimize effects. SSE4 would not have any permanent effects on the school during operation.

Loop I1 workspace would be approximately 528 feet from Midway Hills Academy elementary school (MP 4.1). Construction work areas would not overlap school property. The school may experience increased noise and traffic during construction. Due to the distance from the SSE4 workspace, no effects are anticipated during operation.

¹⁵⁵ See GA-K1-ALIGN-07 in appendix 1.A1 of SNG/EEC's November 5, 2025, Supplemental Filing. Accession no.: 20251105-5163.

¹⁵⁶ See AL-C1-ALIGN-04 in appendix 1.A1 of SNG/EEC's November 5, 2025, Supplemental Filing. Accession no.: 20251105-5163.

¹⁵⁷ See AL-D1-ALIGN-15 in appendix 1.A1 of SNG/EEC's November 5, 2025, Supplemental Filing. Accession no.: 20251105-5163.

¹⁵⁸ See AL-E2-ALIGN-05 in appendix 1.A1 of SNG/EEC's November 5, 2025, Supplemental Filing. Accession no.: 20251105-5163.

¹⁵⁹ Information on consultations with the airport landowners can be found in SNG/EEC's December 10, 2025 Response to EIR page 38-39. Accession no.: 20251210-5208.

4.8.2.7 Conclusion

Mississippi Crossing Project

TGP would cross the Natchez Trace Parkway and the Big Black River using HDDs, which would avoid surface disturbance and preserve scenic and recreational values. TGP has coordinated with the NPS to ensure compliance with applicable permits and protection measures. TGP would restore the project area in accordance with MSX Plan and Procedures, which is consistent with the recommended measures proposed by NPS in its January 16, 2026, letter to TGP. Temporary effects to public or conservation lands, including the Clifton Plantation Hunting Preserve, the Private Fox Sanctuary, and several Wetland Reserve Program Easements, would be limited to construction areas, with restoration and revegetation implemented afterward. TGP would ensure requirements identified during easement negotiations be included in construction documents, as appropriate. We conclude that, with these measures in place, MSX would not result in significant or lasting effects on public lands, recreation, or special land use area.

South System Expansion 4 Project

SSE4 would cross the NRI-listed rivers using HDDs, which would avoid surface disturbance and preserve scenic and recreational values. Most effects would occur during construction and would be minimized by collocating new pipeline loops with existing corridors, maintaining buffers, and restoring disturbed areas. Adoption of mitigation measures recommended by the NPS and other applicable state and local agencies would ensure that applicable protection measures, recreational access, and resource management activities remain intact. SNG/EEC would restore the project area in accordance with the SSE4 Plan and Procedures. Permanent effects would be limited to small areas of maintained right-of-way where mature forest would be converted to open land. Most effects on public land, recreational land, and special use areas would be temporary and limited to construction. With continued agency coordination and incorporation of NPS recommended measures, habitat restoration, and adherence to the SSE4 Plan and Procedures, the Project would not result in significant adverse effects on public lands, recreational or special use areas.

4.8.3 Visual Resources

The term “visual resources” refers to the composite of basic terrain features, geologic features, hydrologic features, vegetation patterns, and anthropogenic features that influence the visual appeal of an area for residents or visitors. The visual quality or character of the landscape is the baseline against which the visual effects of a proposed action or its alternative(s) are measured. Visual character features as described above which exist prior to a proposed action or its alternative(s) serve as the point of reference for determining whether or not a proposed action or alternative(s) would be consistent with the existing visual character of an area.

Additionally, any modification to landforms, waterbodies, vegetation, or the introduction of man-made visual elements, including, but not limited to structures, buildings and landscapes that alter the experience of a person viewing the landscape can be considered a visual effect. This can include the introduction of visual contrasts in form, line, color or texture (Bureau of Land Management, 2013).

4.8.3.1 Mississippi Crossing Project

MSX would collocate approximately 52.8 miles or 26.5 percent of the pipeline route with existing pipeline and transmission line rights-of-way. ¹⁶⁰ In areas of collocation with existing rights-of-way, the MSX Mainline and laterals would introduce an increased overall right-of-way width.

Construction of the MSX Mainline and laterals would have temporary visual effects, including construction equipment, removal of vegetation, and increased human activity associated with construction. Locations where roadways would cross the rights-of-way and pass near existing buildings would present the greatest visual effect during construction. During operation, new rights-of-way would introduce a loss of vegetation, representing the largest visual effect to the existing landscape in areas not collocated with existing rights-of-way, most obvious in areas that were previously forested.

MSX would include the construction and operation of three new compressor stations as described in section 2.1.2. The compressor stations are in rural areas with low concentrations of permanent buildings. Construction of new and modified aboveground facilities would result in temporary visual effects including increased numbers of construction personnel, equipment, and materials, removal of vegetation cover, and disturbance of soil. Construction effects would generally cease following the completion of construction and restoration.

The new aboveground facilities would result in permanent effects on visual resources. Table 4.8-3 summarizes the potential visual effects of Station 602, Station 606A, and Station 610 on nearby residences.

Table 4.8-3: Potential Visual Effects of MSX Compressor Stations and Meter Stations

| Facility | Distance from Facility Fenceline to Residence | Visual Effects |
|--|--|--|
| Station 602 | Nearest residence is 23 feet east of proposed station fenceline. A second residence is approximately 0.35-mile east. | <ul style="list-style-type: none"> • Visibility is intermittent due to existing vegetation and a nearby structure. TGP is proposing to plant evergreen vegetation around the inside perimeter of the facility. |
| Station 606A | Two residences 0.1- and 0.3-mile E/NE | <ul style="list-style-type: none"> • Visibility is not anticipated due to dense deciduous vegetation between the station and residences. |
| Station 610 | One residence 0.1-mile W | <ul style="list-style-type: none"> • Visibility is anticipated due to the elevated position of the residence (~85.5 ft higher than the station). • Intervening vegetation is present but provides minimal screening due to the elevated viewing perspective. |
| Note: Distances obtained from TGP's December 1, 2025, Response to our November 20, 2025, EIR (Accession no.: 20251201-5781). | | |

To mitigate effects at all compressor stations, TGP would employ downward lighting to reduce light pollution, color-match buildings with surrounding backdrops, and grouped structures would be painted using the same color palette. TGP would install planted vegetation perimeters to decrease visual effects to nearby buildings. To further mitigate visual effects at Station 602,

¹⁶⁰ Collocation miles obtained from table 1.2-5 of TGP's September 23, 2025 Supplemental Filing. Accession no.: 20250923-5058.

TGP would commit to plant evergreen (non-deciduous) trees around the inside perimeter of the facility to provide natural screening and reduce visibility of the station. Based on these visual mitigation measures, visual effects from the construction and operation of the compressor stations would not be significant.

Two of the four new meter stations and all three of the proposed OPP facilities would be collocated within the proposed compressor station facilities.¹⁶¹ Other meter stations would be located at the end of proposed laterals where existing natural gas infrastructure and aboveground facilities for delivery points already exist. Construction activities and facility modifications would introduce a temporary visual effect with the use of construction equipment, vehicles, and personnel. Although the addition of OPP facilities and meter stations would introduce additional permanent visual effects to the surrounding landscape, they would be consistent with the land use and visual character that currently exists in these locations. Therefore, we conclude that visual effects from the construction and operation of the new meter stations and OPP facilities would not be significant.

As discussed in section 4.8.2.5, MSX would cross one NRI designated river, the Big Black River at approximately MP 77.4. TGP would install the pipeline in these locations using HDD. TGP would not conduct routine mowing or vegetation clearing between HDD entry and exit points, which would avoid permanent visual effects within the river's riparian areas. The permanent right-of-way beyond the HDD entry and exit points would undergo clearing and require long-term vegetation maintenance; however, due to the distance between the river and HDD entry and exit locations and the surrounding topography, any visual effects of the maintained right-of-way would be negligible.

TGP would also use HDD to cross NPS-managed land for the Natchez Trace Parkway, as described in section 4.8.2.5. As with the Big Black River, TGP would not conduct routine mowing or vegetation clearing between the HDD entry and exit points, which would avoid permanent visual effects on and parkway-users. The only visual indicator that a pipeline is buried beneath the NPS land would be from the presence of federally-required buried pipeline markers.

4.8.3.2 South System Expansion 4 Project

SSE4 pipeline loops would generally be collocated with existing SNG pipelines. Construction of the SSE4 pipeline loops would have temporary visual effects from construction equipment, vegetation removal (including large trees or vegetative barriers), and increased human activity. SSE4 would expand the existing right-of-way to accommodate the pipeline loops. Visual resources within the existing right-of-way have been affected by previous construction and operation activities; therefore, the proposed pipeline loops would not result in significant visual effects on the project area. As discussed in section 4.8.2.5, SSE4 would cross three NRI designated rivers; however, each would be crossed using HDD, thereby avoiding direct visual effects on the river resources during construction, as well as vegetation maintenance that could result in visual effects during operation.

¹⁶¹ Facility descriptions obtained from table 1.2-1 of TGP's September 23, 2025, Supplemental Filing (Accession no.: 20250923-5058).

SSE4 includes the modification of 14 existing aboveground compressor stations and seven meter stations, as well as the construction of three new meter stations. For all but one of the modified compressor stations and five of the seven upgraded meter stations, the existing footprint would be increased to accommodate the additional equipment or expansion of equipment. Table 4.8-5 summarizes the potential visual effects of the proposed compressor station and meter station modifications.

Table 4.8-4: Potential Visual Effects of SSE4 Compressor Stations and Meter Stations

| Facility | Distance to Nearby Residences | Visual Effects |
|-------------------------------|---|---|
| Rose Hill Compressor Station | Single-family residence 2,640 feet from workspace, separated by forested hillside | <ul style="list-style-type: none"> • Temporary visibility from workspace expansion, limited by topography. • Permanent effect limited to increased truck traffic along PAR. • No permanent visual effect from existing facility. |
| Enterprise Compressor Station | Single-family residence 1,056 feet from workspace | <ul style="list-style-type: none"> • Temporary construction visibility from expansion area. • Permanent visual effect from 2.9-acre facility expansion. |
| York Compressor Station | Single-family residence 1,426 feet from workspace, separated by forest and silviculture | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic along public roads. • No permanent visual effect due to vegetative screening and favorable topography. |
| Gallion Compressor Station | Single-family residence 317 feet from workspace, separated by trees | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No new permanent visual effects as existing facility already visible. |
| Selma Compressor Station | Single-family residence 1,003 feet from workspace | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic along public roads. • No permanent visual effects due to vegetative screening and favorable topography. |
| Elmore Compressor Station | Single-family residence 370 feet from workspace, separated by trees and hedgerow | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No new permanent visual effects as existing facility already visible. |
| Auburn Compressor Station | Single-family residence 1,637 feet from workspace, separated by forest | <ul style="list-style-type: none"> • No temporary visual effects (residence not on access route). • No permanent visual effects due to vegetative screening and favorable topography. |
| Ellerslie Compressor Station | Single-family dwelling 475 feet from workspace, separated by forest | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No new permanent visual effects as existing facility already visible. |
| Thomaston Compressor Station | Single-family residence 1,795 feet from workspace, separated by trees and hedgerow | <ul style="list-style-type: none"> • No temporary visual effects (residence not on access route). • No permanent visual effects due to vegetative screening and favorable topography. |
| Ocmulgee Compressor Station | Multi-family dwelling 634 feet from workspace | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No new permanent visual effects as existing facility already visible. |
| Hall Gate Compressor Station | Single-family residence 1,975 feet from workspace, separated by forested land | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No permanent visual effects due to vegetative screening and favorable topography. |
| Wrens Compressor Station | Single-family residence 158 feet from workspace, separated by hedgerow | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic and construction workspaces. • No new permanent visual effects as existing facility already visible. |

Table 4.8-4: Potential Visual Effects of SSE4 Compressor Stations and Meter Stations

| Facility | Distance to Nearby Residences | Visual Effects |
|---|---|---|
| Jefferson Compressor Station | Single-family dwelling 2,323 feet from workspace, separated by silviculture and agricultural fields | <ul style="list-style-type: none"> • No temporary visual effects (residence not on access route). • No permanent visual effects due to vegetative screening and favorable topography. |
| Rincon Compressor Station | Single-family residence 1,320 feet from workspace, separated by forest | <ul style="list-style-type: none"> • No temporary visual effects (residence not on access route). • No permanent visual effects due to vegetative screening and favorable topography. |
| TCP–Rose Hill #3 Meter Station | Single-family residence 2,640 feet from workspace | <ul style="list-style-type: none"> • Temporary visual effects from increased truck traffic along PAR. • No permanent visual effects due to distance, vegetation, and favorable topography. |
| MSX Interconnection Meter Station | Single-family home 370 feet from workspace, separated by trees and open field | <ul style="list-style-type: none"> • Temporary visual effects from increased truck traffic during construction. • Minimal operational visual effects due to vegetative screening. |
| Tenaska Meter Station | Single-family residence 264 feet from workspace, separated by mowed utility corridor | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic during construction. • No new permanent visual effects as existing facility already visible. |
| Smarr Meter Station | Single-family dwelling 3,221 feet from workspace, separated by forest and utility corridor | <ul style="list-style-type: none"> • No temporary visual effects anticipated during construction. • No permanent visual effects due to vegetative screening and favorable topography. |
| Valdosta #1 Meter Station | Single-family dwelling 528 feet from workspace, separated by forest and shrubs | <ul style="list-style-type: none"> • Temporary visual effects from increased truck traffic during construction. • No permanent visual effects due to vegetative screening and favorable topography. |
| Thomson/Wrens Meter Station | Single-family residence 158 feet from workspace, separated by hedgerow | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic during construction. • No permanent visual effects as existing facility already visible. |
| Augusta #2 Meter Station | Multi-family dwelling 2,957 feet from workspace, separated by trees and hedgerow | <ul style="list-style-type: none"> • Temporary visual effects during construction from public road. • No permanent visual effects due to vegetative screening and structure blocks. |
| Louisville Meter Station | Single-family residence 634 feet from workspace, separated by trees and shrubs | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic during construction. • No permanent visual effects as existing facility already visible. |
| Statesboro/Sylvania Meter Station | Single-family residence 211 feet from workspace, separated by trees and shrubs | <ul style="list-style-type: none"> • Temporary visual effects from truck traffic during construction. • No permanent visual effects as existing facility already visible. |
| Port Wentworth Meter Station | Single-family residence 1,742 feet from workspace, separated by forest and hedgerows | <ul style="list-style-type: none"> • Temporary visual effects from construction activity and truck traffic. • No permanent visual effects due to vegetation and distance from receptor. |
| <p>Note: All proposed modifications would occur within existing compressor and meter station sites, except for the MSX Interconnection, Smarr, and Port Wentworth Meter Stations, which would be newly constructed facilities.</p> | | |

Construction activities at the meter stations and compressor stations would have a temporary visual effect on nearby residences, including increased truck and construction equipment traffic. Of the 14 compressor stations that would be expanded, four would be visible from the nearest residences during construction and operation, however, the expansions are

consistent with the existing visible natural gas infrastructure that is already in place due to the existing facilities. Of the seven meter stations that would be expanded, four would be visible from the nearest residences during construction and operation, but all four were previously visible from the existing facility. Two of the three new meter station facilities would have no permanent visual effect on nearby residences due to a combination of existing vegetative screening, distance from receptors, and favorable topography. The new MSX Interconnection Meter Station would result in minor visual effects due to expansions at the existing South Main Line facility. Although several of the expanded facilities would be visible to nearby residences, the additions are consistent with the current landscape that is already within the viewsheds of these areas. Therefore, effects from aboveground facilities would be noticeable, but minor.

4.8.3.3 Conclusions

Mississippi Crossing Project

MSX would alter the visual landscape where new right-of-way and aboveground facilities are introduced. Construction would temporarily increase visual effects through vegetation removal, exposed soil, and the presence of heavy machinery, particularly near road crossings and scattered rural residences. Long-term changes would occur where forested areas are converted to open corridors, though collocation with existing utilities would substantially reduce new visual disturbance. One NRI-listed river (the Big Black River) and the Natchez Trace Scenic Parkway would be crossed using HDD, minimizing visual effects during construction and operation. Compressor and meter stations would be sited in rural settings with limited public visibility, and TGP would use measures such as downward-directed lighting, vegetative screening, and color treatments to blend new structures into the surrounding environment. With these design and restoration efforts, we conclude that visual effects from MSX would be localized and would not significantly alter the region's visual character.

South System Expansion 4 Project

SSE4 would generally follow existing utility corridors. Construction would temporarily increase visual effects through vegetation clearing, exposed soils, and the presence of construction equipment, particularly near residences and local roads. After construction, the right-of-way would be restored and reseeded, allowing vegetation to re-establish. Aboveground facilities, including new meter stations, would be placed within or adjacent to existing industrial or utility areas, minimizing visual disturbance. Additionally, three rivers designated as NRI-listed rivers (the Flint and Oconee rivers in Georgia, and the Tallapoosa River in Alabama) would be crossed using HDD, minimizing visual effects during construction and operation. We conclude that, with these minimization measures, SSE4 would not result in significant long-term visual effects.

4.9 SOCIOECONOMICS

Construction and operation of MSX and SSE4 could affect socioeconomic conditions in the project area. Potential socioeconomic effects of construction and operation of the Projects include changes in population levels or local demographics, increased employment opportunities, increased demand for housing and public services, transportation effects, and an increase in government revenue associated with sales, payroll, and property taxes. The socioeconomic study area considered for the analysis of MSX and SSE4 include counties in Mississippi, Alabama, and Georgia and are discussed below.

We received public comments during the scoping periods that expressed both support and concerns, with some commenters emphasizing potential adverse effects on private property rights, land value, and conservation-based livelihoods, while others supported the Projects for their anticipated local economic benefits, job creation, and contributions to regional energy infrastructure development. We acknowledge the comments in support of the Projects. We have discussed the potential effects on residential and agricultural lands in section 4.8.1, and conservation easements are discussed in section 4.8.2.4. During the public comment period on the draft EIS, we received multiple comments from the public and non-governmental organizations regarding potential effects on environmental justice communities. Executive orders pertaining to environmental justice were revoked in January 2025. Exec. Order No. 14148, 90 Fed. Reg. 8237 (Jan. 28, 2025) (revoking Executive Orders 13985 and 14096); Exec. Order 14173, 90 Fed. Reg. 8633 (Jan. 31, 2025) (revoking Executive Order 12898). However, the Commission continues to fulfill its NEPA responsibilities by considering effects to all potentially affected communities.

4.9.1 Population

4.9.1.1 Mississippi Crossing Project

A summary of select demographic and socioeconomic conditions for counties in the socioeconomic study area affected by MSX is presented in Table I.4.9-1. The population of the affected counties crossed by the Projects ranges from approximately 9,258 to 80,337. Population densities within counties affected by MSX vary from approximately 13.7 to 102.3 persons per square mile, and the county-level civilian workforces range from approximately 3,082 in Humphreys County, Mississippi to 30,949 people in Lauderdale County, Mississippi.

MSX project construction would temporarily increase the population in the socioeconomic study area. During the estimated 14 to 16-month construction phase, MSX would require a peak workforce of 2,020 people distributed across the project as detailed in section 2.6. Two construction spreads are planned to construct the pipeline. As shown in Table 4.9-1, workforce numbers are expected to increase from initial baseline levels to peak levels as construction progresses across the project facilities. The peak workforce for the pipeline is anticipated to be maintained for two to four months, approximately midway through the 14 to 16-month construction phase. After construction is completed, the pipeline facilities would require nine permanent personnel, and one permanent employee would be required for the meter stations and OPP facilities. For the compressor stations, this peak period extends from three to six months, also occurring around the midpoint of construction, after which on-site personnel would decrease to six permanent employees.¹⁶²

Table 4.9-1: Baseline and Peak Workforce During Construction

| Location | Baseline Personnel | Peak Workforce |
|-------------------------|--------------------|----------------|
| Spread 1 -MSX Mainline | 200 to 300 | 600 |
| Spread 2 – MSX Mainline | 300 to 400 | 600 |
| Texas Gas Lateral | 30 to 50 | 75 |

¹⁶² See TGP, MSX Certificate Application, by TGP for the MSX Project, June 30, 2025, Accession No.: 20250630-5152.

Table 4.9-1: Baseline and Peak Workforce During Construction

| Location | Baseline Personnel | Peak Workforce |
|---------------------|--------------------|----------------|
| Tetco Lateral | 30 to 50 | 75 |
| TGP 500 Lateral | 30 to 50 | 75 |
| Transco Lateral | 30 to 50 | 75 |
| Compressor Stations | 40 | 80 |
| Meters Stations/OPP | 60 | 60 |

It is anticipated that approximately 10 percent of the MSX workforce would be sourced locally, with the remaining 90 percent coming from outside of the area. Therefore, most workers are anticipated to be non-local, with workers spatially dispersed and moving along the Project's extensive route. By limiting the number of workers concentrated in any one county, the dispersed nature of the construction activities generally reduces the potential for adverse effects on existing socioeconomic conditions within the study area.

After construction concludes, the operational phase of the MSX Project would see a significant reduction in workforce requirements. Even if all 16 workers required for Project operation permanently relocated with their families from outside of the socioeconomic study area, the population increase would be negligible relative to that of the study area.

4.9.1.2 South System Expansion 4 Project

Table I.4.9-2 provides a summary of relevant demographic and socioeconomic conditions for the counties that would be affected by SSE4. Per table I.4.9-2, the population of the affected counties ranges from approximately 2,913 to 298,771. Population densities within the SSE4 Project counties vary from approximately 11.4 to 2,109.2 persons per square mile, and the county-level civilian workforces range from 1,233 in Glascock County, Georgia to 151,528 people in Chatham County, GA.

Construction of the Project would temporarily increase the population in the socioeconomic study area. This phase of SSE4 would necessitate a temporary workforce of up to 8,909 personnel at peak times over the duration of construction. This includes 6,979 personnel across 22 spreads for pipeline construction, 1,582 personnel across 14 locations for compressor station construction, and 348 personnel across 12 locations for meter station construction. SNG/EEC intends to hire local and regional construction workers to the extent feasible, provided these workers possess the necessary skills for pipeline construction. However, if the local workforce does not possess the required skills, specialized workers would be brought in from outside the project area. SNG/EEC assume that most of the construction workforce (i.e., 95 percent, or 8,463 personnel) would consist of non-local workers, defined here as those who normally reside outside of the daily commuting distance of the work sites.

Non-local workers would temporarily relocate to the SSE4 project vicinity for the duration of their employment; some workers may commute home on weekends, depending on the location of their primary residence. If a larger-than-anticipated percentage of non-local construction

personnel are required to meet peak workforce requirements, sufficient workers would likely be available in the labor pool in the surrounding areas. Non-local workers seeking temporary accommodation are expected to reside within commuting distance of their work sites. Some non-local workers would likely reside in the counties within which they are working; others may locate in larger communities in adjacent or nearby communities. See table I.4.9-4, for a summary of the expected number of workers at each SSE4 facility, as well as the anticipated duration of the work effort.

For the pipeline construction jobs, the highest peak workforce is anticipated to be approximately 534 people at the F1 location in Lee County, Alabama and Harris and Muscogee counties in Georgia, for a duration of approximately 11 months from July 2027 to May 2028. The lowest peak workforce is anticipated to be approximately 117 people at the A2 location in Clarke County, Mississippi for a duration of approximately three months from December 2028 to March 2029.¹⁶³

Compressor station construction jobs would occur in 11 counties, two in Mississippi, five in Alabama, and four in Georgia, and would require approximately 113 workers at each location for a duration of approximately 10 months from January 2028 to November 2028. Meter station construction jobs would occur at locations in 10 counties across MA, Alabama, and GA. The peak workforce for meter station construction would require approximately 29 people for a duration of 1 to 2 months with the earliest construction date of April 2027 and the last month of construction is anticipated to be July 2029 at the Port Wentworth project site in Chatham County, GA. It is anticipated that 29 personnel would be hired at 16 offices for the operation and maintenance of the constructed facilities.¹⁶⁴

Effects on the local population from non-local construction activities would be temporary and minimal. Non-local construction personnel would typically disperse following completion of specialized construction activities. Therefore, no long-term effects on population would result from construction of SSE4.

4.9.2 Housing and Public Services

Construction of the Projects would introduce non-local construction workers to the housing market in the area. These non-local workers would likely use temporary housing such as hotels, motels, apartments, and recreational vehicle parks within commuting distance. Some of the non-local workers would provide their own housing units (e.g., travel trailers).

Temporary increased demand for local public services may occur, including the need for local police to direct traffic during construction and for local emergency services to respond to emergencies associated with construction of the Projects and the associated temporary increase in population. Fire departments may have to respond to project-related fires or other emergencies associated with the temporary increase in population, and medical services may be necessary for workforce personnel illnesses or injuries.

¹⁶³ See South System Expansion 4 Project Resource Report 5, June 2025, (Accession no.: 20250703-5175).

¹⁶⁴ Provided by SNG/EEC in SSE4 July 3, 2025, docket filing (Accession no.: (20250703-5175)).

4.9.2.1 Mississippi Crossing Project

The construction phase of the MSX Project would necessitate a temporary workforce, approximately 90 percent of which would be non-local personnel.¹⁶⁵ Table I.4.9-5 shows housing statistics for the counties that would be affected by MSX. Data on housing units are 2019-2023 American Community Survey (ACS) 5-year estimates (USCB, 2024d). While the total number of housing units per county is generally commensurate with each county's population, rental vacancy rates vary independent of county population and population density. Rental units are concentrated near the higher population density areas in Lauderdale and Washington counties, Mississippi. Some counties within the project counties, like Humphreys County, Mississippi and Choctaw County, Alabama, have fewer available rental units.

Table I.4.9-5 also reports the number of hotels, motels, and recreational vehicle parks in the MSX area. Like the distribution of long-term rental properties, these short-term accommodations are concentrated in counties with higher populations. Considered together, options for accommodations of any type are limited in many of the project counties but abundant in Lauderdale and Washington counties, Mississippi. If the peak workforce were to move into the area for MSX construction, they would reside in a combination of vacant rental housing, temporary housing, and campgrounds in the areas surrounding the construction site. As shown in table I.4.9-5, there is varied available housing that may influence where temporary workers would choose to live during MSX construction.

Approximately 1,818 workers, or 90 percent, would be coming from outside the area during construction and approximately 202 workers, or 10 percent, would be expected to be sourced locally.¹⁶⁶ For most non-local workers, there would be the potential for varied effects. Given the uneven distribution of housing resources, it is likely that workers may concentrate in more populated areas with sufficient temporary housing options, like Lauderdale and Washington counties. Based on the rental vacancies in these areas, there would be sufficient housing available for non-local workers. For portions of MSX that would cross less populated, rural areas with limited housing, an influx of workers could represent a temporary, material change to local accommodation housing markets, which could increase competition for available units and, thereby, increase pricing. Workers may also choose to reside outside of the immediate project construction areas in more populated adjacent counties that are within a commutable distance. When workers choose housing in adjacent areas with greater choices, there is lower competition for available units and reduced upward pressure on pricing increases.

Considering all housing options, effects on the rental and temporary housing market would last for the duration of construction; however, as already noted, the spatial distribution of workers covers approximately 208 miles,¹⁶⁷ and effects along the different spreads and MSX components would be temporary. These temporary effects may be positive to the owners/proprietors of the housing units and state revenues through the local occupancy tax (hotel/motel tax). Conversely, these effects may be negative to current and prospective renters and guests of these homes and

¹⁶⁵ Workforce percentage provided by TGP in its June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

¹⁶⁶ Workforce numbers provided by TGP in its June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

¹⁶⁷ Mileage provided by TGP in its June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

establishments through reduced availability of options and/or higher prices. This effect is anticipated to be minimal, temporary, and not concentrated in any single community, minimizing potential disruptions.

MSX construction may necessitate the relocation and/or procurement of residential structures. TGP would consult with affected landowners regarding both residential and non-residential buildings in or near the proposed workspace. Additional details on residential effects are included in section 4.8. Although TGP does not anticipate that MSX would result in the permanent displacement of residents, any relocations, temporary or permanent, would be conducted according to the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended.

Assuming 90 percent of workers aren't local, the temporary increases in population would be spatially distributed along the construction spreads and additional project components, which may result in minor, short-term population increases in the population of the local communities surrounding the project areas. However, despite the overall dispersion, there could be scenarios where a substantial portion of the workforce might temporarily concentrate in certain areas, especially those with relatively low populations. In these circumstances, even a temporary influx of workers could reduce the service ratio of local emergency services. These areas may not have the same level of resources as more urbanized locations and could become overwhelmed by a high-demand emergency such as a large-scale industrial accident. TGP does not anticipate that non-local construction workers would relocate with school-age children due to the temporary duration of construction activities. Therefore, effects on education services during construction are expected to be negligible.

The operational phase of MSX would require approximately 16 total workers required across all project components.¹⁶⁸ Even if these workers were non-local and required to relocate, the housing markets would be able to absorb the influx of permanent operation workers. Therefore, there would be no long-term effect on housing during MSX operation.

TGP would work with local law enforcement, fire departments, and emergency medical services prior to construction to coordinate for effective emergency response.^{169, 170} With a peak construction work force of up to 2,020 workers for MSX, any project-related increase in demand for medical facility services would not be expected to exceed the capacity or level of service provided by existing medical facilities within or near the project sites. Although the potential for police, fire, and medical services may increase slightly during construction activities, adequate public services exist in the MSX area to handle a civil, criminal, or emergency event. We anticipate that most non-local construction workers would not relocate to the area due to the relatively short duration of construction activities. For these reasons, effects on public services during construction are expected to be negligible. During MSX operation, the largest effect to public services would be associated with an emergency affecting the reliability or integrity of the natural gas facilities. The pipeline system would include design and equipment features, in

¹⁶⁸ Provided by TGP in its June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

¹⁶⁹ A table of public service providers in the MSX area was filed by TGP in its June 30, 2025, Certificate Application, Resource Report 5 (Accession no.: 20250630-5152).

¹⁷⁰ A table of public service providers in the SSE4 area was filed by SNG/EEC in its July 3, 2025, Certificate Application, Resource Report 5 (Accession no.: 20250703-5175).

addition to routine inspection and maintenance programs, that are designed to increase the overall safety of the system. Safety design measures and emergency response protocols are addressed in section 4.13.

4.9.2.2 South System Expansion 4 Project

Table I.4.9-6 provides select housing data from the counties that would be affected by SSE4. Data on housing units are 2019-2023 ACS 5-year estimates (USCB, 2024d). The number of total housing units varies across the effect area, largely correlated with the county population. Data from the ACS were used to understand vacancy patterns and the potential availability of short-term housing in the counties that would be affected by SSE4. The number of hotels and motels and the number of campgrounds and recreational vehicle (RV) parks within the project counties were compiled from available online resources. As shown in table I.4.9-7 in appendix I, the SSE4 project counties provide thousands of rental units. Table I.4.9-8 in appendix I shows the number of hotels, motels, and RV campgrounds (RVParks.com, 2025) in the vicinity of pipeline and aboveground facility construction areas. Based on the rental vacancies, hotels, motels, campgrounds/RV parks in these areas, there would be sufficient housing available for non-local workers.

During SSE4 construction, the presence of construction workers in the project area would increase the demand for temporary short-term housing. Most construction workers would relocate only temporarily to the vicinity of the project area for the duration of their employment, possibly commuting home on weekends, depending on the location of their primary residence. Non-local construction workers would typically use available temporary housing such as area campgrounds/RV parks and hotel/motels in the study area and possibly adjacent towns or counties that are within a reasonable daily commuting distance of the project. Non-local construction workers frequently use travel trailers or RV campers.

Given the large number of available vacant housing units, the number of hotel/motels, plus the hundreds of individual recreational vehicle sites, we do not anticipate any conflicts with hotels, trailer parks, or other temporary housing in the counties that would be affected by SSE4. The anticipated migration of approximately 8,463 personnel to the project area represents less than 1 percent of the total temporary housing, therefore, the temporary demand for these facilities is unlikely to displace permanent residents, adversely affect housing prices, or cause conflicts with tourism.¹⁷¹ Project effects on local housing are expected to be minimal and short-term.

SSE4 construction may necessitate the relocation and/or procurement of residential structures. SNG/EEC are coordinating with individual landowners regarding existing structures within the construction workspace. The Companies would compensate the landowner for any features that cannot be moved or otherwise avoided by the project construction. Such compensation may include replacement and/or relocation by landowner. Any relocations would be conducted according to the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended.

¹⁷¹ Housing numbers obtained from section 5.4.3 of SNG/EEC's July 3, 2025, Application, Accession no.: 20250703-5175.

Existing local government public services within the communities in the SSE4 study area include police/sheriff, fire protection, medical services, and educational institutions. Table I.4.9-9 provides an overview of the public services in the counties that would be affected by SSE4. The counties that would be affected by SSE4 have numerous medical facilities and emergency response services to temporarily accommodate the construction workforce. The temporary influx of construction workers to local communities would be short-term and is not expected to affect the levels of service provided by existing law and fire protection personnel or burden medical facilities. SNG/EEC would work directly with local law enforcement, fire departments, and emergency medical services to coordinate for effective emergency response.

Local police assistance may be required to facilitate traffic flows during construction at workspaces near roads, and permits would be required for vehicle load and width limits for some of the vehicles delivering materials and supplies. Most traffic related to construction worker commutes would occur before 7:00 a.m. and after 7:00 p.m. On Mondays through Saturdays, limiting effects on local commuter traffic.¹⁷²

The Companies would work with local law enforcement, fire departments, and emergency medical services prior to construction to coordinate for effective emergency response. With a peak work force of up to 8,900 workers over the duration of SSE4 construction, it is not anticipated that any project-related increase in demand for medical facility services would exceed the capacity or level of service provided by existing medical facilities within or near the project sites. Although the potential for police, fire, and medical services may increase during construction activities, adequate public services exist across the counties affected by SSE4 to handle a civil, criminal, or emergency event. It is anticipated that most non-local construction workers would not relocate to the area due to the relatively short duration of construction activities. For these reasons, effects on public services during construction are expected to be minimal.

4.9.3 Property Values

We received comments expressing concerns about land values in the vicinity of the Project. The effect that a pipeline easement may have on property value is a damage-related issue that would be negotiated between the parties during the easement acquisition process. The easement acquisition process is designed to provide fair compensation to the landowner for the right to use the property for pipeline construction and operation. Appraisal methods used to value land are typically based on objective characteristics of the property and any improvements. The effect a pipeline could have on a property's value would depend on many factors including the size of the tract, the values of adjacent properties, the presence of other utilities, the current value of the land, and the current land use. Subjective valuation is generally not considered in appraisals. If the presence of a pipeline renders a planned use infeasible, it is possible that a potential purchaser would decide not to purchase the property; however, each potential purchaser has different criteria and differing capabilities to purchase land.

A number of studies have been conducted since the early 1990s on the effects of proximity to pipelines on property values. In a few of them, advanced statistical techniques have been applied to evaluate transaction sales data before and after the construction of a pipeline. A literature review

¹⁷² Timeframe obtained from section 5.4.5 of SNG/EEC's July 3, 2025, Application (Accession no.: 20250703-5175).

of these studies can be found in Wilde et al. (2012). The paper concludes that natural gas pipelines have no statistically significant effect on the values of nearby properties.

FERC staff conducted independent research and identified two recent studies that assessed the effects of natural gas pipeline compressor stations on property values. The first study was prepared for the National Fuel Gas Supply Corporation and assesses the effects on property values in neighborhoods surrounding compressor stations in seven locations in the state of New York. Sales data over the previous 15 years were evaluated and assessors from six of the seven areas were interviewed. The study found no quantifiable evidence of a discernable effect on property values or appreciation rates of properties within 0.5-mile of compressor stations. The study, which notes the general lack of sales data for analysis, identified the following commonalities among the seven areas: the compressor stations were sited on large land parcels and set back from the road; natural and constructed buffers were utilized; and compressor station sites were generally in rural areas removed from higher density development (Griebner, 2015).

The second study, “A Study of Natural Gas Compressor Stations and Residential Property Values,” was prepared for TGP and based on four case studies in New Hampshire and Massachusetts. This study compared the value of properties close to compressor stations to properties farther away. The study relied on available market data and interviews with town assessors, building department representatives, and other government representatives. The study concluded that the presence of a compressor station did not generally affect property values in the area. The study indicated a higher confidence in this conclusion for properties more than 0.5-mile from compressor stations. The reason for this is that the areas surrounding the compressor stations in each of the case studies were more rural in nature, and therefore, there was a comparative lack of sales data in the immediate vicinity of the compressor stations as compared to the area 0.5-mile away. Overall, the study concluded that “well designed and operated compressor stations on larger sites with adequate buffers should have minimal effect on surrounding land uses and residential property values” (Foster, 2016). Based on the research we have reviewed, we do not anticipate a significant negative effect on property values as a result of the Projects.

4.9.4 Transportation and Traffic

4.9.4.1 Mississippi Crossing Project

During construction, TGP would use existing public and private access roads and new TARs and PARs to access the construction work areas. Certain access roads would be used on a permanent basis to access the MSX facilities for operations and maintenance purposes. All existing private access roads proposed for project use would be dirt, gravel, or rock. For the existing access roads, improvements and modifications are expected to be minimal.

Seven new access roads are proposed for MSX, including two permanent and five temporary roads.¹⁷³ Among the new access roads, TGP would establish PARs at each of the new compressor stations (Station 602, Station 606A, and Station 610). Traffic control measures for roadways would be coordinated with the counties that would be crossed by the project, as well as the Alabama Department of Transportation and Mississippi Department of Transportation, as

¹⁷³ Access road numbers obtained from section 5.3.2 of TGP’s June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

needed. Additionally, TGP would follow the procedures described in its Traffic Management Plan.

TGP plans to use 17 contractor yards during construction, located across multiple counties, including Washington, Holmes, Attala, Neshoba, Newton, and Lauderdale counties in Mississippi and Choctaw County in Alabama.¹⁷⁴ Each contractor yard would be accessed via local roads and major collectors, depending on their specific locations. Most contractor yards would be strategically placed to minimize the effect on major thoroughfares.

Traffic entering and exiting the contractor yards would be variable over the construction period and throughout each day. Daily traffic would generally be the highest between 6:00 a.m. and 8:00 a.m. As workers arrive at the contractor yards and depart to locations along the construction area. The highest amount of traffic would occur during the times of peak construction. After 8:00 a.m., traffic entering and exiting the contractor yards would proceed at a much lower volume throughout the day until approximately 6:00 p.m.¹⁷⁵ Parking for daily commuters would be provided at the contractor yards. TGP anticipates that some construction workers would be bused or carpooled from the contractor yards to the MSX work areas where parking would occur within construction workspaces. Busing would reduce the effects on the roadways and the need for parking at project sites.

During MSX construction, in addition to daily roundtrips for trucks delivering equipment and materials, upwards of 670 vehicles per day would be added to local roads for construction workers commuting to/from the proposed construction workspace or contractor yards. Table 4.9-2 identifies the roadways that provide primary access to each of the project’s aboveground facilities along with the average daily traffic for the roadway. TGP anticipates that construction activities would occur six days per week (Monday through Saturday) for approximately 14 to 16 months (work on Sundays may be required for certain construction activities, as discussed above). During MSX operation, the 16 permanent personnel would use roadways in the study area.

Table 4.9-2: Primary Access Roadways for MSX Aboveground Facilities

| Facility | MP | Primary Access Roadway | ADT Count | Estimated Daily Vehicle Count | |
|---|--------------|---|--------------------|-------------------------------|-----------|
| | | | | Construction | Operation |
| Existing Station 54 and MSX OPP Facility ¹ | 0 | Tennessee Gas Road, off Hwy 1 | 3,600 ¹ | 10 - 30 | 3 - 5 |
| MSX OPP Facility 2 | 31 | Old U.S. Hwy 49W, off Hwy 49W | 240 ¹ | 5 - 10 | 1 |
| New Station 602 and Meter Station ¹ | 32 | Old U.S. Hwy 49W, off Hwy 49W | 240 ¹ | 45 - 90 | 1 - 3 |
| New Station 606A and Meter Station 2 | 96 | Jamison Rd (County Road 1140), off Hwy 35 | Not available | 35 - 60 | 1 - 3 |
| New Station 610 and MSX OPP Facility ³ | 166 | Pauldin Road, off Interstate 59 | Not available | 40 - 70 | 3 - 5 |
| MSX Meter Station ³ | 0 (Texas Gas | Jamison Rd (County Road 1140), | Not available | 5 - 10 | 1 |

¹⁷⁴ Contractor yard count obtained from table 1.2-1 of TGP’s June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

¹⁷⁵ Timeframes and vehicle numbers obtained section 5.3.3 of TGP’s June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

Table 4.9-2: Primary Access Roadways for MSX Aboveground Facilities

| Facility | MP | Primary Access Roadway | ADT Count | Estimated Daily Vehicle Count | |
|--------------------------------|----------|------------------------|------------------|-------------------------------|-----------|
| | | | | Construction | Operation |
| | Lateral) | off Hwy 35 | | | |
| MSX Meter Station ⁴ | 199 | Brightwater Road | 275 ² | 5 - 10 | 1 |

Sources: ¹ Average daily traffic (ADT) count obtained from MDOT (2025b) and ² ADOT count obtained from ALDOT (2024). Estimated daily construction and operational traffic counts obtained from the MSX June 30, 2025, Certificate Application, table 5.3-1 (Accession no.: 20250630-5152)

Key:
MSX = Mississippi Crossing Project, Hwy = highway, OPP = overpressure protection

Existing transportation networks would experience short-term, minor effects during construction due to equipment and material deliveries and construction workers commuting to the project workspace. For example, TGP would bore under paved roadbeds where practicable. In some cases, TGP would construct the pipeline across unpaved roads using open-cut methods. To minimize traffic delays at open-cut road crossings of unpaved roads, TGP would establish detours before and during construction. If no reasonable detours are feasible, at least one traffic lane of the road would be left open, except for brief periods when road closures would be required to construct the project. Minimal effects on traffic are anticipated for paved or unpaved roads that are crossed by boring. The lanes for these roads would remain open, and drivers would be required to reduce speeds at the crossing location. TGP’s construction contractors would obtain the necessary federal, state, and local roadway transport and load permits necessary to facilitate MSX construction activities.

TGP’s construction contractors may implement the following measures, where practicable, to minimize effects on residents and motorists during construction of the Project, including:

- scheduling oversized/overweight equipment and materials deliveries to occur during non-peak traffic hours and to avoid school bus routes/schedules;
- using pilot cars for oversize/overweight equipment and material deliveries in designated parking areas;
- employ traffic control measures and work with local school districts to identify school routes and commute times with the goal of minimizing construction traffic along these routes during peak use periods;
- installing signage and/or using flaggers at roadway turnoffs;
- maintaining access to private driveways;
- busing workers to the Project sites; and
- repairing roads damaged by construction activities.

TGP would utilize existing public roadways and existing and new TARs and PARs to access the project during construction and operation. An increased number of vehicles on nearby roadways is anticipated during peak traffic periods—typically between 6:00 a.m. and 8:00 a.m., and again after 6:00 p.m. Corresponding to the start and end of normal workday hours (Monday through Saturday, 7:00 a.m. to 7:00 p.m.). TGP would hire 16 permanent personnel for operation

of the project, and operation would have a negligible long-term effect on traffic and transportation routes.¹⁷⁶ The existing road networks would experience short-term, temporary effects during construction as a result of equipment and materials delivery and construction workers commuting to the Project workspace. More information on traffic can be found in the MSX Traffic Management Plan.

4.9.4.2 South System Expansion 4 Project

SSE4 would mainly be accessed by use of existing highways, roadways, and access roads. Table I.4.9-10 in appendix I presents the annual average daily traffic (AADT) and the functional classification of the primary road to be used to access SSE4 compressor and meter station sites. The compressor stations with the highest AADT are the Rincon Compressor Station in Effingham County, Georgia, the Auburn Compressor Station in Lee County Alabama, and the Ellerslie Compressor Station in Harris County, Georgia with AADTs of 34,500, 30,713, and 26,000, respectively. These existing compressor stations would be accessed by interstate highways and a minor arterial roadway. Meter stations with the highest AADT are the Smarr Meter Station in Monroe County, Georgia, the Warner Robins/Mid States/Perry/Hawkinsville Meter Station in Bibb County, Georgia, and the S. Atl. Meter Station in Clayton County, Georgia with AADTs of 95,700, 39,400 and 34,000, respectively. These meter stations would be accessed by interstate highways and a principal arterial.

Existing public and private roads in the study area would be used to access the SSE4 facilities, except in places where new access roads are necessary. TARs and contractor yards would be constructed to support construction activities and establish new PARs to support operation of the new facilities.

SSE4 construction would result in minor, short-term effects on the transportation system in the study area. Construction would be scheduled for work within or adjacent to roadways to avoid commuter traffic and schedules for school buses and local city transit buses to the extent practical.

Traffic control measures for roadways would be coordinated with the counties and local departments of transportation, as needed. At all times during open-cut road crossings, SNG/EEC would work with applicable agencies and landowners as appropriate to ensure that construction activities would not prevent emergency vehicles from reaching affected individuals. Mitigation measures may include temporary travel lanes during construction or the placement of steel plate bridges to allow continued traffic flow during open trenching or specific construction activities. If an open-cut road requires an extensive construction duration, provisions would be made for detours or other measures to permit traffic flow during construction. If the road were permitted to be closed during construction, signs and notices would be issued per the permit conditions and all affected landowners notified prior to the road closure. SNG/EEC would use a trenchless construction method to construct the pipeline across roadways where traffic could not be detoured or interrupted.

¹⁷⁶ Provided by TGP in its September 23, 2025, Supplemental Filing at Table 1.5-1 (Accession no.: 20250923-5058).

Equipment and materials would be transported to the project sites. Most construction equipment would remain on site during construction. Traffic would typically coincide with construction activity from 7:00 a.m. to 7:00 p.m. Mondays through Saturdays; however, weather conditions, site conditions, specialized construction techniques, electrical work, emergencies, or other atypical circumstances may require extended construction hours, which could include nighttime and/or Sunday hours. If work hours extend outside of the planned work hours, SNG/EEC would work with affected parties to accommodate special needs.

Construction crews would commute to the SSE4 work areas in their personal or company vehicles. Workers would be deployed in various locations, thereby reducing the potential for congestion in any one area. With typical start and finish times of 7:00 a.m. and 7:00 p.m., most workers would commute to and from the construction areas during off-peak hours. Some discrete activities may occur beyond these timeframes. Traffic flow effects would be temporary on any given section of roadway. Construction crews would be small and isolated, and effects on school bus routes are anticipated to be minimal. Table I.4.9-11 in appendix I presents the estimated number of daily round trips per SSE4 pipeline loop.

At peak construction, SNG/EEC estimates that the number of daily round trips for all compressor station sites would be 113, and the estimated number of daily round trips for all meter station sites is anticipated to be 29.¹⁷⁷ More information on traffic can be found in the SSE4 Traffic Management Plan, which we have reviewed and find it to be adequate. Although the influx of workers during construction would have a noticeable effect during peak worker commute times, this increase in traffic would be temporary and manageable. SNG/EEC would hire 29 permanent personnel for operation of the project, and operation would have a negligible long-term effect on traffic and transportation routes.

4.9.5 Economy, Employment, and Tax Revenues

4.9.5.1 Mississippi Crossing Project

Based on the 2019-2023 ACS data, the median household incomes within the affected counties range from \$29,434 in Holmes County, Mississippi to \$53,087 in Neshoba County, Mississippi. The state unemployment rate in July 2025 for Alabama and Mississippi was 3.0, and 4.0 percent, respectively. The unemployment rates ranged from 3.5 to 15.8 percent. (USCB, 2024b, 2024c and 2024d).

The top five industries throughout the project area are in educational services, and health care and social assistance, manufacturing; retail trade; construction; and arts, entertainment, and recreation, and accommodation and food services. (USCB, 2024a).

Information on county budgets, taxes and revenues, and expenditures is not readily available for most of the counties crossed by MSX. However, Tax Policy Center (2026) reports that 2023 state and local government expenditures per capita for Mississippi was \$11,047. Public expenditures in each county are approximated by multiplying the average spending per capita in each state by each county's population (see table 4.9-3).

¹⁷⁷ Trip information obtained from table 5.4-8 of SNG/EEC's July 3, 2025, Certificate Application (Accession no.: 20250703-5175).

Table 4.9-3: Population and Public Spending for MSX Counties

| County/State | 2023 Population | Public Spending within County (\$ millions) |
|----------------|-----------------|---|
| Choctaw, AL | 12,525 | 137.1 |
| Washington, MS | 43,674 | 482.5 |
| Sunflower, MS | 25,328 | 279.8 |
| Humphreys, MS | 7,570 | 83.6 |
| Holmes, MS | 16,491 | 182.2 |
| Attala, MS | 17,685 | 195.4 |
| Leake, MS | 21,288 | 235.2 |
| Neshoba, MS | 28,927 | 319.6 |
| Newton, MS | 21,151 | 233.7 |
| Lauderdale, MS | 71,984 | 795.2 |
| Clarke, MS | 15,424 | 170.4 |

Source: Tax Policy Center 2026

Choctaw County, Alabama has a 3 percent county tax rate and a 4 percent state tax rate, totaling 7 percent sales and use tax rate for the county. The county tax rate for all counties affected by MSX in Mississippi is 0 percent, and the state tax rate is 7 percent, totaling 7 percent sales and use tax rate for the counties (Alabama Department of Revenue 2025; State of Mississippi Department of Revenue 2025). Table 4.9-4 lists the state income tax ranges.

Table 4.9-4: Income Tax Range by State

| State | Income Tax Range |
|-------------|-------------------|
| Alabama | 2% to 5% |
| Georgia | 5.19% (flat rate) |
| Mississippi | 4.70% (flat rate) |

Sources: Alabama Department of Revenue 2025; Tax Foundation , 2025; State of Mississippi Department of Revenue 2024b

During the construction phase, substantial payroll would be distributed to personnel at various MSX project sites. A portion of this payroll is expected to be spent locally, supporting housing, food, gasoline, entertainment, and luxury items. This local spending would stimulate local economic activity by initiating direct and indirect economic effects through a multiplier effect on income and employment.

MSX material purchases and other expenditures amount to a total cost of \$1.7 billion.¹⁷⁸ While much of these expenditures are expected to be spent out of state, some expenditures may benefit local suppliers and contribute directly to the state economy. At the county and state levels, these expenditures are expected to provide a negligible, temporary, beneficial effect on the local economy.

¹⁷⁸ Cost obtained from section 5.3.4.1 of TGP’s June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

TGP plans to hire 16 additional permanent personnel for MSX operations. There may be additional materials expenditures during operations for maintenance. These expenditures would continue to benefit the local economy through both direct and indirect economic effects. Therefore, the operational payroll and taxes from materials purchases would have a long-term, positive, though negligible, effect on the local economy.

For MSX, significant payroll expenditures for the peak of 2,020 personnel during the estimated 14- to 16- month construction phase are expected to generate income tax revenue at both the state and federal levels. The income tax rate in Mississippi is a flat 4.70 percent, and in Alabama, it ranges from two to five percent. Federal income tax rates range from 10 to 35 percent. These income taxes would contribute to state and federal revenues (Tax-Rates.org, 2025).

While some sales tax may be generated from materials purchased locally, most project materials are expected to be sourced from out of state. Consequently, taxes on materials and services purchased out-of-state but installed in-state would primarily contribute to state and local revenues. In Mississippi, the use tax rate is seven percent, applied to these out-of-state purchases. In Alabama, the use tax rate is four percent, with an additional three percent in Choctaw County, totaling seven percent. The use tax generated from the installed project components is expected to amount up to \$57,346,233 in Mississippi and up to \$628,130 in Alabama, contingent on whether substantial sales taxes have already been paid on these items out of state (SalesTaxHandbook, 2025).¹⁷⁹ These figures represent the maximum potential tax contributions, as use tax is adjusted not to exceed the state sales tax rate if prior taxes have been paid. TGP may use the Mississippi Business Finance Corporation bond program to obtain savings on sales taxes in the State of Mississippi and would provide the Commission with additional information if it elects to pursue this program.

Construction tax revenues from income and sales taxes would provide a moderate, temporary, beneficial effect at the state level and a negligible beneficial effect at the federal level, given the scale of revenues and expenditures at these respective levels. These revenues are vital for funding essential public services such as education, infrastructure, and healthcare.

Ongoing operational payroll would continue to generate income tax revenue, and some operation and maintenance materials expenditures may occur, generating sales tax revenue. Given the significantly lower levels of payroll and materials tax revenue during operation, and considering the scale of respective government revenues, the overall effect on state and federal budgets would be negligible.

Taxes based on the assessed value of the operational facilities would provide a stable and long-term revenue stream to state and local governments. The precise allocation to each county would vary and is not definitively known. This is due to statutory regulations and local ordinances that dictate the percentages or amounts allocated to various jurisdictions, as well as factors such as the property's location, its assessed valuation, the specific needs and budget requirements of different governmental entities, and voter- approved initiatives, all of which influence how tax

¹⁷⁹ Use tax revenue obtained from section 5.3.4.3 of TGP's June 30, 2025, Certificate Application (Accession no.: 20250630-5152).

revenues are shared and allocated. The projected total ad valorem taxes from 2025 through 2038 are provided in the table 4.9-5.

Table 4.9-5: Estimated Ad Valorem Tax Rates (2025 – 2038) Generated by MSX

| Year | Ad Valorem Tax (\$000) | Year | Ad Valorem Tax (\$000) |
|------|------------------------|------|------------------------|
| 2025 | 889 | 2032 | 26,418 |
| 2026 | 6,154 | 2033 | 26,643 |
| 2027 | 9,034 | 2034 | 26,321 |
| 2028 | 13,950 | 2035 | 25,999 |
| 2029 | 23,832 | 2036 | 25,999 |
| 2030 | 25,226 | 2037 | 25,715 |
| 2031 | 26,048 | 2038 | 25,431 |

Operation tax revenues would provide long-term, minor beneficial effects on local and state governments.

4.9.5.2 South System Expansion 4 Project

Based on the 2019-2023 ACS data, the median household incomes within the counties that would be affected by SSE4 range from \$37,930 in Perry County, Alabama to \$104,333 in Harris County, GA. The state unemployment rate in July 2025 for Mississippi, Alabama, and Georgia was 4.0, 3.0, and 3.4 percent, respectively. The unemployment rates ranged from 2.7 to 6.6 percent for the counties that would be affected by SSE4. Both counties in Mississippi, two counties in Alabama (Elmore and Lee), and four counties in Georgia (Chatham, Effingham, Glascock, and Monroe) had unemployment rates lower than the state average (USCB, 2024b, 2024c and 2024d).

The top five industries throughout the project area are in educational services, health care and social assistance, manufacturing; retail trade; construction; and arts, entertainment, and recreation, and accommodation and food services. Educational, health care, and social assistance are the top industry category across most counties (USCB, 2024a).

The general sales and use tax rate for counties that would be affected by SSE4 are listed in table I.4.9-12 in appendix I. SSE4 expenditures would generate economic activity and support employment and income in the vicinity of the project and beyond through the multiplier effect, as initial changes in demand “ripple” through the local economy and support business-to-business spending and household spending. These local workers and project expenditures are summarized in table I.4.9-13 in appendix I.

Non-local workers (an estimated 95 percent of the construction workforce) are expected to spend on average an additional \$850 per week on lodging, meals, and incidentals. Expenses would be subject to county and local sales tax and lodging tax. An estimated 30 to 50 percent of construction materials and 10 percent of equipment expenditures would be local to the project counties.¹⁸⁰ These expenses also would be subject to county and local sales tax. The total local expenditures by workers is projected to be \$234,423,000, the total of local project expenditures is

¹⁸⁰ Expenditures obtained from section 5.4.2.1 of SNG/EEC’s July 3, 2025, Certificate Application (Accession no.: 20250703-5175).

projected to be \$398,831,000, and the total sales tax revenues (project and worker expenditures) is projected to be \$57,322,000.

Local property taxes are calculated by local tax assessors' offices based on assessed property value, any application adjustments or exemptions, and the tax (millage) rate. Local taxes support area schools, first responders, and other government activities and projects. Taxes are established each fiscal year by local officials based on an approved budget. Property tax revenues are presented in table I.4.9-14 in appendix I. SSE4 is anticipated to result in long-term beneficial effects from local and state tax revenues generated from worker payrolls and materials and services that are purchased.

SSE4 would affect agricultural lands during construction and operation. However, most agricultural lands affected by construction workspaces would be restored to pre-construction conditions and would be available to be used for crops, grazing, or hay as described in sections 4.2 and 4.8. Where new aboveground facilities would be constructed, agricultural lands would be permanently affected during operation. However, SNG/EEC have designed the project to minimize permanent effects on agricultural lands by leveraging the use of their existing facilities and rights-of-way.

4.9.6 Conclusion

Construction would temporarily increase the population in the general vicinity of these projects. No substantial effects on the local housing markets would be expected from this temporary population increase. Existing public services are adequate to meet the anticipated needs of the construction and operational workforce for the Projects.

Staging and delivery of construction personnel, materials, and equipment to project sites may temporarily affect traffic on roads where construction site access is provided, but no long-term effects in the study area counties would be anticipated. Appropriate measures and notifications would be implemented to minimize effects on residents or businesses along local roads.

Landowners would be compensated for the acquisition of new property for aboveground facilities and for easements, including compensation for construction-related damages from loss of crops, pasture, and timber.

4.9.6.1 Mississippi Crossing Project

MSX would create short-term economic benefits through construction employment, local spending, and increased sales and use tax revenues. The temporary arrival of construction workers could slightly increase housing demand in smaller rural counties, but nearby towns and cities would have enough lodging options to handle the additional workers. TGP would coordinate with local officials and emergency services to manage workforce-related needs, transportation logistics, and safety measures. Long-term economic contributions would result from property tax payments, operational spending, and a small number of permanent jobs. Because construction-related effects would be brief and localized, and because long-term effects would be limited to minor beneficial tax and employment gains, MSX would not result in significant adverse socioeconomic effects.

4.9.6.2 South System Expansion 4 Project

SSE4 would also generate temporary economic benefits from construction-related employment, worker spending, and local procurement of goods and services. Non-local workers would rely primarily on existing hotels, rental units, and RV accommodations, which would meet demand without disrupting local housing markets. SNG/EEC would maintain coordination with community officials and service providers to manage workforce needs and minimize short-term traffic or service effects. Over the long term, the project would provide ongoing tax revenues and minor operational employment benefits. Considering these temporary and localized effects, along with measures such as local coordination, traffic management, landowner compensation, and site restoration, SSE4 would not cause significant adverse socioeconomic effects and would likely have a modest positive influence on regional economies.

4.10 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) requires FERC to consider the effects of its undertakings on historic properties and includes consultation requirements with the Advisory Council on Historic Preservation, State Historic Preservation Officers (SHPO), Tribal Historic Preservation Officers (THPO), and/or Indian Tribes. The Companies are assisting FERC in meeting our obligations under section 106 by preparing the necessary information, analysis, and recommendations as authorized by 36 CFR 800.2(a)(3).

Construction and operation of the Projects have the potential to affect historic properties, which are cultural resources that are listed in or eligible for listing in the National Register of Historic Places (NRHP). These resources may include pre-contact or historic archaeological sites, districts, buildings, structures, objects, or places that hold traditional value for Native American communities or other cultural groups. To qualify as historic properties, such resources must generally retain integrity of location, design, setting, materials, workmanship, feeling, and association, and must satisfy one or more of the criteria established in 36 CFR 60.4. Potential direct effects may include the destruction or disturbance of all or part of an NRHP-eligible archaeological site, or the alteration or removal of a historic property. Indirect effects may include the introduction of visual, atmospheric, or auditory elements that alter the setting or character of a historic property.

4.10.1 Cultural Resource Surveys

The Companies conducted Phase I archaeological and historic architectural resource surveys of the proposed construction areas to identify cultural resources that could be affected by construction and operation of MSX and SSE4.

We received comments from the public regarding cultural resources during several public comment meetings and individual questions posted to the docket. Most of the non-specific comments related to general concerns over the need for comprehensive cultural resource surveys. More specific requests are addressed in the sections below.¹⁸¹

¹⁸¹ TGP June 30, 2025, Certificate Application, Attachment B, Response to Comments (Accession no.: 20250630-5311).

4.10.1.1 Mississippi Crossing Project

Prior to the cultural resources surveys, a review was undertaken of previously completed cultural resources surveys, previously recorded archaeological sites, built resources greater than 50 years of age, cemeteries, and properties listed in the NRHP that are located within 0.5-mile (0.8 kilometer) of the proposed project. To determine the location and presence of previously conducted surveys and recorded resources within both the direct and indirect area of potential effects (APE), a review of the data stored electronically in the Historic Resources Inventory Database maintained by the Mississippi Department of Archives and History (MDAH) and the online Alabama State Site File (ASSF) database maintained by the Alabama Office of Archaeological Research was conducted in accordance with MDAH and Alabama Office of Archaeological Research guidelines (ASSF, 2006; MDAH, 2019).

For the MSX Project, Phase I cultural resource investigations were conducted in Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties, Mississippi and Choctaw County, Alabama. The surveys were conducted between September 9, 2024, and March 23, 2026, to assess the potential for both direct and indirect effects on cultural resources by the proposed undertaking. The direct APE, designed to encompass any ground disturbance associated with the project, includes a corridor approximately 208 miles long and 300 feet wide centered on the MSX pipeline centerlines, and 50-foot-wide corridor along proposed access roads, and the complete footprint of the new compressor stations, meter stations, miscellaneous facilities, and contractor/storage yards.¹⁸² Phase I pedestrian and subsurface surveys were conducted following appropriate SHPO guidelines.

Archaeological Resources

In Mississippi, a total of 153 cultural resources investigations have been conducted within 0.5-mile of the project area.¹⁸³ The MSX direct APE intersects 17 of the previously conducted surveys.¹⁸⁴ While many of the intersecting surveys cross the MSX Project area for only short distances, one previous survey (MDAH no. 07-370) intersects and parallels the project area for approximately 52 miles.¹⁸⁵ However, a review of the project documentation suggested that the portions of the survey area that intersect an archaeological site and the survey portions within the Mississippi Delta do not meet current MDAH standards, as these portions of the survey were primarily pedestrian survey with very limited subsurface testing.

¹⁸² TGP indicated they are removing six contractor yards from the MSX Project scope totaling 136.5 acres. This acreage was removed from our review under section 106 of the NHPA and NEPA. See TGP May 5, 2026, Environmental Information Request Response (Accession no: 20260505-5068).

¹⁸³ TGP June 30, 2025, Certificate Application, Vol IV Resource Report 4 (CUI – PRIV) at pgs. 26-32 (Accession no.: 20250630-5159) and TGP September 23, 2025, Certificate Application, Supplemental Attachment 3 Tables @ pgs. 299 to 308 (Accession no.: 20250923-5058).

¹⁸⁴ TGP June 30, 2025, Certificate Application, Vol IV Resource Report 4 (CUI - PRIV) PRIV_1of2 at pg. 25 (Accession no.: 20250630-5159). This document is not publicly available because it contains the precise locations of sensitive resources.

¹⁸⁵ TGP June 30, 2025, Certificate Application, Vol IV Resource Report 4 (CUI - PRIV) at pg. 25 (Accession no.: 20250630-5159). This document is not publicly available because it contains the precise locations of sensitive resources.

The background review conducted through the online viewer at MDAH revealed that 380 archaeological sites¹⁸⁶ had been previously identified within a 0.5-mile radius of the project area within the State of Mississippi.¹⁸⁷ Of the 380 sites, 38 are in the project’s direct APE. Of those 38, 25 are recommended as ineligible, three sites are unevaluated, seven sites have an unknown recommendation, and three sites were recommended as eligible for listing in the NRHP (Sites Ho527, Ho1178, and Hu719). TGP has recommended that portions of site Ho527 within the project area be covered with matting during construction to avoid adverse effects to the site. Site Ho1178 and site Hu719 are proposed to be avoided via HDD.

TGP conducted archaeological investigations along the proposed project corridor and associated workspaces in Mississippi and Alabama. The field effort included approximately 33,425 shovel tests, of which 558 contained cultural material. An additional 1,837 shovel tests were not excavated because of slope, standing water, or prior disturbance. A supplemental investigation was conducted from May 5 through May 7, 2025, to evaluate the Natchez Trace Parkway crossing. All 167 shovel tests from this effort were negative for cultural material. Supplemental investigations were conducted in Mississippi from September 10, 2024 to March 23, 2026, and in Alabama from September 9 to May 29, 2025.¹⁸⁸

A total of 144 new archaeological sites¹⁸⁹ were identified in Mississippi, and 38 previously recorded sites were revisited. Thirty-seven isolated finds were also documented.¹⁹⁰ Most resources would be recommended as not eligible for inclusion in the NRHP. Sites that are recommended eligible or potentially eligible would be avoided or otherwise protected during construction. Table 4.10-1 summarizes the results of the MSX archeological survey.

Table 4.10-1: Summary of MSX Archaeological Survey Results

| State | New Sites | NRHP-Eligible or Potentially Eligible Sites | Avoidance / Treatment Measure |
|-------------|-----------|--|--------------------------------|
| Mississippi | 144 | 90 (HU528, HU713, HU719, HU755, HU758, HU760, HU761, HU764, HU767, HU768, HU772, HU775, HU777, HU780, HU783, HU784, HU785, HU786, HU789, HU792, HU797, HU798, HU800, HO527/645, HO639, HO1158, HO1176, HO1178, HO1181, HO1268, HO1270, HO1271, HO1272, HO1273, HO1274, HO1276, HO1278, HO1279, HO1281, HO1283, HO1286, HO1287, HO1288, 250122G1-CR01, 250214I1-CR01, NW554, NW556, NW560, NW564, NW565, NW566, NW568, NW569, LD653, LD790, LD918, LD921, LD922, LD923, LD924, LD926, LD927, LK583, CK703, CK704, CK715, WS1141, AT640, AT642, AT643, NE636, NE640, NE641, NE642, NE647, SU548, SU1245, SU1249, SU1250, WS844, WS990, WS1034, WS1140, | Avoided, reroute, or protected |

¹⁸⁶ TGP September 23, 2025, Certificate Application, Supplemental Attachment 3 Tables at pgs. 299 to 308 (Accession no.: 20250923-5058).

¹⁸⁷ TGP June 30, 2025, Certificate Application, Vol IV Resource Report 4 (CUI - PRIV) appendix 4.B.1 (Accession no.: 20250630-5159). This document is not publicly available because it contains the precise locations of sensitive resources.

¹⁸⁸ TGP September 23, 2025, Certificate Application, Supplemental Filing #2 Attachment 7 Survey Reports (Accession no.: 20250923-5056). These documents are not publicly available because they contain the precise locations of sensitive resources.

¹⁸⁹ TGP September 23, 2025, Certificate Application, Supplemental Filing #2 Attachment 3 Tables at pgs. 309 to 331 (Accession no.: 20250923-5058). Tables contain both isolated finds and archaeological sites.

¹⁹⁰ TGP May 22, 2026 Attachment SHPO Update (Not Filed)

| State | New Sites | NRHP-Eligible or Potentially Eligible Sites | Avoidance / Treatment Measure |
|---------------|------------|---|-------------------------------|
| | | WS1141, WS1144, WS1148, WS1149, WS1151, WS1153, WS1154) | |
| Alabama | 2 | 1 (1CW396) | Avoided |
| Total: | 146 | 92 | n/a |

In Mississippi, most recorded archaeological and historic resources would not meet the criteria for NRHP eligibility. In Humphreys, Holmes, Leake, Newton, Lauderdale, and Clarke counties, select sites would be recommended as eligible because they contain intact cultural deposits, diagnostic materials, or features with potential to yield important information about precontact or historic occupation. Each eligible site would be avoided through reroute, HDD, or the use of protective matting.

In Alabama, six previously recorded cultural resources surveys have been conducted within 0.5-mile of the MSX Project, none of which are within the project's APE.¹⁹¹

In Alabama, the background review revealed that nine archaeological sites have been previously identified within a 0.5-mile radius of the project area.¹⁹² None of these resources are listed on the NRHP. Ineligible sites within 0.5-mile include 1Cw123, 1Cw125, 1Cw127, 1Cw129, 1Cw324, and 1Cw325. As these sites are ineligible for the NRHP, no additional archaeological work is recommended. Site 1Cw128 has an undetermined evaluation, while 1Cw124 and 1Cw126 are recommended to be potentially eligible; however, they are located outside the MSX Project area and would not be affected by the project.

In Alabama, two new sites were identified within Choctaw County (1CW395 and 1CW396). One of these, site 1CW396, would have the potential to provide significant cultural information and would therefore be avoided. Four isolated finds were recorded and would not require further treatment. TGP submitted an avoidance and construction plan for site ICW396 on October 24, 2025, which was determined reasonable and appropriate by the Alabama SHPO on November 21, 2025.¹⁹³

In total, 92 archaeological sites along the project corridor are eligible or potentially eligible for NRHP listing. TGP would implement avoidance and protection measures for each of these resources. No adverse effects on historic properties would be anticipated as a result of project construction or operation.

¹⁹¹ TGP June 30, 2025, Certificate Application, Resource Report 4 appendix 4.B.2 (CUI - PRIV) at pg. 11 (Accession no.: 20250630-5159). This document is not publicly available because it contains the precise locations of sensitive resources.

¹⁹² TGP June 30, 2025, Certificate Application, Vol IV Resource Report 4 (CUI - PRIV) at pg. 14 (Accession no.: 20250630-5159). This document is not publicly available because it contains the precise locations of sensitive resources.

¹⁹³ TGP November 26, 2025, Supplemental Filing, SHPO consult and Avoidance Plan (CUI - PRIV) (Accession no.: 20251126-5116). The avoidance plan is not publicly available because it contains the precise locations of sensitive resources.

Architectural Resources

In Mississippi, a review of the MDAH database identified 44 historic structures that had been previously recorded within the visual APE.¹⁹⁴ These resources represent a variety of historic property types, including residential, agricultural, transportation, and community-related structures that date primarily from the nineteenth and early twentieth centuries. Most of the resources are associated with rural settlement and agricultural development patterns characteristic of the Mississippi Delta and central Mississippi uplands.

Each of the identified structures was evaluated for potential NRHP eligibility based on age, integrity, and association with significant historic themes. None of the previously recorded structures within the MSX visual APE were found to meet the NRHP criteria for significance or integrity. Many resources have undergone substantial alteration or deterioration that has compromised their historical character, while others lack distinctive architectural or historical associations that would convey significance at the local, state, or national level.

The architectural survey conducted for the MSX Project identified four new architectural resources and one previously recorded historic cemetery, which were revisited. All resources were recommended not eligible for listing in the NRHP. As a result, no additional documentation, avoidance measures, or further work are recommended for architectural resources within the project area.¹⁹⁵

In Alabama, a review of the Alabama Register of Landmarks & Heritage and the Alabama Properties listed on the NRHP did not reveal any previously recorded historic structures within the visual APE.¹⁹⁶ One historic-age architectural resource was identified within the visual APE in Choctaw County during survey. Similar to those in Mississippi, this resource was evaluated and determined not eligible for listing in the NRHP. Therefore, no further action is required for above ground historic properties associated with the MSX Project.

4.10.1.2 South System Expansion 4 Project

Prior to cultural resources surveys, SNG/EEC conducted a review of previously completed cultural resources surveys, previously recorded archaeological sites, built resources greater than 50 years of age, cemeteries, and properties listed in the NRHP that are located within 1.0 mile (1.6 kilometers) of the SSE4 Project. To determine the location and presence of previously recorded resources within both the direct and indirect APE, a review of the data stored electronically in the Historic Resources Inventory Database maintained by the MDAH, the online Alabama State Site File (ASSF) database maintained by the Alabama Office of Archaeological Research and the online Georgia's Natural, Archaeological, and Historic Resources GIS database (GNAHRGIS) maintained by the Georgia Historic Preservation Division (GAHPD) of the GADNR, and the

¹⁹⁴ TGP June 30, 2025, Certificate Application, Vol I Resource Report 4 at pgs. 4-6 (Accession no.: 20250630-5157). This document is not publicly available because it contains the precise locations of sensitive resources.

¹⁹⁵ TGP September 23, 2025, Certificate Application, Supplemental Filing #2 Attachment 7 Survey Reports (Accession no.: 20250923-5056). These documents are not publicly available because they contain the precise locations of sensitive resources.

¹⁹⁶ TGP June 30, 2025, Certificate Application, Vol I Resource Report 4 at pgs. 4-6 (Accession no.: 20250630-5152).

Georgia Archaeological Site File (GASF), was conducted in accordance with Mississippi, Alabama, and Georgia guidelines (ASSF, 2006; GASF, 2019; GAHPD, 2017; and MDAH, 2019).

Archaeological Resources

A Phase I archaeological investigation was conducted in Mississippi, Alabama, and Georgia to assess the potential for both direct and indirect effects on cultural resources by the proposed undertaking. The archaeological APE in all three states included approximately 91.4 meters (300 feet) in both greenfield (e.g., new pipeline right-of-way) and collocated areas (e.g., area adjacent to an existing pipeline corridor).¹⁹⁷

According to MDAH, there are 25 previously completed archaeological investigations within 1.0 mile (1.6 kilometers) of the SSE4 Project area in Mississippi.¹⁹⁸ Of these 25 surveys, three were associated with previous expansions of SNG's South Main Line Pipeline and thus are particularly pertinent to the current investigation.

According to MDAH, there are 33 previously recorded archaeological sites within 1.0 mile (1.6 kilometers) of the SSE4 Project area in Mississippi.¹⁹⁹ Of those sites, three were considered eligible or potentially eligible for listing in the NRHP (i.e., Sites 22CK666, 22LD710, and 22LD711). However, only sites 22LD710 and 22LD711 are in or adjacent to the proposed survey areas. Site 22LD710 was classified as a Late Archaic and Early, Middle, and Late Gulf Formational artifact scatter that likely represented the remains of a camp or village site. Similarly, site 22LD711 was classified as an Early, Late, and Middle Archaic site with an Early, Middle, and Late Gulf Formational component likely representing a former lithic manufacturing area.

According to the ASSF, there are 95 previously completed archaeological investigations within 1.0 mi (1.6 km) of the project area in Alabama, four of which were associated with previous expansions of SNG's South Main Line Pipeline.²⁰⁰

According to the ASSF, 189 archaeological sites have been identified within 1.0 mi (1.6 km) of the project area in Alabama, of which 34 sites are within or adjacent to the current survey areas.²⁰¹ Of the 189 previously recorded archaeological sites, 19 were recommended eligible for listing in the NRHP. Of the 19 sites recommended eligible for listing in the NRHP, the boundaries of sites 1MC21, 1MC22, 1TP59, 1MC158, and 1MC181 are within or adjacent to the currently proposed survey areas. Sites 1TP59, 1MC158, and 1MC181 are recommended as not eligible for

¹⁹⁷ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 Pub at pg. 4-4 (Accession No. 20250630-5311).

¹⁹⁸ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 Pub at pg. 4-2 (Accession No. 20250630-5311).

¹⁹⁹ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 Pub at pg. 4-2 (Accession No. 20250630-5311).

²⁰⁰ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 at pg. 4-2 (Accession No. 20250630-5311) and SNG/EEC November 5, 2025, Supplemental Filing 2, appendix 4.D at pgs. 4-5 (Accession No. 20251105-5164). This document is not publicly available because it contains the precise locations of sensitive resources.

²⁰¹ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 Pub at pg. 4-2 and 4-3 (Accession No. 20250630-5311) and SNG/EEC November 5, 2025, Supplemental Filing 2, appendix 4.D (4 of 4) at pgs. 5-6 (Accession No. 20251105-5164).

the NRHP and no further archaeological work is recommended. Site 1MC21 and site 1MC22 are eligible for the NRHP and would be avoided by SNG/EEC.

According to GNAHRGIS, there are 88 previously completed archaeological investigations within 1.0 mi (1.6 km) of the project area in Georgia, four of which were associated with previous expansions of SNG’s South Main Line Pipeline.²⁰²

According to GNAHRGIS, 262 archaeological sites have been identified within 1.6 km (1.0 mi) of the project area in Georgia.²⁰³ Of the 262 sites, 45 appear within or immediately adjacent to the proposed survey areas; however, none were recommended as eligible or potentially eligible for listing in the NRHP, thus no further archaeological work is recommended.

Phase I archaeological investigations for the SSE4 Project were conducted in Mississippi, Alabama, and Georgia to identify and evaluate cultural resources that could be affected by proposed construction. The surveys employed systematic pedestrian inspection and shovel testing across the direct and indirect APE. Shovel tests were generally spaced between 15 and 30 meters apart, with intervals adjusted according to landform and site probability.

Across all three states, the investigations involved the excavation of approximately 21,900 shovel tests and the exclusion of nearly 2,900 unexcavated test locations due to slope, standing water, disturbance, or obstructions. These efforts resulted in the identification of 179 cultural resources, including 111 archaeological sites, 59 isolated finds, and nine historic structures with associated archaeological material. A summary of the archaeological survey results is provided in table 4.10-2.

Table 4.10-2: Summary of SSE4 Archaeological Survey Results

| State | New Sites | NRHP-Eligible or Potentially Eligible Sites | Avoidance / Treatment Measure |
|--------------|------------|---|-------------------------------|
| Mississippi | 16 | 1 (22CK581) | Avoided |
| Alabama | 48 | 6 (1DS312, 1EE505, 1EE840, 1EE842, 1SU160, 1TP54) | Avoided |
| Georgia | 47 | 3 (MEP02272025-02, KED02122025-A, 9SP46) | Avoided |
| Total | 111 | 10 | n/a |

In Mississippi, the survey identified 21 resources, most of which lack the integrity or significance required for NRHP eligibility. One site containing potential human interments would be avoided, ensuring that no adverse effects would occur. In Alabama, 72 resources were recorded, and six may be eligible for NRHP listing. Each of the eligible sites would be protected through route modification or HDD, eliminating the need for further evaluation and avoiding effects. In Georgia, 86 resources were identified, including three that would warrant avoidance or additional study; all others were found not eligible for the NRHP or avoided by SSE4.

²⁰² SNG/EEC August 26, 2025, Supplemental Filing 1, appendix4.D-4H, Phase I Cultural Reports at pgs. 31-32, 34-47 (Accession No. 20250826-5140). These documents are not publicly available because they contain the precise locations of sensitive resources.

²⁰³ SNG/EEC June 30, 2025, Certificate Application, Vol I Resource Report 4 at pgs. 4-3 and 4-3 (Accession No. 20250630-5311).

Public comments from Elizabeth and Joel Lewis noted that several Native American mounds were located on their property. SNG/EEC responded that the project route had been adjusted to avoid their property. Mark Fortson representing Fordson Family, L.L.P. submitted a comment concerning the presence of a Grist Mill on their property in Harris County, Georgia on March 31, 2025. SNG/EEC responded that the project route would avoid the property. On April 21, 2025, James C. Nobles, Jr., of Gray, Georgia submitted a comment which noted several cultural resources located on two properties within the pipeline right-of-way. No cultural resources were identified within the two parcels during the cultural resources survey and SHPO concurred with the survey findings.²⁰⁴ On March 31, 2025, Alton Weeks commented that an unmarked burial ground was located on his property. SNG/EEC responded by noting that the project route was adjusted to avoid the property. Don Faulk representing the Mount Zion Baptist Church in Macon, Georgia commented on April 1, 2025 that he has concerns about the proximity of the project route to their historic age church and cemetery. SNG/EEC responded that the proposed route of the project has been adjusted to avoid the property.²⁰⁵

After additional survey work in Mississippi, the Mississippi SHPO responded to the Phase I survey report that Sites 22Ck578 and 22Ck579 were likely destroyed and no further work is required.²⁰⁶ Additional requested survey work in Georgia was reviewed by the Georgia SHPO which concurred with all site eligibility recommendations and avoidance measures, and determined that NRHP eligibility under Criterion D for site 9WG341/Hood Cemetery and the Mount Zion Baptist Cemetery is currently unknown due to lack of adequate information provided, and that the portion of the site within the SSE4 Project's APE may retain integrity and data potential.²⁰⁷

The combined results of these investigations demonstrate that SNG/EEC conducted a thorough and coordinated archaeological survey across the project corridor. Through avoidance, protective matting, and alignment adjustments, no adverse effects on historic properties would be anticipated as a result of SSE4 Project construction or operation.

Architectural Resources

A review of state historic preservation databases and field investigations identified previously recorded and newly documented historic-age architectural resources within the visual APE of the SSE4 in Mississippi, Alabama, and Georgia. These resources represent a range of building types and land uses, including residential dwellings, agricultural complexes, transportation-related structures, commercial buildings, and community facilities, most of which date from the nineteenth through mid-twentieth centuries.

In Mississippi, 19 previously recorded historic standing structures were identified within one mile of the SSE4 Project area including 11 residences, three schools, two stores, a former plantation, a bridge and a historic cemetery. Twelve of these resources are listed in the NRHP.

²⁰⁴ SNG/EEC, January 7, 2026, Agency Updates, letter from HPD dated 12/19/2025 (Accession no.: 20260107-5005)

²⁰⁵ SNG/EEC, June 30, 2025, Certificate Application, Attachment B, Response to Comments (Accession no.: 20250630-5311).

²⁰⁶ SNG/EEC, January 7, 2026, Agency Updates, letter from MDAH dated 12/1/2025 (Accession no.: 20260107-5005).

²⁰⁷ SNG/EEC, January 7, 2026, Agency Updates, letter from MDAH dated 12/1/2025 (Accession no.: 20260107-5005).

Field investigations conducted for the current survey identified 15 new architectural resources. None of the newly or previously recorded structures exhibit sufficient integrity or significance to warrant NRHP listing, and no further work is recommended for these resources.²⁰⁸

In Alabama, 141 previously recorded historic standing structures were identified within one mile of the project corridor. None of these structures are listed in or recommended eligible for the NRHP. Field investigations identified an additional 13 historic-age standing structures, seven structures associated with archaeological remains, and three cemeteries. All were evaluated and determined not eligible for NRHP listing because of limited integrity, lack of architectural distinction, or absence of significant historical associations. Consequently, no further investigation or treatment measures are recommended.

In Georgia, the SSE4 survey documented 61 historic-age standing structures within the project area. These resources primarily represent rural residential and agricultural properties typical of the region's twentieth-century landscape. All recorded structures were evaluated and determined not eligible for NRHP listing. Therefore, no additional documentation or avoidance measures are warranted for aboveground historic-age resources associated with the SSE4 Project.

4.10.2 SHPO Consultation

4.10.2.1 Mississippi Crossing Project

TGP initiated Section 106 consultation with the Mississippi and Alabama SHPOs in August 2024, requesting concurrence with the cultural resources survey work plan. TGP submitted its Phase I cultural resources survey reports and Unanticipated Discoveries Plans (UDP) to the Alabama and Mississippi SHPOs on June 7, 2025. The Alabama and Mississippi SHPOs provided comments on TGP's reports in July 2025. TGP addressed these comments and submitted the revised Phase I Cultural Resources Survey Reports to the agencies in September 2025.

In October 2025, the Alabama SHPO, concurred with the findings of the Phase I Cultural Resources Survey Reports for the MSX Project, agreeing that the project, as described, would not result in adverse effects on cultural or historical resources, and requested a detailed avoidance plan be provided to their office for review and comment prior to commencement of project activities.²⁰⁹ On November 21, 2025, the Alabama SHPO determined that TGP's submitted avoidance/construction plan for site ICW396 was reasonable and acceptable.²¹⁰ We agree.

The Mississippi SHPO submitted additional comments on the revised and addendum Phase I reports, which TGP addressed and submitted updated reports on February 11, 2026. MDAH provided concurrence with the findings on April 15, 2026; however, it requested an avoidance plan and additional site-specific information for certain areas. TGP submitted its revised addendum Phase I archaeological report to the Mississippi SHPO on May 18, 2026. In a letter dated June 18,

²⁰⁸ SNG/EEC August 26, 2025, Certificate Application, Supplemental 2 appendix 4.D-4H, Phase I Cultural Reports at pgs. 492 (Accession no.: 20250826-5140). These documents are not publicly available because they contain the precise locations of sensitive resources.

²⁰⁹ TGP's supplemental filing dated January 26, 2026, contained a copy of the Alabama SHPO concurrence letter dated October 20, 2025 (Accession no.: 20260126-5168).

²¹⁰ AHC's letter of acceptance for the avoidance plan dated November 21, 2025 (Accession no. 20251126-5115).

2026, the Mississippi SHPO concurred that the MSX Project would not adversely affect historic properties.²¹¹ We agree.

4.10.2.2 South System Expansion 4 Project

SNG/EEC initiated Section 106 consultation with the Mississippi and Alabama SHPOs on September 12, 2024, and Georgia SHPO on October 9, 2024, requesting concurrence with the cultural resources survey scope of work. The Mississippi SHPO concurred with the scope of work on November 20, 2024, the Alabama SHPO on October 22, 2024, and the Georgia SHPO on November 8, 2024.

The Georgia SHPO reviewed SNG/EEC's Phase I cultural resources report and provided comments and requests for additional information, including the NRHP assessment of several historic standing structures utilizing established historic contexts (GAHDP, 2023). SNG/EEC submitted updated reports and the Georgia SHPO responded to those updates on December 19, 2025, stating that the project, as proposed, would have no adverse effect on historic properties. Three addendums have been filed with the Georgia SHPO and final concurrences have been received for Addendums I-III on December 19, 2025, March 2, 2026, and May 13, 2026 respectively.²¹² The Mississippi SHPO responded in a letter dated December 1, 2025, concurring with the Phase I survey report findings, and providing no objections to the proposed undertaking.²¹³ The final report for Alabama was submitted on April 10, 2026 to the Alabama SHPO. The Alabama SHPO provided final concurrence on May 13, 2026.²¹⁴ Based on the recommendations and SHPO comments, the SSE4 Project would have no adverse effect on historic properties. We agree.

4.10.3 Native American Consultations

4.10.3.1 Mississippi Crossing Project

As part of the Section 106 initiation, TGP invited the following Tribal communities to participate in the pre-filing process in letters dated August 23, 2024, and December 10, 2024: the Alabama-Coushatta Tribe of Texas; the Choctaw Nation of Oklahoma; the Coushatta Tribe of Louisiana; the Mississippi Band of Choctaw Indians; the Muscogee (Creek) Nation; and the Quapaw Nation.²¹⁵

The Choctaw Nation of Oklahoma responded on September 28, 2024, stating that the project lies within their area of interest and requesting additional information. A letter from the tribe was filed requesting consulting party status on January 10, 2025, and another letter on May 23, 2025, requesting consultation on a government-to-government level. TGP provided the requested information on June 27, 2025.²¹⁶ TGP sent revised survey reports to the Tribe on

²¹¹ TGP's weekly SHPO update No. 7 (Accession no.: 20260622-5116).

²¹² Georgia SHPO concurrence (Accession no. 20260522-5277 EIR3 Part 4).

²¹³ SNG/EEC, January 7, 2025, Supplemental Filing #3, letter from MDAH dated 12/1/2025 and letter from GAHDP dated 12/19/2025 (Accession no.: 20260107-5005).

²¹⁴ Alabama SHPO concurrence (Accession no. 20260522-5277 EIR3 Part 2).

²¹⁵ TGP June 30, 2025, Certificate Application, Resource Report 4, at pgs. 4-12 to 4-16 (Accession no.: 20250630-5152).

²¹⁶ TGP June 30, 2025, Certificate Application, Vol I Resource Report 4, at pg. 4-13 (Accession no.: 20250630-5152).

October 9, 2025 and received confirmation of receipt from the tribe on November 13, 2025.²¹⁷ The Tribe requested shapefiles of cultural site boundaries on January 26, 2026 and TGP responded with the requested data on February 3, 2026. On February 11, 2026, the Choctaw Nation of Oklahoma provided initial comments and on February 27, 2026, TGP responded to the provided comments. On March 31, 2026, the Tribe provided additional comments, and TGP provided responses on April 23, 2026.²¹⁸

The Mississippi Band of Choctaw Indians responded on December 23, 2024, requesting additional information.²¹⁹ TGP responded on January 15, 2025, informing the Tribe that TGP was evaluating the route alignment and would provide the requested information when the route is further determined. On June 27, 2025, TGP provided the requested information to the Tribe. On August 22, 2025, the Tribe responded to TGP's June 27, 2025 submittal of additional information and confirmed receipt. TGP provided copies of revised Phase I reports to the Tribe on October 9, 2025, and shapefiles of cultural site boundaries on February 3, 2026. On March 16, 2026, the Tribe requested shapefiles of the latest project routes. TGP provided with the requested files. On April 22, 2026, the Tribe provided comments on the Projects.²²⁰ In their response, the Tribe expressed continued concern over the consultation process and that they were provided with an older version of the Phase I report. The Tribe noted that they received the latest version of the Phase I report from the MDAH. The Tribe noted that they would continue to review the materials and would submit additional comments.²²¹

The Muscogee (Creek) Nation responded on September 11, 2024, confirming their participation in the pre-filing process.²²² The Quapaw Nation responded on September 4, 2024, requesting additional information, which TGP provided on September 9, 2024.²²³ The Quapaw Nation again requested additional information on December 26, 2024, for locations of compressor stations. TGP responded on January 13, 2025, informing the Nation that TGP was evaluating the exact compressor station locations and would provide the information when the locations are determined. TGP provided the requested information to the Tribe on June 27, 2025. On April 15, 2026, the Quapaw Nation requested information on the status of Section 106 for the project. TGP provided the requested information on April 16, 2026. On April 22, 2026, the Quapaw Nation provided comments on the project and noted concerns with the consultation process.²²⁴ On May 6, 2026, TGP responded to the Tribe's comments.²²⁵

²¹⁷ TGP November 19, 2025, Supplemental Filing (Accession no: 20251119-5164).

²¹⁸ TGP April 23, 2026 Attachment DR-11a, Status of Approvals, Certificates, Consultations and Notifications Table (Accession no: 20260423-5193).

²¹⁹ TGP June 30, 2025, Certificate Application, Vol I Resource Report 4, at pg. 4-14 (Accession no.: 20250630-5152).

²²⁰ TGP April 23, 2026 Attachment DR-11a, Status of Approvals, Certificates, Consultations and Notifications Table (Accession no: 20260423-5193).

²²¹ TGP response to April 9, 2026 EIR, Attachment DR-11b (Accession no.: 20260423-5193)

²²² TGP June 30, 2025, Certificate Application, Vol I Resource Report 4, at pg. 4-15 (Accession no.: 20250630-5152).

²²³ TGP June 30, 2025, Certificate Application, Vol I Resource Report 4, at pg. 4-15 (Accession no.: 20250630-5152).

²²⁴ TGP April 23, 2026 Attachment DR-11a, Status of Approvals, Certificates, Consultations and Notifications Table (Accession no: 20260423-5193).

²²⁵ TGP May 8, 2026, Agency and Permitting Update (Accession no.: 20260508-5053)

4.10.3.2 South System Expansion 4 Project

As part of the Section 106 initiation, SNG/EEC invited the following Tribal communities to participate in the pre-filing process in letters dated on September 25, 2024 and October 13, 2024: the Alabama-Coushatta Tribe of Texas; the Alabama-Quassarte Tribal Town; the Catawba Indian Nation; the Cherokee Nation; the Choctaw Nation of Oklahoma; the Coushatta Tribe of Louisiana; the Eastern Band of Cherokee Indians; the Eastern Shawnee Tribe of Oklahoma; the Mississippi Band of Choctaw Indians; the Muscogee (Creek) Nation; and the Seminole Tribe of Florida.²²⁶

The Choctaw Nation of Oklahoma responded on November 17, 2024, and February 18, 2025, requesting additional information. SNG/EEC provided the requested information on November 26, 2024, and March 12, 2025. On April 23, 2025, the Choctaw Nation of Oklahoma stated via email that SSE4 crosses many Choctaw sites including burial locations. The Choctaw Nation of Oklahoma requested to work closely with the SNG/EEC to avoid these sites and that a detailed inadvertent discovery plan is created. On October 27, 2025, SNG/EEC communicated that as soon as data analysis is complete, a report would be submitted to them that details the results of the investigation in the Choctaw Nation of Oklahoma Area of Historic Interest.²²⁷ The Muscogee (Creek) Nation responded on October 25, 2024, requesting the cultural resources survey report with NRHP determinations when complete. The Catawba Indian Nation responded on February 4, 2025, stating that they have no immediate concerns but requested that they be notified if Native American artifacts and/or human remains are located.

4.10.3.3 FERC Tribal Consultation

In letters dated August 7, 2025, FERC invited federally recognized tribes to participate in our review of the Mississippi Crossing Project and the South System 4 Expansion Project. FERC sent letters to the same tribes as TGP and SNG/EEC, however, additional Tribes were identified that have interest in the two project areas and were also sent letters inviting their participation in the review of the Projects. Those Tribes include the Absentee Shawnee Tribe of Indians of Oklahoma; the Chickasaw Nation; the Chitimacha Tribe of Louisiana, the Jena Band of Choctaw Indians; the Kialegee Tribal Town; the Poarch Band of Creek Indians; the Quapaw Nation; the Thlopthlocco Tribal Town; and the Tunica-Biloxi Indians of Louisiana.

On May 19, 2025, the Choctaw Nation of Oklahoma filed a letter to the docket requesting to be a consulting part on the Projects.²²⁸ On August 21, 2025, the Choctaw Nation of Oklahoma stated in a letter filed to the docket their concerns with multiple MSX Project locations crossing into their homelands. On October 10, 2025, the Choctaw Nation of Oklahoma sent a letter acknowledging FERC's correspondence and reiterated their concern with the project location and concerns with various processes due to large nature of the combined Projects.²²⁹ They filed another letter dated February 4, 2026, stating that they acknowledged FERC's continuing correspondence and asked for continued consultation while they continued to review received documentation for the project.²³⁰ On April 13, 2026, the Choctaw Nation of Oklahoma stated in a letter that they

²²⁶ SNG/EEC July 3, 2025, Certificate Application, Vol I Resource Report 4, at pg. 4-10 and 4-11 (Accession no.: 20250703-5175).

²²⁷ SNG/EEC November 5, 2025, Supplemental Filing #2, appendix 4.I (Accession no.: 20251106-5006).

²²⁸ FERC May 19, 2025 (Accession no: 20250519-5070)

²²⁹ FERC October 10, 2025, (Accession no: 20251010-5208).

²³⁰ FERC February 4, 2026 (Accession no: 20260204-5119).

were continuing to review documentation and were awaiting completion of survey reports from the SSE4 Project.²³¹

On August 5, 2025, the Mississippi Band of Choctaw Indians filed a letter to the docket stating that they would like to remain in consultation on the Projects.²³² On February 11, 2026, the Mississippi Band of Choctaw Indians sent an email to FERC staff to inquire regarding government-to-government consultation with FERC for the Projects. FERC staff attempted to contact the Tribe by telephone to discuss any issues or concerns they may have regarding the Projects on February 12, February 19, February 25, and March 27, 2026, and left voicemails when available.²³³ On March 3, 2026, FERC filed a memo providing record of consultation efforts with the Mississippi Band of Choctaw Indians under CP25-514-000.²³⁴ No response has been received.

On March 5, 2026, the Alabama-Coushatta Tribe of Texas stated in a letter that they had reviewed the projects and they had no comments as the project areas do not lie in their areas of interest.²³⁵

On March 26, 2026, the Bureau of Indian Affairs commented that TGP and FERC had not conducted meaningful government-to-government consultation with the Mississippi Band of Choctaw Indians and that the pipeline alignment overlapped with Tribal property in Leake County, Mississippi, and encroached upon Tribal parcels in Attala, Leake, and Neshoba Counties, and the Conehatta and Standing Pine communities.²³⁶ TGP responded to the Bureau of Indian Affairs' comments on March 31, 2026, confirming that the MSX Project does not cross Tribal trust lands, Tribal fee lands, or reservation lands.²³⁷ As stated above, FERC staff made several attempts to communicate with the Mississippi Band of Choctaw Indians regarding the project.

4.10.4 Unanticipated Discoveries Plan

4.10.4.1 Mississippi Crossing Project

TGP submitted two UDPs for the MSX Project in Mississippi and Alabama for review by each state SHPO. Each UDP outlines procedures for treatment of unanticipated cultural resources during construction activities. The plans outline training and orientation procedures pertaining to cultural resources for construction contractors, definitions and types of potential resources to be encountered, NRHP eligibility assessment protocols, and key contacts at the SHPO, Tribes, FERC and TGP. Additionally, TGP provided procedures for the discovery and treatment of unanticipated human remains and burial sites per state and federal regulations. We find the UDPs acceptable.

²³¹ SNG/EEC (Accession no: 20260413-5097)

²³² SNG/EEC November 5, 2025, Certificate Application, Supplemental Filing #2 Attachment B Tribes Public at pgs. 3 to 4 (Accession no.: 20251106-5006). As the letter predates our government-to-government letter, this correspondence appears to be in response to the Projects NOI which also initiates FERC's section 106 consultation for the Projects.

²³³ See Tribal Consultation Memo on FERC's eLibrary (Accession no.: 20260330-3006).

²³⁴ FERC March 3, 2026 (Accession no: 20260330-3006).

²³⁵ TGP, March 5, 2026, Comments from the Alabama-Coushatta Tribe of Texas (Accession no: 20260305-0002).

²³⁶ TGP March 26, 2026, Comments on draft EIS (Accession no: 20260326-5141).

²³⁷ TGP March 31, 2026, Response to the U.S. Bureau of Indian Affairs comments on DEIS (Accession no: 20260331-5250).

4.10.4.2 South System Expansion 4 Project

SNG/EEC submitted three UDPs for the SSE4 Project in Mississippi, Alabama, and Georgia. The UDPs outline procedures for treatment of unanticipated cultural resources during construction activities. The plans outline training and orientation procedures pertaining to cultural resources for construction contractors, definitions and types of potential resources to be encountered and key contacts at the SHPO, Tribes, FERC, and SNG/EEC. Additionally, SNG/EEC provided procedures for the discovery and treatment of unanticipated human remains and burial sites per state and federal regulations. We find the UDPs acceptable.

4.10.5 Conclusion

4.10.5.1 Mississippi Crossing Project

The MSX Project would involve ground disturbance across multiple Mississippi counties and a small portion of Alabama. Archaeological surveys identified both previously known and newly recorded sites, but most would not meet the criteria for NRHP eligibility. Twenty-two sites would be considered eligible or potentially eligible; each would be avoided through route realignment, HDD, or protective measures. Architectural surveys found that none of the existing or newly identified aboveground structures retain sufficient integrity or significance for NRHP listing. The visual effects of the project would therefore not alter the character of any eligible historic properties. As a result, the MSX Project would have no adverse effect on historic properties.

Tribal communication would continue through coordination with the Choctaw Nation of Oklahoma, Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, and Quapaw Nation. Any unanticipated discoveries would be conducted in accordance with the approved UDPs.

4.10.5.2 South System Expansion 4 Project

The SSE4 Project would cross Mississippi, Alabama, and Georgia. Archaeological surveys conducted along the proposed corridor identified numerous cultural resources, but all would be either avoided or determined not eligible for the NRHP. A small number of sites with potential eligibility in each state would be avoided by design modifications or protective methods. Architectural surveys identified historic-age structures within the visual APE effects, but none would qualify for NRHP listing due to loss of integrity or lack of significance. Public comments resulted in modified project routes avoiding several specific properties and suspected cultural resources. As a result, the SSE4 Project would have no adverse effect on historic properties.

Coordination with the Mississippi, Alabama, and Georgia SHPOs and Tribes would continue during project construction to ensure continued compliance in the event of an unanticipated discovery, which would be handled in accordance with the approved UDPs.

4.10.5.3 Compliance with the National Historic Preservation Act

FERC has completed its compliance requirements under Section 106 of the NHPA for the MSX and SSE4 Projects.

4.11 AIR QUALITY

The term air quality refers to relative concentrations of pollutants in the ambient air. Local and regional air quality in the Project areas would potentially be affected by construction and operation of the Projects. This section summarizes federal and state air quality regulations that are applicable to the proposed facilities. We also characterize the existing air quality and describe effects the facilities may have on regional and local air quality, as well as proposed mitigation measures to reduce adverse effects on air quality.

The EPA established the National Ambient Air Quality Standards (NAAQS) to protect human health and public welfare.²³⁸ Primary standards protect human health, including the health of defined sensitive populations, such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. NAAQS have been developed for criteria air pollutants – sulfur dioxide (SO₂), particulate matter with a diameter of 10 microns or less (PM₁₀), particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone, and lead, and include standards for short-term (acute) and long-term (chronic) exposures. Emissions of oxides of Nitrogen (NO_x) and volatile organic compounds (VOC) are regulated by the EPA as precursors to the formation of ozone. VOC means any compound of carbon (excluding CO, carbon dioxide [CO₂], carbonic acid, metallic carbides or carbonates, and ammonium carbonate), which participates in atmospheric photochemical reactions [40 CFR 51.100s]). The EPA also regulates hazardous air pollutants (HAP) which are pollutants that are known to cause cancer and other serious health effects.

Other pollutants, not produced by combustion, include fugitive dust and fugitive emissions. Fugitive dust is a mix of PM_{2.5}, PM₁₀, and larger particles generated by moving vehicles, construction equipment, earth movement, and/or wind erosion. Fugitive emissions, in the context of this EIS, also include fugitive emissions of methane (CH₄) and VOCs from operational pipelines and aboveground facilities.

The EPA defines air pollution to include the mix of the following six greenhouse gases (GHG): CO₂, CH₄, nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs produced by fossil-fuel combustion are CO₂, CH₄, and N₂O, which are generally non-toxic and non-hazardous at normal ambient concentrations and are identified as pollutants due to the increased atmospheric concentration of GHGs since the industrial age and warming of the climatic system. Emissions of GHGs are quantified and regulated in units of carbon dioxide equivalent (CO₂e). The CO₂e unit of measure factors in the global warming potential (GWP²³⁹) of each GHG over a specified timeframe. There are no NAAQS or established significance thresholds for GHGs. During construction and operation of the Projects, these GHGs

²³⁸ The current NAAQS are listed on the EPA's website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>

²³⁹ GWP is a measure of heat absorbed by the emissions of 1 ton of a GHG over a period of time relative to the heat absorbed by 1 ton of CO₂ emissions. Equivalent carbon dioxide (CO₂e) is the amount of carbon dioxide that would cause the same level of radiative forcing as a unit of one of the other GHGs. CO₂e is calculated by multiplying the mass of GHG emissions and the GWP of that GHG. The primary GHG from fossil fuels have the following 100 year GWP: methane 28, N₂O 265. Thus, 28 tons of carbon dioxide would cause the same level of radiative forcing as 1 ton of methane over 100 years.

would be emitted from the combustion of fuel in various types of engines associated with the Projects.

We received public comments during the scoping periods as well as during the draft EIS comment period that expressed concerns about potential air quality health effects from the Projects, including emissions and dust generated during construction and operation. These effects are addressed in Sections 4.11.3 and 4.11.4. Commenters also noted risks from increased greenhouse gas emissions and potential CH₄ leaks, requesting that mitigation measures be implemented to protect local communities and environmental health. Cumulative effects from greenhouse gases are addressed in the Cumulative Effects section of this EIS.

4.11.1 Existing Air Quality

The subsections below present the regional climate in the Project areas and describe well-established air quality concepts that are applied to characterize air quality and to determine the significance of increases in air pollution.

4.11.1.1 Mississippi Crossing Project

Regional Climate

The area for the MSX air analysis includes Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties in Mississippi and Choctaw County in Alabama. Table I.4.11-1 in appendix I summarizes the climate of the MSX areas represented by the National Weather Service Meteorological Station data.

Ambient Air Quality Standards and Attainment Status

The NAAQS are presented in table I.4.11-2 in appendix I. Mississippi and Alabama have adopted the NAAQS and do not have more stringent ambient standards.

Air Quality Control Regions (AQCR) 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. Each AQCR, or smaller portion within an AQCR (such as a county or multiple counties), 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 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 for continued attainment of the NAAQS. Areas that lack sufficient data to determine attainment status are designated “unclassifiable” and treated as attainment areas.

The EPA and state and local agencies have established a network of ambient air quality monitoring stations to measure concentrations of criteria pollutants across the United States. The data are then averaged over a specific time period and used by regulatory agencies to determine compliance with the NAAQS and to determine if an area is in attainment, nonattainment, or maintenance. Washington, Sunflower, Humphreys, Holmes, Attala, Leake, Neshoba, Newton, Lauderdale, and Clarke counties in Mississippi and Choctaw County in Alabama, where MSX

would be located, are classified as attainment or unclassified for all criteria pollutants. Measured concentrations (micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) of ozone, CO, NO₂, PM_{2.5}, PM₁₀, and SO₂ from representative air quality monitors for the MSX area are summarized in tables I.4.11-3, I.4.11-4, and I.4.11-5 in appendix I.

4.11.1.2 South System Expansion 4 Project

Regional Climate

The SSE4 air analysis area includes Sumter, Hale, Dallas, Elmore, Lee counties in Alabama, Harris, Upson, Bibb, Baldwin, Jefferson, and Effingham counties in Georgia, and Clarke County, Mississippi. Table I.4.11-1 located in appendix I summarizes the climate of the SSE4 area represented by the National Weather Service Meteorological Station data.

Ambient Air Quality Standards and Attainment Status

Mississippi, Georgia and Alabama have all adopted the NAAQS and do not have more stringent ambient standards.

Sumter, Hale, Dallas, Elmore, and Lee counties in Alabama, Harris, Upson, Baldwin, Jefferson, and Effingham counties in Georgia, and Clarke County in Mississippi, where SSE4 would be located, are classified as attainment or unclassified for all criteria pollutants. Bibb County, Georgia is classified as a maintenance area for 1997, 8-hour average ozone and 1997, 24-hour average PM_{2.5} NAAQS. Measured concentrations ($\mu\text{g}/\text{m}^3$) from representative air quality monitors for the Project area are summarized in tables I.4.11-6 through I.4.11-9 in appendix I.

4.11.2 Air Quality Regulations

The MDEQ has a federally approved state implementation plan to regulate air emissions produced by stationary sources such as MSX. The MDEQ, ADEM, and GAEPD have federally approved state implementation plans to regulate air emissions produced by stationary sources such as SSE4. MDEQ's air quality regulations are codified under Mississippi Administrative Code, Chapter 11. ADEM's air quality regulations are codified under Alabama Administrative Code, Rule 335. GAEPD's air quality regulations are codified under Georgia Administrative Code (GAC), Chapter 391. The following sections summarize the applicability of various state and federal air quality regulations.

4.11.2.1 Federal Regulations

New Source Review

New or modified air pollutant emission sources are subject to a state-level permitting process known as New Source Review (NSR) prior to construction or operation. The NSR permitting program is designed to protect air quality when air pollutant emissions are increased either through the modification of existing sources or through the construction of a new source of air pollution. There are three categories of NSR permitting: PSD, Nonattainment New Source Review (NNSR), and minor source NSR. PSD, NNSR, and minor source NSR are applicable depending on the projected emissions. The major source threshold depends on the pollutant, whether the project is an existing major source, and if the projects are in an attainment area or nonattainment/maintenance area.

PSD regulations are codified in 40 CFR 52.21, which define a major source as any source type belonging to a list of named source categories that have a potential to emit (PTE) 100 tons per year (tpy) or more of any regulated pollutant, or 250 tpy for sources not among the listed source categories. None of the proposed facilities qualify as a major source under NSR; therefore, PSD or NNSR do not apply to the Projects.

Class I Areas and Air Quality Related Values

Under the PSD program, the EPA designates mandatory federal Class I areas to protect certain land use categories (e.g., wilderness areas, national parks, national forests) to ensure that deterioration of air pollutants (PM₁₀, PM_{2.5}, SO₂, and NO_x) and existing air quality-related values, such as visibility, are minimized in these areas. Relative to Class II and III areas, Class I areas have the most restrictive allowable ambient air quality increments, defined as increases in pollutant concentrations over baseline concentrations. The closest Class I areas to the project include Cohotta Wilderness Area (165 km), Bankhead National Forest (196 km), Joyce Kilmer-Slickrock Wilderness Area (223 km), Shining Rock Wilderness Area (229 km), Okefenokee National Wildlife Refuge (232 km), Breton Wildlife Refuge (252 km), Sipsey Wilderness Area (203 km), and Wolf Island (103 km). MSX and SSE4 do not propose any new major source or major modification subject to PSD; therefore, these Projects are not subject to Class I area related effect assessment.

Title V / 40 CFR 70 Operating Permit

Title V under 40 CFR 70 is a federal operating permit program implemented by each state. There are Title V permitting thresholds for criteria pollutants, and if potential emissions exceed these thresholds, sources must apply for a Title V operating permit through the state program and/or local permitting authority.

The facility-wide potential-to-emit for MSX Station 606A and Station 610 are estimated to be below the major source threshold of 100 tpy under the Title V permitting program. The facility-wide potential-to-emit for MSX Station 602 is estimated to be greater than 100 tpy for CO and NO_x and therefore, is required to obtain a Title V operating permit.

All SNG/EEC compressor stations associated with SSE4 are currently considered major sources for Title V permitting and are operating under existing Title V permits except the Rose Hill Compressor Station located in Clarke County, Mississippi. The Rose Hill Compressor Station would remain a minor non-Title V source after the proposed modifications become operational. Title V permit modifications incorporating the proposed Project changes would be required for all Title V sources.

New Source Performance Standards

The EPA promulgates New Source Performance Standards (NSPS) under 40 CFR 60 for new, modified, or reconstructed stationary sources to establish emission limits as well as fuel, monitoring, notification, reporting, and recordkeeping requirements.

The facilities associated with MSX and SSE4 would be subject to the following NSPS sections:

- Subpart A – General Provisions

- Subpart KKKKa – Standards of Performance for Stationary Combustion Turbines
- Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
- Subpart OOOOb – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after December 6, 2022

The Companies must comply with all NSPS provisions as applicable to the Projects.

National Emissions Standards for Hazardous Air Pollutants

The Clean Air Act (CAA) Amendments established a list of 189 HAPs, resulting in the promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP), codified in 40 CFR 61 and 40 CFR 63. The standards within 40 CFR 63 regulate HAPs from major sources of HAPs and specific source categories emitting HAPs. Some NESHAP may apply to non-major sources (area sources) of HAPs. Major source thresholds for NESHAP are 10 tpy of any single HAP or 25 tpy of total HAPs. NESHAP regulates HAPs emissions from stationary sources by setting emission limits, as well as monitoring, testing, record keeping, and notification requirements.

The facilities associated with MSX and SSE4 would be subject to the following NESHAP subparts:

- Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines;
- Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; and
- Subpart YYYYY – NESHAP for Stationary Combustion Turbines.

General Conformity

Established under the CAA (section 176(c)(4)), the General Conformity Rule ensures federal agency actions do not cause or contribute to a violation of the NAAQS by requiring conformity to the SIP and thus plays an important role in helping states and tribes improve air quality in nonattainment areas. MSX would be located in an attainment area and therefore a general conformity analysis is not required for this Project. The majority of SSE4 is in attainment/unclassified areas, except for the Ocmulgee Compressor Station and a portion of Loop H1 in Bibb County, Georgia which is classified as maintenance areas for 1997, 8-hour average ozone and 1997, 24-hour average PM_{2.5} NAAQS. Bibb County is part of the Macon, Georgia maintenance areas for ozone and PM_{2.5}. Because all of Bibb County is designated as maintenance for PM_{2.5} and ozone, direct and precursor emissions of PM_{2.5},²⁴⁰ NO_x, and VOC from construction of the Projects that potentially exceed 100 tpy within Bibb County would trigger a general conformity determination. Construction emissions estimates for the SNG Ocmulgee Compressor Station, the Warner Robins, Mid States, Perry, Hawkinsville meter stations, and the length of new pipeline to be constructed in Bibb County are not expected to exceed the General Conformity

²⁴⁰ PM_{2.5} precursors can react in the atmosphere to form PM_{2.5}. These include the pollutants NO_x, sulfur oxides (including SO₂), VOCs, and ammonia (NH₃).

Applicability thresholds of 100 tpy for PM_{2.5}, NO_x, and VOC (see table 4.11-2). Therefore, a general conformity determination would not be required.

Mandatory Greenhouse Gas Reporting Rule

The EPA established the Mandatory GHG Reporting Rule under 40 CFR 98. This rule requires operators of applicable sources of GHG emissions to report actual GHG operating emissions exceeding 25,000 metric tons of CO_{2e} in one year. This rule is not a permit and does not limit or control emissions. GHG emissions from operation of the Projects would be reported under 40 CFR 98 Subparts C and W, as applicable.²⁴¹

4.11.2.2 State Regulations

The Projects would take place in Mississippi, Alabama, and Georgia. The following applicable state regulations would apply and the Companies must comply with these requirements:

Mississippi

- 11 MAC Pt. 2, R. 1.3.D(1)(a), Particulate Matter limitations
- 11 MAC Pt. 2, R. 1.3(C), General Nuisances
- 11 MAC Pt. 2, R. 1.3, Visible Emissions
- 11 MAC Pt. 2, R. 1.4.A (1), Sulfur Compounds

Alabama

- ADEM Admin. Code R.335-3-4-.01, Visible Emissions
- ADEM Admin. Code R.335-3-4-.03, Particulate Emissions from Fuel-Burning Equipment
- ADEM Admin. Code R.335-3-4-.04, Particulate Emissions from Process Industries – General
- ADEM Admin. Code R.335-3-5-.01, Sulfur Compounds
- ADEM Admin. Code R.335-3-6, Organic Emissions
- ADEM Administrative Code R.335-3-8, Standards for Stationary RICE

Georgia

- GAC 391-3-1.03(9), Annual Emissions Fee
- GAC 391-3-1-.02(2)(b)(1), Visible Emissions
- GAC 391-3-1.02(2)(d), Fuel Burning Equipment
- GAC 391-3-1-.02(2), Particulate Emissions
- SO₂ Emissions

²⁴¹ The EPA is proposing to amend the Greenhouse Gas Reporting Program to remove program obligations for most source categories, including subpart C and subpart W. See 90 Fed. Reg. 44,591 (Sept. 16, 2025).

- Excess Emissions due to an Emergency

4.11.3 Construction Emissions Effects and Mitigation

Construction of the Projects would result in temporary and localized increases of tailpipe emissions from mobile diesel- and gasoline-fueled equipment. In addition, temporary increases in fugitive dust emissions would result from construction-related surface disturbances and construction vehicle movement on unpaved roads. Open burning would not be used by either of the Projects for the disposal of cleared trees or vegetation. The construction emissions associated with the Projects would occur at the locations of the compressor stations and also along the length of the pipeline. The construction emissions associated with the compressor stations would occur at the same general location during the entire duration of the construction period. The construction emissions associated with the pipeline construction would however move along the length of the pipeline as the pipeline is constructed in segments. Any specific location may therefore be affected by pipeline construction emissions for only a short period of time.

The Companies estimated off-road (construction equipment) and on-road (commuting) engine tailpipe emissions of the pollutants NO_x, SO₂, CO, PM₁₀, PM_{2.5}, VOCs, HAPs, CO₂, CH₄, and N₂O due to construction activities and commuting associated with the Projects. Potential off-road tailpipe emission estimates were derived by quantifying worst-case assumptions of load, engine HP, and estimated hours to determine estimated HP-hours and multiplying this result by an emission factor for each respective pollutant. Emission factors for non-road engines, including NO_x, SO₂, CO, PM₁₀, PM_{2.5}, VOCs, HAPs, CO₂, and CH₄ expressed in grams per HP-hour (g/HP-hr), were obtained using the EPA Motor Vehicle Emission Simulator. Potential on-road tailpipe emission estimates were derived by quantifying the number of miles traveled for each vehicle classification type and multiplying by on-road emission factors, also obtained from the Motor Vehicle Emission Simulator program. Potential fugitive emission estimates of PM₁₀ and PM_{2.5} due to construction were derived using the methodology in the Western Regional Air Partnership Fugitive Dust Handbook.

Summaries of potential construction emission estimates for MSX and SSE4 are detailed in the following sections.

4.11.3.1 Mississippi Crossing Project

Estimated potential construction emissions for MSX are shown in table 4.11-1 for the total duration of construction activities in 2027 and 2028.²⁴²

²⁴² A copy of the detailed construction emission calculations for MSX, including speciated GHGs were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152.

Table 4.11-1: Total Construction-Related Estimated Emissions for MSX (tons)

| Construction Emissions by Facility ^{a,b} | Total Estimated Construction Emissions (tons) 2027-2028 | | | | | | | |
|---|---|-------------|-----------------|------------------|-------------------|--------------|--------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Station 602 Construction Emissions | | | | | | | | |
| Construction Equipment Engines | 3.57 | 1.95 | 0.007 | 0.36 | 0.35 | 0.06 | 0.09 | 2,659 |
| On-Road Vehicle Travel | 0.61 | 0.34 | 0.001 | 0.03 | 0.02 | 0.03 | 0.02 | 180 |
| Fugitive Emissions from Off-Road Vehicles | 0.00 | 0.00 | 0.00 | 8.84 | 0.88 | 0.00 | 0.00 | 0.00 |
| Fugitive Dust Emissions from Construction Activity | 0.00 | 0.00 | 0.00 | 1.06 | 0.11 | 0.00 | 0.00 | 0.00 |
| Station 602 Subtotal | 4.18 | 2.29 | 0.008 | 10.29 | 1.37 | 0.09 | 0.11 | 2,838 |
| Station 606A Construction Emissions | | | | | | | | |
| Construction Equipment Engines | 3.15 | 1.78 | 0.006 | 0.33 | 0.32 | 0.05 | 0.07 | 2,367 |
| On-Road Vehicle Travel | 0.79 | 0.42 | 0.001 | 0.03 | 0.03 | 0.03 | 0.02 | 230 |
| Fugitive Emissions from Off-Road Vehicles | 0.00 | 0.00 | 0.00 | 8.84 | 0.88 | 0.00 | 0.00 | 0.00 |
| Fugitive Dust Emissions from Construction Activity | 0.00 | 0.00 | 0.00 | 1.06 | 0.11 | 0.00 | 0.00 | 0.00 |
| Station 606A Subtotal | 3.94 | 2.21 | 0.007 | 10.26 | 1.34 | 0.08 | 0.09 | 2,597 |
| Station 610 Construction Emissions | | | | | | | | |
| Construction Equipment Engines | 3.57 | 1.95 | 0.007 | 0.36 | 0.35 | 0.06 | 0.08 | 2,659 |
| On-Road Vehicle Travel | 0.79 | 0.43 | 0.001 | 0.03 | 0.03 | 0.03 | 0.02 | 230 |
| Fugitive Emissions from Off-Road Vehicles | 0.00 | 0.00 | 0.00 | 8.84 | 0.88 | 0.00 | 0.00 | 0.00 |
| Fugitive Dust Emissions from Construction Activity | 0.00 | 0.00 | 0.00 | 1.06 | 0.11 | 0.00 | 0.00 | 0.00 |
| Station 610 Subtotal | 4.36 | 2.38 | 0.008 | 10.30 | 1.38 | 0.09 | 0.10 | 2,889 |
| Pipeline Construction Emissions | | | | | | | | |
| Construction Equipment Engines | 204.3 | 44.9 | 0.41 | 8.56 | 8.30 | 12.6 | 18.19 | 154,119 |
| On-Road Vehicle Travel | 0.04 | 0.03 | 0.0009 | 0.001 | 0.001 | 0.003 | 0.02 | 7.28 |
| Fugitive Emissions from Off-Road Vehicles | 0.00 | 0.00 | 0.00 | 8.62 | 0.86 | 0.00 | 0.00 | 0.00 |
| Fugitive Dust Emissions from Construction Activity ¹ | 0.00 | 0.00 | 0.00 | 539 | 53.9 | 0.00 | 0.00 | 0.00 |
| Pipeline – Subtotal | 204.4 | 45.0 | 0.41 | 556.4 | 63.08 | 12.6 | 18.21 | 154,127 |
| Total Project Aboveground facilities + Pipeline – | 216.9 | 51.8 | 0.44 | 587.24 | 67.16 | 12.83 | 18.51 | 162,451 |
| <p>a/ Includes construction emissions from off-road construction equipment, on-road vehicle engines, on-road vehicle fugitives, construction, construction fugitives, and storage pile erosion fugitives.</p> <p>b/ A copy of the detailed construction emission calculations for MSX, including speciated GHGs, were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152.</p> | | | | | | | | |

Mitigation

TGP would take measures to limit emissions of fugitive dust during construction and has developed a fugitive dust control plan, which includes measures such as using water spray on construction activity areas, posting signs and limiting vehicle speed to 15 mph and installing track outs among other measures.

Exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines would be restricted by federal design standards imposed at the time of manufacture of the

vehicles and would comply with EPA mobile and non-road emission regulations (40 CFR 85, 86, and 89). TGP would also require that all construction vehicles reduce engine idling.

4.11.3.2 South System Expansion 4 Project

Estimated potential construction emissions for SSE4 are shown in table 4.11-2 for the duration of the construction activities from 2027 through 2029.²⁴³

Table 4.11-2: Total Construction-Related Estimated Emissions for SSE4 (tons)

| Construction Emissions by Facility and Year ^a | Estimated Emissions (tons) | | | | | | | |
|--|----------------------------|-------------|-----------------|------------------|-------------------|-------------|--------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} | VOCs | HAPs | CO _{2e} |
| YEAR 2027 | | | | | | | | |
| York Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.12 | 2.11 | 0.0021 | 0.079 | 0.054 | 0.17 | 0.033 | 640 |
| On-Road Delivery Vehicles | 0.51 | 0.30 | 0.0009 | 0.033 | 0.015 | 0.014 | 0.0027 | 288 |
| Off-Road Construction Equipment | 4.34 | 0.51 | 0.0048 | 0.10 | 0.10 | 0.15 | 0.037 | 1,816 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 12.78 | 1.28 | 0.00 | 0.00 | 0.00 |
| York Compressor Station | 5.97 | 2.91 | 0.0079 | 12.99 | 1.45 | 0.33 | 0.073 | 2,744 |
| Selma Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.12 | 2.11 | 0.0021 | 0.079 | 0.054 | 0.17 | 0.033 | 640 |
| On-Road Delivery Vehicles | 0.51 | 0.30 | 0.0009 | 0.033 | 0.015 | 0.014 | 0.0027 | 288 |
| Off-Road Construction Equipment | 4.34 | 0.51 | 0.0048 | 0.10 | 0.10 | 0.15 | 0.037 | 1,816 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 10.93 | 1.09 | 0.00 | 0.00 | 0.00 |
| Selma Compressor Station | 5.97 | 2.91 | 0.0079 | 11.15 | 1.26 | 0.33 | 0.073 | 2,744 |
| Auburn Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.12 | 2.11 | 0.0021 | 0.079 | 0.054 | 0.17 | 0.033 | 640 |
| On-Road Delivery Vehicles | 0.51 | 0.30 | 0.0009 | 0.033 | 0.015 | 0.014 | 0.0027 | 288 |
| Off-Road Construction Equipment | 4.34 | 0.51 | 0.0048 | 0.10 | 0.10 | 0.15 | 0.037 | 1,816 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 11.28 | 1.13 | 0.00 | 0.00 | 0.00 |
| Auburn Compressor Station | 5.97 | 2.91 | 0.0079 | 11.50 | 1.30 | 0.33 | 0.073 | 2,744 |
| Hall Gate Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.12 | 2.11 | 0.0021 | 0.079 | 0.054 | 0.17 | 0.033 | 640 |
| On-Road Delivery Vehicles | 0.51 | 0.30 | 0.0009 | 0.033 | 0.015 | 0.014 | 0.0027 | 288 |
| Off-Road Construction Equipment | 4.34 | 0.51 | 0.0048 | 0.10 | 0.10 | 0.15 | 0.037 | 1,816 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 10.78 | 1.08 | 0.00 | 0.00 | 0.00 |
| Hall Gate Compressor Station | 5.97 | 2.91 | 0.0079 | 11.00 | 1.25 | 0.33 | 0.073 | 2,744 |
| Meter Stations Construction Emissions | | | | | | | | |
| Commuter Transit | 4.47 | 8.43 | 0.0085 | 0.32 | 0.22 | 0.68 | 0.13 | 2,560 |
| On-Road Delivery Vehicles | 1.27 | 0.73 | 0.0023 | 0.08 | 0.037 | 0.034 | 0.0066 | 710 |

²⁴³ A copy of the detailed construction emission calculations for SSE4, including speciated GHGs were provided by SNG/EEC in the February 17, 2026, Supplemental Filing under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20260217-5265.

Table 4.11-2: Total Construction-Related Estimated Emissions for SSE4 (tons)

| Construction Emissions by Facility and Year ^a | Estimated Emissions (tons) | | | | | | | |
|---|----------------------------|--------------|-----------------|------------------|-------------------|--------------|--------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Off-Road Construction Equipment | 6.74 | 1.23 | 0.0075 | 0.23 | 0.22 | 0.31 | 0.076 | 2,765 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 1.48 | 0.15 | 0.00 | 0.00 | 0.00 |
| Meter Stations | 12.48 | 10.40 | 0.018 | 2.11 | 0.62 | 1.03 | 0.21 | 6,035 |
| Pipeline Construction Emissions | | | | | | | | |
| Commuter Transit | 19.23 | 36.27 | 0.037 | 1.36 | 0.93 | 2.92 | 0.57 | 11,012 |
| On-Road Delivery Vehicles | 1.27 | 0.73 | 0.0023 | 0.08 | 0.037 | 0.034 | 0.0066 | 710 |
| Off-Road Construction Equipment | 665 | 382 | 0.73 | 31.85 | 30.44 | 84.32 | 19.44 | 268,657 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 729 | 72.86 | 0.00 | 0.00 | 0.00 |
| Pipeline –Subtotal | 686 | 419 | 0.77 | 762 | 104 | 87.28 | 20.01 | 280,379 |
| Laydown / Contractor Yards / Temporary Workspace | | | | | | | | |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 911 | 91.11 | 0.00 | 0.00 | 0.00 |
| Aboveground facilities + Pipeline – Total | 722 | 441 | 0.82 | 1,722 | 201 | 89.62 | 20.52 | 297,389 |
| YEAR 2028 | | | | | | | | |
| Rose Hill Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 23.73 | 2.37 | 0.00 | 0.00 | 0.00 |
| Rose Hill Compressor Station | 6.35 | 3.01 | 0.0087 | 23.95 | 2.55 | 0.33 | 0.074 | 3,017 |
| Enterprise Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 17.99 | 1.80 | 0.00 | 0.00 | 0.00 |
| Enterprise Compressor Station | 6.35 | 3.01 | 0.0087 | 18.21 | 1.97 | 0.33 | 0.074 | 3,017 |
| Gallion Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 19.42 | 1.94 | 0.00 | 0.00 | 0.00 |
| Gallion Compressor Station | 6.35 | 3.01 | 0.0087 | 19.65 | 2.12 | 0.33 | 0.074 | 3,017 |
| Elmore Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 34.93 | 3.49 | 0.00 | 0.00 | 0.00 |
| Elmore Compressor Station | 6.35 | 3.01 | 0.0087 | 35.15 | 3.67 | 0.33 | 0.074 | 3,017 |
| Ellerslie Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |

Table 4.11-2: Total Construction-Related Estimated Emissions for SSE4 (tons)

| Construction Emissions by Facility and Year ^a | Estimated Emissions (tons) | | | | | | | |
|--|----------------------------|-------------|-----------------|------------------|-------------------|-------------|--------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} | VOCs | HAPs | CO _{2e} |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 13.30 | 1.33 | 0.00 | 0.00 | 0.00 |
| Ellerslie Compressor Station | 6.35 | 3.01 | 0.087 | 13.52 | 1.50 | 0.33 | 0.074 | 3,017 |
| Ocmulgee Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.11 | 2.18 | 0.0023 | 0.081 | 0.054 | 0.17 | 0.032 | 690 |
| On-Road Delivery Vehicles | 0.50 | 0.32 | 0.001 | 0.035 | 0.015 | 0.013 | 0.0025 | 314 |
| Off-Road Construction Equipment | 4.74 | 0.52 | 0.0054 | 0.11 | 0.10 | 0.15 | 0.039 | 2,013 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 14.73 | 1.47 | 0.00 | 0.00 | 0.00 |
| Ocmulgee Compressor Station | 6.35 | 3.01 | 0.0087 | 14.96 | 1.65 | 0.33 | 0.074 | 3,017 |
| Meter Stations Construction Emissions | | | | | | | | |
| Commuter Transit | 0.16 | 0.31 | 0.00033 | 0.011 | 0.0076 | 0.024 | 0.0046 | 98.31 |
| On-Road Delivery Vehicles | 1.72 | 1.09 | 0.0035 | 0.12 | 0.052 | 0.045 | 0.0087 | 1,075 |
| Off-Road Construction Equipment | 2.58 | 0.39 | 0.0028 | 0.074 | 0.071 | 0.11 | 0.026 | 1,041 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.54 | 0.054 | 0.00 | 0.00 | 0.00 |
| Meter Stations | 4.46 | 1.79 | 0.0066 | 0.74 | 0.18 | 0.18 | 0.040 | 2,215 |
| Pipeline Construction Emissions | | | | | | | | |
| Commuter Transit | 26.65 | 52.39 | 0.055 | 1.94 | 1.29 | 3.98 | 0.77 | 16,574 |
| On-Road Delivery Vehicles | 1.72 | 1.09 | 0.0035 | 0.12 | 0.052 | 0.045 | 0.0087 | 1,075 |
| Off-Road Construction Equipment | 1,052 | 573 | 1.17 | 46.95 | 44.83 | 127 | 29.41 | 432,535 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 1,090 | 109 | 0.00 | 0.00 | 0.00 |
| Pipeline – Subtotal | 1,080 | 626 | 1.22 | 1,139 | 155 | 131 | 30.19 | 450,184 |
| Laydown / Contractor Yards / Temporary Workspace | | | | | | | | |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 2,235 | 235 | 0.00 | 0.00 | 0.00 |
| Aboveground facilities + Pipeline – Total | 1,122 | 646 | 1.28 | 3,619 | 404 | 133 | 30.67 | 470,498 |
| YEAR 2029 | | | | | | | | |
| Thomaston Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.00 | 2.15 | 0.0022 | 0.074 | 0.048 | 0.15 | 0.029 | 669 |
| On-Road Delivery Vehicles | 0.44 | 0.31 | 0.001 | 0.033 | 0.014 | 0.011 | 0.0021 | 309 |
| Off-Road Construction Equipment | 4.66 | 0.47 | 0.0053 | 0.10 | 0.098 | 0.14 | 0.037 | 2,007 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 18.59 | 1.86 | 0.00 | 0.00 | 0.00 |
| Thomaston Compressor Station | 6.11 | 2.93 | 0.0086 | 18.79 | 2.02 | 0.31 | 0.069 | 2,984 |
| Wrens Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.00 | 2.15 | 0.0022 | 0.074 | 0.048 | 0.15 | 0.029 | 669 |
| On-Road Delivery Vehicles | 0.44 | 0.31 | 0.001 | 0.033 | 0.014 | 0.011 | 0.0021 | 309 |
| Off-Road Construction Equipment | 4.66 | 0.47 | 0.0053 | 0.10 | 0.098 | 0.14 | 0.037 | 2,007 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 13.95 | 1.40 | 0.00 | 0.00 | 0.00 |
| Wrens Compressor Station | 6.11 | 2.93 | 0.0086 | 14.16 | 1.56 | 0.31 | 0.069 | 2,984 |

Table 4.11-2: Total Construction-Related Estimated Emissions for SSE4 (tons)

| Construction Emissions by Facility and Year ^a | Estimated Emissions (tons) | | | | | | | |
|--|----------------------------|--------------|-----------------|------------------|-------------------|---------------|--------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Jefferson Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.00 | 2.15 | 0.0022 | 0.074 | 0.048 | 0.15 | 0.029 | 669 |
| On-Road Delivery Vehicles | 0.44 | 0.31 | 0.001 | 0.033 | 0.014 | 0.011 | 0.0021 | 309 |
| Off-Road Construction Equipment | 4.66 | 0.47 | 0.0053 | 0.10 | 0.98 | 0.14 | 0.037 | 2,007 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 16.55 | 1.65 | 0.00 | 0.00 | 0.00 |
| Jefferson Compressor Station | 6.11 | 2.93 | 0.0086 | 16.75 | 1.81 | 0.31 | 0.069 | 2,984 |
| Rincon Compressor Station Construction Emissions | | | | | | | | |
| Commuter Transit | 1.00 | 2.15 | 0.0022 | 0.074 | 0.048 | 0.15 | 0.029 | 669 |
| On-Road Delivery Vehicles | 0.44 | 0.31 | 0.001 | 0.033 | 0.014 | 0.011 | 0.0021 | 309 |
| Off-Road Construction Equipment | 4.66 | 0.47 | 0.0053 | 0.10 | 0.098 | 0.14 | 0.037 | 2,007 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 17.81 | 1.78 | 0.00 | 0.00 | 0.00 |
| Rincon Compressor Station | 6.11 | 2.93 | 0.0086 | 18.02 | 1.94 | 0.31 | 0.069 | 2,984 |
| Meter Stations Construction Emissions | | | | | | | | |
| Commuter Transit | 0.054 | 0.12 | 0.00012 | 0.004 | 0.0026 | 0.0081 | 0.0016 | 36.01 |
| On-Road Delivery Vehicles | 0.31 | 0.21 | 0.0007 | 0.023 | 0.0096 | 0.0077 | 0.0015 | 216 |
| Off-Road Construction Equipment | 1.22 | 0.21 | 0.0015 | 0.039 | 0.038 | 0.054 | 0.013 | 547 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 1.48 | 0.15 | 0.00 | 0.00 | 0.00 |
| Meter Stations | 1.58 | 0.54 | 0.0023 | 1.55 | 0.20 | 0.07 | 0.016 | 799 |
| Pipeline Construction Emissions | | | | | | | | |
| Commuter Transit | 4.99 | 10.69 | 0.011 | 0.37 | 0.24 | 0.75 | 0.15 | 3,320 |
| On-Road Delivery Vehicles | 0.31 | 0.21 | 0.0007 | 0.023 | 0.0096 | 0.0077 | 0.0015 | 216 |
| Off-Road Construction Equipment | 198 | 112 | 0.22 | 8.55 | 8.15 | 24.85 | 5.74 | 83,329 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 185 | 18.54 | 0.00 | 0.00 | 0.00 |
| Pipeline – Subtotal | 203 | 123 | 0.24 | 194 | 26.94 | 25.61 | 5.89 | 86,864 |
| Laydown / Contractor Yards / Temporary Workspace | | | | | | | | |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 995 | 99.53 | 0.00 | 0.00 | 0.00 |
| Aboveground facilities + Pipeline –Total | 229 | 135 | 0.27 | 1,259 | 134 | 26.90 | 6.18 | 99,599 |
| Total Project Emissions 2027-2029 | 2,076 | 1,222 | 2.37 | 6,897 | 739 | 249.56 | 57.39 | 868,348 |
| <p>a/ Includes construction emissions from off-road construction equipment, on-road vehicle engines, on-road vehicle fugitives, construction, construction fugitives, and storage pile erosion fugitives.</p> <p>b/ A copy of the detailed construction emission calculations for SSE4, including speciated GHGs were provided by SNG/EEC in the February 17, 2026 Supplemental Filing under appendix 9.A. The calculations are available for the public to review on FERC’s eLibrary, Accession no.: 20260217-5265.</p> | | | | | | | | |

Mitigation

SNG/EEC would take measures to limit emissions of fugitive dust during construction and has developed a fugitive dust control plan, which includes measures such as using water spray on construction activity areas, posting signs and limiting vehicle speed to 15 mph and installing track outs among other measures.

Exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines would be minimized by federal design standards imposed at the time of manufacture of the vehicles and would comply with EPA mobile and non-road emission regulations (40 CFR 85, 86, and 89). SNG/EEC would require that all construction vehicles reduce engine idling.

4.11.4 Operational Air Emissions Effects and Mitigation

4.11.4.1 Mississippi Crossing Project

Proposed new compressor stations 602, 606A, and 610 would generate regulated air pollutant emissions during operation. Table 4.11-3 summarizes the operational emissions estimates for the three Stations.²⁴⁴ Emission sources include the following at each compressor station:

- natural gas combustion in combustion turbines;
- natural gas combustion in a reciprocating internal combustion engines driving two emergency generators;
- natural gas combustion in catalytic heaters;
- breathing and working losses from condensate tanks;
- fugitive emissions from potential leaks in valves and piping components; and
- gas release events (blowdowns) during maintenance and emergency shutdowns (ESD).

The blowdown emissions would occur along the pipeline right-of-way. These emissions were estimated assuming a gas release quantity of 3 million standard cubic feet per ESD event (3 events annually), and assuming a gas release quantity of 100,000 standard cubic feet per maintenance event (60 events annually).

²⁴⁴ A copy of the detailed operational emission calculations for MSX, including speciated GHGs were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152.

Table 4.11-3: Estimated Operating Emissions, Station 602, Station 606A, Station 610

| Emission Unit ^a | Estimated Emissions (tpy) | | | | | | |
|--|---------------------------|---------------|-----------------|---|---------------|-------------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ / PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Station 602 Operation and Maintenance Annual Emissions | | | | | | | |
| 3 Solar Titan 250 Turbines | 101.50 | 101.97 | 9.51 | 18.45 | 58.41 | 2.85 | 327,351 |
| 2 Emergency Generators | 1.18 | 2.36 | 0.001 | 0.02 | 0.60 | 0.12 | 225 |
| 2 Catalytic Heaters | 0.04 | 28.28 | 0.04 | 0.22 | 0.16 | 0.06 | 4,942 |
| Fugitive Emissions | 0.00 | 0.00 | 0.00 | 0.00 | 8.76 | 0.37 | 0.00 |
| 2 Condensate Tanks | 0.00 | 0.00 | 0.00 | 0.00 | 0.002 | 0.00 | 0.00 |
| Blowdowns | 0.00 | 0.00 | 0.00 | 0.00 | 4.35 | 0.09 | 8,568 |
| Total Station 602 | 101.73 | 132.61 | 9.55 | 18.70 | 72.26 | 3.49 | 341,085 |
| Station 606A Operation and Maintenance Annual Emissions | | | | | | | |
| 1 Solar Titan 130 Turbine | 26.93 | 27.33 | 2.54 | 4.92 | 15.65 | 0.76 | 87,339 |
| 1 Emergency Generator | 0.30 | 0.59 | <0.001 | 0.01 | 0.15 | 0.03 | 66 |
| 1 Catalytic Heater | 0.02 | 8.48 | 0.01 | 0.07 | 0.05 | 0.02 | 1,482 |
| Fugitive Emissions | 0.00 | 0.00 | 0.00 | 0.00 | 7.02 | 0.31 | 0.00 |
| 1 Condensate Tank | 0.00 | 0.00 | 0.00 | 0.00 | 0.001 | 0.00 | 0.00 |
| Blowdowns | 0.00 | 0.00 | 0.00 | 0.00 | 2.62 | 0.06 | 5,998 |
| Total Station 606A | 27.25 | 36.41 | 2.55 | 5.00 | 25.49 | 1.17 | 94,886 |
| Station 610 Operation and Maintenance Annual Emissions | | | | | | | |
| 2 Solar Titan 250 Turbines | 67.00 | 67.98 | 6.34 | 12.30 | 38.94 | 1.90 | 218,334 |
| 1 Emergency Generator | 1.18 | 2.36 | <0.001 | 0.02 | 0.60 | 0.12 | 225 |
| 1 Catalytic Heater | 0.02 | 14.14 | 0.01 | 0.11 | 0.08 | 0.03 | 2,471 |
| Fugitive Emissions | 0.00 | 0.00 | 0.00 | 0.00 | 7.91 | 0.34 | 0.00 |
| 2 Condensate Tanks | 0.00 | 0.00 | 0.00 | 0.00 | 0.001 | 0.00 | 0.00 |
| Blowdowns | 0.00 | 0.00 | 0.00 | 0.00 | 3.48 | 0.07 | 6,855 |
| Total Station 610 | 67.61 | 83.30 | 6.36 | 12.42 | 47.23 | 2.33 | 227,671 |
| Pipeline Right-of-Way Emissions | 0.00 | 0.00 | 0.00 | 0.00 | 10.45 | 0.22 | 21,421 |
| Combined Total | 196.59 | 252.32 | 18.46 | 36.12 | 155.43 | 7.21 | 685,063 |
| a/ A copy of the detailed operational emission calculations for MSX, including speciated GHGs were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152. | | | | | | | |

Operational Mitigation Measures

As shown above, the majority of air emissions during the operation phase would be generated by the fuel combustion sources (turbines, emergency generator, and catalytic heaters). This equipment would be operated following manufacturer's recommended practices and would be required to meet all applicable state and federal emissions limitations. Some of the total VOC emissions would be fugitive in nature, released from valves, piping components, and from operation and maintenance activities. TGP's maintenance and operation programs would be optimized to limit frequency and extent of maintenance activities, therefore reducing blowdown emissions from maintenance activities. TGP would employ good engineering practices such as electronically performed routine maintenance and inspection and coordinating maintenance activities to minimize generation of fugitive VOC emissions.

4.11.4.2 South System Expansion 4 Project

During the operations phase, regulated air emissions would be generated at each compressor station from combustion of natural gas in the turbines, emergency generators, and heaters. Fugitive VOC emissions would be generated from potential leaks in valves and piping components, maintenance and shutdown activities (blowdowns), and from storage tanks. These emissions are summarized in table 4.11-4 for each compressor station.²⁴⁵ The Project would make modifications at 14 existing compressor stations, which include replacing vintage gas-fired reciprocating engine driven compressors with more efficient state-of-the-art gas-fired turbine driven compressors at some of the compressor stations. A detailed list of modifications planned for each compressor station is presented in Table 2.2-2. Since the gas turbines have the potential to emit less NO_x, CO, and VOC emissions compared to the reciprocating engines in general, there would be a net decrease in the potential-to-emit of NO_x, CO, and VOC emissions from some of the compressor stations. Table 4.11-4 shows the pre-Project, post-Project, and overall Project potential-to-emit effects at each SSE4 compressor station. As shown, the most increase in annual emissions is projected to be approximately 51 tpy of CO emissions at the Rose Hill compressor station. The most reduction in emissions is projected to be approximately 654 tpy of NO_x emissions at the Gallion compressor station.

Table 4.11-4: Estimated Operating Emissions for SSE4 Project

| Compressor Station | Estimated Emissions (tpy) | | | | | | |
|-------------------------------------|---------------------------|--------|-----------------|---|--------|--------|------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ / PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Pre-Project PTE | | | | | | | |
| Enterprise Compressor Station | 891.82 | 404.44 | 0.94 | 51.21 | 262.51 | 101.01 | 181,166.86 |
| Rose Hill Compressor Station | 22.86 | 23.14 | 2.24 | 4.41 | 20.47 | 1.06 | 85,683.99 |
| York Compressor Station | 465.11 | 95.44 | 4.68 | 7.58 | 18.91 | 6.53 | 133,485.20 |
| Gallion Compressor Station | 1,667.99 | 392.98 | 0.32 | 26.03 | 149.72 | 44.80 | 71,453.97 |
| Selma Compressor Station | 465.11 | 49.51 | 3.24 | 6.30 | 15.98 | 5.32 | 105,939.74 |
| Elmore Compressor Station | 1,212.71 | 245.69 | 0.31 | 25.61 | 125.74 | 44.39 | 79,505.82 |
| Auburn Compressor Station | 465.11 | 71.93 | 4.83 | 9.38 | 54.27 | 7.19 | 147,258.72 |
| Ellerslie Compressor Station | 1,062.81 | 317.76 | 0.33 | 26.60 | 135.35 | 39.84 | 60,082.64 |
| Thomaston Compressor Station | 730.44 | 164.73 | 0.31 | 33.10 | 180.54 | 75.10 | 111,060.48 |
| Ocmulgee Compressor Station | 1,603.23 | 74.99 | 0.42 | 27.54 | 182.02 | 41.14 | 56,179.91 |
| Hall Gate Compressor Station | 415.75 | 123.25 | 0.35 | 18.09 | 167.55 | 45.98 | 61,260.24 |
| Wrens Compressor Station | 471.65 | 451.70 | 0.14 | 5.88 | 175.64 | 21.31 | 22,156.71 |
| Jefferson County Compressor Station | 58.04 | 58.75 | 2.13 | 11.29 | 20.36 | 0.69 | 85,663.20 |
| Rincon Compressor Station | 55.97 | 56.72 | 2.016 | 10.89 | 19.63 | 1.93 | 76,893.75 |

²⁴⁵ A copy of the detailed operational emission calculations for SSE4, including speciated GHGs were provided by SNG/EEC in the July 3, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary (Accession no.: 20250703-5175).

Table 4.11-4: Estimated Operating Emissions for SSE4 Project

| Compressor Station | Estimated Emissions (tpy) | | | | | | |
|-------------------------------------|---------------------------|-----------------|-----------------|---|-----------------|---------------|---------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ / PM _{2.5} | VOCs | HAPs | CO _{2e} |
| Total Pre-Project PTE | 9,588.61 | 2,561.03 | 22.28 | 263.90 | 1,528.70 | 436.29 | 1,277,291.25 |
| Post-Project PTE | | | | | | | |
| Enterprise Compressor Station | 505.90 | 340.39 | 3.28 | 46.03 | 186.80 | 85.90 | 262,993.90 |
| Rose Hill Compressor Station | 69.01 | 74.34 | 6.58 | 12.83 | 47.48 | 3.04 | 256,305.25 |
| York Compressor Station | 491.44 | 126.27 | 7.15 | 12.36 | 21.78 | 2.68 | 207,562.61 |
| Gallion Compressor Station | 1,014.42 | 290.13 | 3.97 | 25.86 | 153.30 | 32.77 | 191,325.51 |
| Selma Compressor Station | 491.44 | 110.35 | 5.71 | 11.08 | 24.77 | 2.17 | 177,510.72 |
| Elmore Compressor Station | 950.13 | 290.17 | 4.06 | 32.88 | 129.31 | 38.06 | 196,697.09 |
| Auburn Compressor Station | 491.44 | 102.72 | 7.30 | 14.17 | 57.60 | 2.73 | 238,468.46 |
| Ellerslie Compressor Station | 976.57 | 339.16 | 2.19 | 29.48 | 147.30 | 39.04 | 142,988.87 |
| Thomaston Compressor Station | 724.89 | 181.47 | 1.59 | 35.58 | 172.24 | 69.88 | 161,874.78 |
| Ocmulgee Compressor Station | 1,603.48 | 75.49 | 0.42 | 27.54 | 173.35 | 39.63 | 67,622.12 |
| Hall Gate Compressor Station | 59.97 | 32.22 | 1.97 | 5.27 | 55.01 | 15.99 | 94,324.85 |
| Wrens Compressor Station | 48.76 | 19.02 | 0.87 | 3.81 | 44.71 | 14.48 | 50,779.40 |
| Jefferson County Compressor Station | 78.11 | 81.97 | 4.01 | 14.93 | 32.59 | 1.72 | 139,575.93 |
| Rincon Compressor Station | 76.04 | 79.94 | 3.93 | 14.53 | 31.81 | 2.57 | 136,686.22 |
| Total Post-Project PTE | 7,581.60 | 2,143.68 | 53.03 | 286.36 | 1,278.05 | 350.66 | 2,324,896.70 |
| Project PTE Effects | | | | | | | |
| Enterprise Compressor Station | -385.92 | -64.05 | 2.35 | -5.18 | -75.71 | -15.11 | 81,827.03 |
| Rose Hill Compressor Station | 46.15 | 51.20 | 4.34 | 8.42 | 27.02 | 1.98 | 170,621.26 |
| York Compressor Station | 26.33 | 30.83 | 2.47 | 4.79 | 2.87 | -3.85 | 74,077.41 |
| Gallion Compressor Station | -653.57 | -102.86 | 3.66 | -0.17 | 3.58 | -12.03 | 119,870.54 |
| Selma Compressor Station | 26.33 | 30.83 | 2.47 | 4.79 | 8.79 | -3.15 | 71,570.98 |
| Elmore Compressor Station | -262.57 | 44.48 | 3.75 | 7.27 | 3.57 | -6.33 | 117,191.27 |
| Auburn Compressor Station | 26.33 | 30.83 | 2.47 | 4.79 | 3.33 | -4.46 | 91,209.73 |
| Ellerslie Compressor Station | -86.24 | 21.41 | 1.87 | 2.88 | 11.95 | -0.80 | 82,906.23 |
| Thomaston Compressor Station | -5.56 | 16.74 | 1.28 | 2.48 | -8.30 | -5.22 | 50,814.30 |
| Ocmulgee Compressor Station | 0.25 | 0.50 | 0.00 | 0.01 | -8.67 | -1.51 | 11,442.20 |
| Hall Gate Compressor Station | -355.78 | -91.03 | 1.62 | -12.83 | -112.54 | -29.99 | 33,064.61 |
| Wrens Compressor Station | -422.90 | -432.68 | 0.73 | -2.07 | -130.93 | -6.83 | 28,622.69 |
| Jefferson County Compressor Station | 20.07 | 23.22 | 1.88 | 3.64 | 12.24 | 1.03 | 53,912.72 |
| Rincon Compressor Station | 20.07 | 23.22 | 1.88 | 6.34 | 12.17 | 0.64 | 59,974.47 |

Table 4.11-4: Estimated Operating Emissions for SSE4 Project

| Compressor Station | Estimated Emissions (tpy) | | | | | | |
|---|---------------------------|----------------|-----------------|---|----------------|---------------|---------------------|
| | NO _x | CO | SO ₂ | PM ₁₀ / PM _{2.5} | VOCs | HAPs | CO _{2e} |
| SSE4 Summary | -2,007.00 | -417.35 | 30.75 | 22.46 | -250.64 | -85.63 | 1,047,105.46 |
| a/ A copy of the detailed operational emission calculations for SSE4, including speciated GHGs were provided by SNG/EEC in the July 3, 2025, Certificate Application under appendix 9.A. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250703-5175. b/ Pipeline fugitives are included for each compressor station total. | | | | | | | |

4.11.4.3 Operational Air Quality Modeling Assessment

To further evaluate air quality effects from operations, air dispersion modeling was performed for MSX and SSE4 compressor stations that would be constructed or modified as part of the Project.

4.11.4.4 Mississippi Crossing Project

As discussed in section 4.11.1, measured concentrations ($\mu\text{g}/\text{m}^3$) from representative air quality monitors for Station 602, Station 606A, and Station 610 are summarized in tables I.4.11-3, I.4.11-4, and I.4.11-5.

To evaluate the air quality effects from the operation of MSX compressor stations, TGP performed air dispersion modeling for Stations 602, 606A, and 601 using the EPA's AERMOD air dispersion modeling system, a Gaussian plume model approved by EPA for predicting ambient air concentrations within a 50-kilometer distance of an emissions source.

Surface and upper air meteorological data for the five-year period of 2020 through 2024 from the Jackson, Mississippi Thompson Field Station (Station ID 03940) was used for this modeling analysis for Station 602 and 606A due to its proximity. Surface and upper air meteorological data for the five-year period of 2020 through 2024 from the Meridian, Mississippi station (Station ID 13865) was used for Station 610. Table I.4.11-10 in appendix I lists the meteorological stations used and the distance to each compressor station.

A circular grid composed of receptors placed at 100-meter intervals having a radius of approximately 5 kilometers was used for the models. Structures can influence modeling results because of building-induced downwash, which can increase predicted concentrations at receptors located in the zone affected by downwash. Structure downwash was considered in the AERMOD model runs.²⁴⁶

Modeling was performed to predict the maximum ambient air effects for criteria air pollutants from the proposed point sources (turbines, generators, gas heaters) associated with each compressor station using the maximum short term emissions rates. Results for the modeling

²⁴⁶ The AERMOD input/output files were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152.

analysis performed for each compressor station are summarized in table 4.11-5. As shown, the maximum effects for all pollutants and averaging times predicted by the modeling are below the respective PSD Class II significant effect levels (SILs). The SILs are used by EPA in air permitting decisions and based on EPA regulations. If modeling results of a project's emissions are below the defined SIL for a pollutant/averaging period, then the source is generally considered to be insignificant to cause or contribute to an exceedance of the NAAQS for that pollutant/averaging period, and no further analysis is needed. It can therefore be concluded that operational emissions from MSX would result in direct, long-term, but minor effects on air quality, which would comply with applicable federal and state air quality standards and requirements.

Table 4.11-5: MSX Compressor Station AERMOD Results and Class II SIL Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^c | Class II SIL |
|---|------------------|--|--------------|
| Station 602 Modeling Results | | | |
| NO ₂ | 1-hour | 5.60 | 7.5 |
| | Annual | 0.15 | 1 |
| CO | 1-hour | 1,979.64 | 2,000 |
| | 8-hour | 190.12 | 500 |
| PM ₁₀ | 24-hour | 0.78 | 5 |
| PM _{2.5} | 24-hour | 0.79 | 1.2 |
| | Annual | 0.082 | 0.3 |
| SO ₂ | 1-hour | 0.60 | 7.8 |
| | 3-hour | 0.64 | 25 |
| Station 606A Modeling Results | | | |
| NO ₂ | 1-hour | 5.72 | 7.5 |
| | Annual | 0.15 | 1 |
| CO | 1-hour | 206.78 | 2,000 |
| | 8-hour | 102.02 | 500 |
| PM ₁₀ | 24-hour | 0.69 | 5 |
| PM _{2.5} | 24-hour | 0.71 | 1.2 |
| | Annual | 0.045 | 0.3 |
| SO ₂ | 1-hour | 0.61 | 7.8 |
| | 3-hour | 0.55 | 25 |
| Station 610 Modeling Results | | | |
| NO ₂ | 1-hour | 4.25 | 7.5 |
| | Annual | 0.14 | 1 |
| CO | 1-hour | 566.16 | 2,000 |
| | 8-hour | 50.23 | 500 |
| PM ₁₀ | 24-hour | 0.38 | 5 |
| PM _{2.5} | 24-hour | 0.40 | 1.2 |
| | Annual | 0.043 | 0.3 |
| SO ₂ | 1-hour | 0.51 | 7.8 |
| | 3-hour | 0.01 | 25 |
| <p>a/ The AERMOD input/output files were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250630-5152.</p> <p>b/ Bolded values denote that the Project Effect is above the Class II SIL</p> <p>c/ Compressor No. 1, Compressor No. 2, Compressor No. 3, Emergency Generator No. 1, Emergency Generator No. 2, Heater No. 1, and Heater No. 2 were not modeled for SO₂, PM_{2.5}, or PM₁₀ at Station 602. Compressor No. 1, Emergency Generator No. 1, and Heater No. 1 were not modeled for SO₂ at Station 606A. Compressor No. 1, Compressor No. 2, Emergency Generator No. 1, and Heater No. 1 were not modeled for NO₂, PM_{2.5}, PM₁₀, or SO₂ at Station 610.</p> | | | |

To demonstrate compliance with the NAAQS, modeled effects from the compressor stations were added to representative background values and shown in Table 4.11-6.

Table 4.11-6: MSX Compressor Station AERMOD Results and NAAQS Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^b | Background Value (µg/m ³) ^c | Background Monitor ID | Total Concentration (Modeled + Background Value) (µg/m ³) | NAAQS (µg/m ³) ^d |
|--|------------------|--|--|-----------------------|---|---|
| Station 602 Modeling Results | | | | | | |
| NO ₂ | 1-hour | 5.60 | 67.68 | 471570100 | 73.28 | 188 |
| | Annual | 0.15 | 16.92 | 471570100 | 17.07 | 100 |
| CO | 1-hour | 1,979.64 | 1,495 | 280490020 | 3,475 | 40,000 |
| | 8-hour | 190.12 | 1,150 | 280490020 | 1,340 | 10,000 |
| PM ₁₀ | 24-hour | 0.78 | 74.67 | 280490020 | 75.45 | 150 |
| PM _{2.5} | 24-hour | 0.79 | 22.00 | 280490021 | 22.79 | 35 |
| | Annual | 0.082 | 8.80 | 280490021 | 8.88 | 9 |
| SO ₂ | 1-hour | 0.60 | 7.00 | 280490020 | 7.60 | 196.5 |
| Station 606A Modeling Results | | | | | | |
| NO ₂ | 1-hour | 5.72 | 67.68 | 471570100 | 73.40 | 188 |
| | Annual | 0.15 | 16.92 | 471570100 | 17.07 | 100 |
| CO | 1-hour | 206.78 | 1,495 | 280490020 | 1,702 | 40,000 |
| | 8-hour | 102.02 | 1,150 | 280490020 | 1,252 | 10,000 |
| PM ₁₀ | 24-hour | 0.69 | 74.67 | 280490020 | 75.36 | 150 |
| PM _{2.5} | 24-hour | 0.71 | 22.00 | 280490021 | 22.71 | 35 |
| | Annual | 0.045 | 8.80 | 280490021 | 8.85 | 9 |
| SO ₂ | 1-hour | 0.61 | 7.00 | 280490020 | 7.61 | 196.5 |
| Station 610 Modeling Results | | | | | | |
| NO ₂ | 1-hour | 4.25 | 80.84 | 10732059 | 85.09 | 188 |
| | Annual | 0.14 | 16.92 | 10732059 | 17.06 | 100 |
| CO | 1-hour | 566.16 | 1,495 | 280490020 | 2,061 | 40,000 |
| | 8-hour | 50.23 | 1,150 | 280490020 | 1,200 | 10,000 |
| PM ₁₀ | 24-hour | 0.38 | 74.67 | 280490020 | 75.05 | 150 |
| PM _{2.5} | 24-hour | 0.40 | 16.00 | 11190003 | 16.40 | 35 |
| | Annual | 0.043 | 6.20 | 11190003 | 6.24 | 9 |
| SO ₂ | 1-hour | 0.51 | 10.48 | 11190003 | 10.99 | 196.5 |
| <p>a/ The AERMOD input/output files were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC’s eLibrary, Accession no.: 20250630-5152.</p> <p>b/ Compressor No. 1, Compressor No. 2, Compressor No. 3, Emergency Generator No. 1, Emergency Generator No. 2, Heater No. 1, and Heater No. 2 were not modeled for SO₂, PM_{2.5}, or PM₁₀ at Station 602. Compressor No. 1, Emergency Generator No. 1, and Heater No. 1 were not modeled for SO₂ at Station 606A. Compressor No. 1, Compressor No. 2, Emergency Generator No. 1, and Heater No. 1 were not modeled for NO₂, PM_{2.5}, PM₁₀, or SO₂ at Station 610.</p> <p>c/ Tables of background values for each compressor station are located in appendix I.</p> <p>d/ All Project Effects + Background Values below NAAQS.</p> | | | | | | |

4.11.4.5 South System Expansion 4 Project

To evaluate the air quality effects from the operation of the SSE4 compressor stations, SNG/EEC performed air dispersion modeling using the AERMOD model for operational emissions that would result from the SSE4 compressor stations after the proposed project is completed. Modeling for each proposed modified compressor station was performed only for pollutants for which a potential net increase would occur as a result of SSE4.

Surface and upper air meteorological data for the five-year period (2020 through 2024 for all sites in Mississippi and Georgia and 2019 through 2023 for all sites in Alabama) used in the modeling were obtained from the nearest meteorological stations to each compressor station modeled. Table I.4.11-10 lists the meteorological stations used and the distance to each compressor station.

A circular grid composed of receptors placed at 100-meter intervals and having a radius of approximately 5 kilometers was used for the models. Structures can influence modeling results because of building-induced downwash, which can increase predicted concentrations at receptors located in the zone affected by downwash. Structure downwash was considered in the AERMOD model runs.²⁴⁷

Modeling was performed for the proposed point sources (turbines, generators, gas heaters) associated with each compressor station modification and using the net emissions increase from each unit. Results from the modeling analysis at each compressor station are summarized in table 4.11-7.

Table 4.11-7: SSE4 Compressor Station AERMOD Results and Class II SIL Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^c | Class II SIL |
|--|--------------------|--|--------------|
| Enterprise (Mississippi) Modeling Results | | | |
| NO ₂ | 1-hour | No proposed emissions increase | 7.5 |
| | Annual | | 1 |
| CO | 1-hour | | 2,000 |
| | 8-hour | | 500 |
| PM ₁₀ | 24-hour | | 5 |
| PM _{2.5} | 24-hour | | 1.2 |
| | Annual | | 0.3 |
| SO ₂ | 1-hour | | 1.45 |
| | Annual (secondary) | 0.06 | 1 |
| Rose Hill (Mississippi) Modeling Results | | | |
| NO ₂ | 1-hour | 4.63 | 7.5 |
| | Annual | 0.13 | 1 |
| CO | 1-hour | 441.8 | 2,000 |
| | 8-hour | 204.8 | 500 |
| PM ₁₀ | 24-hour | 0.23 | 5 |
| PM _{2.5} | 24-hour | 0.23 | 1.2 |
| | Annual | 0.03 | 0.3 |
| SO ₂ | 1-hour | 0.63 | 7.8 |
| | Annual (secondary) | 0.03 | 1 |
| York (Alabama) Modeling Results | | | |
| NO ₂ | 1-hour | 5.52 | 7.5 |
| | Annual | 0.09 | 1 |
| CO | 1-hour | 502.5 | 2,000 |
| | 8-hour | 400.3 | 500 |
| PM ₁₀ | 24-hour | 0.3 | 5 |
| PM _{2.5} | 24-hour | 0.17 | 1.2 |
| | Annual | 0.02 | 0.3 |
| SO ₂ | 1-hour | 0.71 | 7.8 |
| | Annual (secondary) | 0.06 | 1 |
| Gallion (Alabama) Modeling Results | | | |
| NO ₂ | 1-hour | No Proposed Increase | 7.5 |
| | Annual | | 1 |
| CO | 1-hour | | 2,000 |

²⁴⁷ The AERMOD input/output files were provided by SNG/EEC in the July 3, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC's eLibrary, Accession no.: 20250703-5175.

Table 4.11-7: SSE4 Compressor Station AERMOD Results and Class II SIL Comparison

| Pollutant | Averaging Period | Project Effect ($\mu\text{g}/\text{m}^3$) ^c | Class II SIL |
|---|--------------------|---|--------------|
| PM10 | 8-hour | | 500 |
| | 24-hour | | 5 |
| PM2.5 | 24-hour | | 1.2 |
| | Annual | | 0.3 |
| SO ₂ | 1-hour | 1.04 | 7.8 |
| | Annual (secondary) | 0.06 | 1 |
| Selma (Alabama) Modeling Results | | | |
| NO ₂ | 1-hour | 5.54 | 7.5 |
| | Annual | 0.07 | 1 |
| CO | 1-hour | 834.9 | 2,000 |
| | 8-hour | 477.5 | 500 |
| PM10 | 24-hour | 0.24 | 5 |
| PM2.5 | 24-hour | 0.14 | 1.2 |
| | Annual | 0.01 | 0.3 |
| SO ₂ | 1-hour | 0.93 | 7.8 |
| | Annual (secondary) | 0.05 | 1 |
| Elmore (Alabama) Modeling Results | | | |
| NO ₂ | 1-hour | No Proposed Increase | 7.5 |
| | Annual | | 1 |
| CO | 1-hour | 438.4 | 2,000 |
| | 8-hour | 214.8 | 500 |
| PM10 | 24-hour | 0.66 | 5 |
| PM2.5 | 24-hour | 0.30 | 1.2 |
| | Annual | 0.01 | 0.3 |
| SO ₂ | 1-hour | 1.1 | 7.8 |
| | Annual (secondary) | 0.02 | 1 |
| Auburn (Alabama) Modeling Results | | | |
| NO ₂ | 1-hour | 3.2 | 7.5 |
| | Annual | 0.08 | 1 |
| CO | 1-hour | 541.0 | 2,000 |
| | 8-hour | 349.9 | 500 |
| PM10 | 24-hour | 0.24 | 5 |
| PM2.5 | 24-hour | 0.15 | 1.2 |
| | Annual | 0.02 | 0.3 |
| SO ₂ | 1-hour | 0.04 | 7.8 |
| | Annual (secondary) | 0.76 | 1 |
| Ellerslie (Georgia) Modeling Results | | | |
| NO ₂ | 1-hour | No Proposed Increase | 7.5 |
| | Annual | | 1 |
| CO | 1-hour | 387.6 | 2,000 |
| | 8-hour | 167.0 | 500 |
| PM10 | 24-hour | 0.22 | 5 |
| PM2.5 | 24-hour | 0.22 | 1.2 |
| | Annual | 0.01 | 0.3 |
| SO ₂ | 1-hour | 0.52 | 7.8 |
| | Annual (secondary) | 0.02 | 1 |
| Thomaston (Georgia) Modeling Results | | | |
| NO ₂ | 1-hour | 6.32 | 7.5 |
| | Annual | 0.06 | 1 |
| CO | 1-hour | 682.8 | 2,000 |
| | 8-hour | 285.4 | 500 |
| PM10 | 24-hour | 0.28 | 5 |
| | 24-hour | 0.28 | 1.2 |

Table 4.11-7: SSE4 Compressor Station AERMOD Results and Class II SIL Comparison

| Pollutant | Averaging Period | Project Effect ($\mu\text{g}/\text{m}^3$) ^c | Class II SIL | |
|--|--------------------|---|--------------|-----|
| PM _{2.5} | Annual | 0.01 | 0.3 | |
| SO ₂ | 1-hour | 0.05 | 7.8 | |
| | Annual (secondary) | 0.95 | 1 | |
| Ocmulgee (Georgia) Modeling Results | | | | |
| NO ₂ | 1-hour | No Proposed Increase – Electric Unit | 7.5 | |
| | Annual | | 1 | |
| CO | 1-hour | | 2,000 | |
| | 8-hour | | 500 | |
| PM ₁₀ | 24-hour | | 5 | |
| PM _{2.5} | 24-hour | | 1.2 | |
| | Annual | | 0.3 | |
| SO ₂ | 1-hour | | 7.8 | |
| | Annual (secondary) | | 1 | |
| Hall Gate (Georgia) Modeling Results | | | | |
| NO ₂ | 1-hour | No Proposed Increase | 7.5 | |
| | Annual | | 1 | |
| CO | 1-hour | | 2,000 | |
| | 8-hour | | 500 | |
| PM ₁₀ | 24-hour | | 5 | |
| PM _{2.5} | 24-hour | | 1.2 | |
| | Annual | | 0.3 | |
| SO ₂ | 1-hour | | 1.15 | 7.8 |
| | Annual (secondary) | | 0.02 | 1 |
| Wrens (Georgia) Modeling Results | | | | |
| NO ₂ | 1-hour | No Proposed Increase | 7.5 | |
| | Annual | | 1 | |
| CO | 1-hour | | 2,000 | |
| | 8-hour | | 500 | |
| PM ₁₀ | 24-hour | | 5 | |
| PM _{2.5} | 24-hour | | 1.2 | |
| | Annual | | 0.3 | |
| SO ₂ | 1-hour | | 0.97 | 7.8 |
| | Annual (secondary) | | 0.06 | 1 |
| Jefferson County (Georgia) Modeling Results | | | | |
| NO ₂ | 1-hour | 4.56 | 7.5 | |
| | Annual | 0.06 | 1 | |
| CO | 1-hour | 357.4 | 2,000 | |
| | 8-hour | 198.7 | 500 | |
| PM ₁₀ | 24-hour | 0.15 | 5 | |
| PM _{2.5} | 24-hour | 0.15 | 1.2 | |
| | Annual | 0.01 | 0.3 | |
| SO ₂ | 1-hour | 0.70 | 7.8 | |
| | Annual (secondary) | 0.51 | 1 | |
| Rincon (Georgia) Modeling Results | | | | |
| NO ₂ | 1-hour | 4.38 | 7.5 | |
| | Annual | 0.05 | 1 | |
| CO | 1-hour | 455.2 | 2,000 | |
| | 8-hour | 278.4 | 500 | |
| PM ₁₀ | 24-hour | 0.16 | 5 | |
| PM _{2.5} | 24-hour | 0.16 | 1.2 | |
| | Annual | 0.01 | 0.3 | |
| SO ₂ | 1-hour | 0.84 | 7.8 | |
| | Annual (secondary) | 0.04 | 1 | |

Table 4.11-7: SSE4 Compressor Station AERMOD Results and Class II SIL Comparison

| Pollutant | Averaging Period | Project Effect ($\mu\text{g}/\text{m}^3$) ^c | Class II SIL |
|--|------------------|--|--------------|
| a/ The AERMOD input/output files were provided by SNG/EEC in the July 3, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC’s eLibrary, Accession no.: 20250703-5175. b/ All Project effects below the SIL. c/ Emergency Generator No. 5 was not modeled at Enterprise Station. Emergency Generator No. 2 was not modeled at Rose Hill Station. Emergency Generator No. 3 was not modeled at York Station. Emergency Generator G004 was not modeled at Gallion Station. Combustion Turbine No. 1, Combustion Turbine No. 2, and Fuel Gas Heater No. 2 were not modeled for CO, NO ₂ , PM _{2.5} , or PM ₁₀ at Gallion Station. Emergency Generator No. 3 was not modeled at Selma Station. Emergency Generator No. 2 was not modeled at Elmore Station. Compressor Turbine No. 1, Compressor Turbine No. 2, and Fuel Gas Heater No. 1 were not modeled for NO _x at Elmore Station. Emergency Generator No. 3 was not modeled at Auburn Station. Compressor Engine Emergency Generator No. 2 was not modeled at Ellerslie Station. Natural Gas Turbine No. 1 was not modeled for NO ₂ at Ellerslie Station. Emergency Generator G004 was not modeled at Thomaston Station. Emergency Generator No. 3 was not modeled at Hall Gate Station. Compressor Engine No. 3 and Fuel Gas Heater No. 2 were not modeled for CO, NO ₂ , PM _{2.5} , and PM ₁₀ at Hall Gate Station. Emergency Generator No. 4 was not modeled at Wrens Station. Natural Gas Turbine No. 1 and Fuel Gas Heater No. 2 were not modeled for CO, NO ₂ , PM _{2.5} , and PM ₁₀ at Wrens Station. Emergency Generator No. 2 was not modeled at Jefferson County Station. Emergency Generator No. 2 was not modeled at Rincon Station. | | | |

As shown, the maximum model-predicted effects for all pollutants and averaging times are below the respective PSD Class II SILs and associated NAAQS. It can therefore be concluded that operational emissions from SSE4 would result in direct, long-term, but minor effects on air quality, which would comply with applicable federal and state air quality standards and requirements. To demonstrate compliance with the NAAQS, modeled effects from the compressor stations were added to representative background values and shown in Table 4.11-8.

Table 4.11-8: SSE4 Compressor Station AERMOD Results and NAAQS Comparison

| Pollutant | Averaging Period | Project Effect ($\mu\text{g}/\text{m}^3$) ^b | Background Value ($\mu\text{g}/\text{m}^3$) ^c | Background Monitor ID | Total Concentration (Modeled + Background Value) ($\mu\text{g}/\text{m}^3$) | NAAQS ($\mu\text{g}/\text{m}^3$) ^d |
|--|------------------|--|--|-----------------------|---|---|
| Enterprise (Mississippi) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | 13.10 | 280490020 | 14.55 | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | | | | | 40,000 |
| | 8-hour | | | | | 10,000 |
| PM ₁₀ | 24-hour | | | | | 150 |
| PM _{2.5} | 24-hour | | | | | 35 |
| | Annual | 9 | | | | |
| SO ₂ | 1-hour | 1.45 | 13.10 | 280490020 | 14.55 | 196.5 |
| Rose Hill (Mississippi) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 4.63 | 52.08 | 280590006 | 56.71 | 188 |
| | Annual | 0.13 | 6.52 | | 6.65 | 100 |
| CO | 1-hour | 441.8 | 1,380 | 280490020 | 1,822 | 40,000 |
| | 8-hour | 204.8 | 1,150 | | 1,355 | 10,000 |
| PM ₁₀ | 24-hour | 0.23 | 81.00 | 280490020 | 81.23 | 150 |
| PM _{2.5} | 24-hour | 0.23 | 20.00 | 280490020 | 20.23 | 35 |
| | Annual | 0.03 | 8.80 | | 8.83 | 9 |
| SO ₂ | 1-hour | 0.63 | 13.10 | 280750003 | 13.73 | 196.5 |
| York (Alabama) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 5.52 | 73.88 | 010730023 | 79.40 | 188 |
| | Annual | 0.09 | 16.04 | | 16.13 | 100 |

Table 4.11-8: SSE4 Compressor Station AERMOD Results and NAAQS Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^b | Background Value (µg/m ³) ^c | Background Monitor ID | Total Concentration (Modeled + Background Value) (µg/m ³) | NAAQS (µg/m ³) ^d |
|---|------------------|--|--|-----------------------|---|---|
| CO | 1-hour | 502.5 | 2,415 | 010730023 | 2,918 | 40,000 |
| | 8-hour | 400.3 | 2,070 | | 2,470 | 10,000 |
| PM ₁₀ | 24-hour | 0.3 | 27.70 | 11011002 | 28.00 | 150 |
| PM _{2.5} | 24-hour | 0.17 | 17.70 | 11250011 | 17.87 | 35 |
| | Annual | 0.02 | 7.10 | | 7.12 | 9 |
| SO ₂ | 1-hour | 0.71 | 33.27 | 10730023 | 33.98 | 196.5 |
| Gallion (Alabama) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | | | | | 40,000 |
| | 8-hour | | | | | 10,000 |
| PM ₁₀ | 24-hour | | | | | 150 |
| PM _{2.5} | 24-hour | | | | | 35 |
| | Annual | | | | | 9 |
| SO ₂ | 1-hour | | | | | 1.04 |
| Selma (Alabama) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 5.54 | 73.88 | 010730023 | 79.42 | 188 |
| | Annual | 0.07 | 16.04 | | 16.11 | 100 |
| CO | 1-hour | 834.9 | 2,415 | 010730023 | 3,250 | 40,000 |
| | 8-hour | 477.5 | 2,070 | | 2,548 | 10,000 |
| PM ₁₀ | 24-hour | 0.24 | 27.70 | 11011002 | 27.94 | 150 |
| PM _{2.5} | 24-hour | 0.14 | 18.30 | 11250011 | 18.44 | 35 |
| | Annual | 0.01 | 8.00 | 11011002 | 8.01 | 9 |
| SO ₂ | 1-hour | 0.93 | 33.27 | 10730023 | 34.20 | 196.5 |
| Elmore (Alabama) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | 438.4 | 2,415 | 010730023 | 2,853 | 40,000 |
| | 8-hour | 214.8 | 2,070 | | 2,285 | 10,000 |
| PM ₁₀ | 24-hour | 0.66 | 27.70 | 11011002 | 28.36 | 150 |
| PM _{2.5} | 24-hour | 0.30 | 18.30 | 11250011 | 18.60 | 35 |
| | Annual | 0.01 | 8.00 | 11011002 | 8.01 | 9 |
| SO ₂ | 1-hour | 1.1 | 33.27 | 10730023 | 34.37 | 196.5 |
| Auburn (Alabama) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 3.2 | 73.88 | 010730023 | 77.08 | 188 |
| | Annual | 0.08 | 16.04 | | 16.12 | 100 |
| CO | 1-hour | 541.0 | 2,415 | 010730023 | 2,956 | 40,000 |
| | 8-hour | 349.9 | 2,070 | | 2,420 | 10,000 |
| PM ₁₀ | 24-hour | 0.24 | 27.70 | 11011002 | 27.94 | 150 |
| PM _{2.5} | 24-hour | 0.15 | 18.30 | 11250011 | 18.45 | 35 |
| | Annual | 0.02 | 8.00 | 11011002 | 8.02 | 9 |
| SO ₂ | 1-hour | 0.04 | 33.27 | 10730023 | 33.31 | 196.5 |
| Ellerslie (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | 387.6 | 1,068 | 132230003 | 1,456 | 40,000 |
| | 8-hour | 167.0 | 839.00 | | 1,006 | 10,000 |
| PM ₁₀ | 24-hour | 0.22 | 30.00 | 131210039 | 30.22 | 150 |
| PM _{2.5} | 24-hour | 0.22 | 20.00 | 132150001 | 20.22 | 35 |
| | Annual | 0.01 | 8.60 | | 8.61 | 9 |

Table 4.11-8: SSE4 Compressor Station AERMOD Results and NAAQS Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^b | Background Value (µg/m ³) ^c | Background Monitor ID | Total Concentration (Modeled + Background Value) (µg/m ³) | NAAQS (µg/m ³) ^d |
|--|------------------|--|--|-----------------------|---|---|
| SO ₂ | 1-hour | 0.52 | 4.70 | 130890002 | 5.22 | 196.5 |
| Thomaston (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 6.32 | 30.30 | 132230003 | 36.62 | 188 |
| | Annual | 0.06 | 4.50 | | 4.56 | 100 |
| CO | 1-hour | 682.8 | 1,068 | 132230003 | 1,751 | 40,000 |
| | 8-hour | 285.4 | 839.00 | | 1,124 | 10,000 |
| PM ₁₀ | 24-hour | 0.28 | 30.00 | 131210039 | 30.28 | 150 |
| PM _{2.5} | 24-hour | 0.28 | 20.00 | 132150001 | 20.28 | 35 |
| | Annual | 0.01 | 8.60 | | 8.61 | 9 |
| SO ₂ | 1-hour | 0.05 | 4.70 | 130890002 | 4.75 | 196.5 |
| Ocmulgee (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase – Electric Unit | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | | | | | 40,000 |
| | 8-hour | | | | | 10,000 |
| PM ₁₀ | 24-hour | | | | | 150 |
| PM _{2.5} | 24-hour | | | | | 35 |
| | Annual | | | | | 9 |
| SO ₂ | 1-hour | | | | | 196.5 |
| Hall Gate (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | | | | | 40,000 |
| | 8-hour | | | | | 10,000 |
| PM ₁₀ | 24-hour | | | | | 150 |
| PM _{2.5} | 24-hour | | | | | 35 |
| | Annual | | | | | 9 |
| SO ₂ | 1-hour | | | | | 1.15 |
| Wrens (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | No Proposed Increase | | | | 188 |
| | Annual | | | | | 100 |
| CO | 1-hour | | | | | 40,000 |
| | 8-hour | | | | | 10,000 |
| PM ₁₀ | 24-hour | | | | | 150 |
| PM _{2.5} | 24-hour | | | | | 35 |
| | Annual | | | | | 9 |
| SO ₂ | 1-hour | | | | | 0.97 |
| Jefferson County (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 4.56 | 30.30 | 132230003 | 34.86 | 188 |
| | Annual | 0.06 | 4.50 | | 4.56 | 100 |
| CO | 1-hour | 357.4 | 1,068 | 132230003 | 1,425 | 40,000 |
| | 8-hour | 198.7 | 839.00 | | 1,038 | 10,000 |
| PM ₁₀ | 24-hour | 0.15 | 30.00 | 131210039 | 30.15 | 150 |
| PM _{2.5} | 24-hour | 0.15 | 20.00 | 132150001 | 20.15 | 35 |
| | Annual | 0.01 | 8.60 | | 8.61 | 9 |
| SO ₂ | 1-hour | 0.70 | 4.70 | 130890002 | 5.40 | 196.5 |
| Rincon (Georgia) Modeling Results | | | | | | |
| NO ₂ | 1-hour | 4.38 | 30.30 | 132230003 | 34.68 | 188 |
| | Annual | 0.05 | 4.50 | | 4.55 | 100 |
| CO | 1-hour | 455.2 | 1,068 | 132230003 | 1,523 | 40,000 |

Table 4.11-8: SSE4 Compressor Station AERMOD Results and NAAQS Comparison

| Pollutant | Averaging Period | Project Effect (µg/m ³) ^b | Background Value (µg/m ³) ^c | Background Monitor ID | Total Concentration (Modeled + Background Value) (µg/m ³) | NAAQS (µg/m ³) ^d |
|-------------------|------------------|--|--|-----------------------|---|---|
| | 8-hour | 278.4 | 839.00 | | 1,117 | 10,000 |
| PM ₁₀ | 24-hour | 0.16 | 30.00 | 131210039 | 30.16 | 150 |
| PM _{2.5} | 24-hour | 0.16 | 20.00 | 132150001 | 20.16 | 35 |
| | Annual | 0.01 | 8.60 | | 8.61 | 9 |
| SO ₂ | 1-hour | 0.84 | 4.70 | 130890002 | 5.54 | 196.5 |

a/ The AERMOD input/output files were provided by SNG/EEC in the July 3, 2025, Certificate Application under appendix 9.B. The calculations are available for the public to review on FERC’s eLibrary, Accession No. Accession no.: 20250703-5175.

b/ Emergency Generator No. 5 was not modeled at Enterprise Station. Emergency Generator No. 2 was not modeled at Rose Hill Station. Emergency Generator No. 3 was not modeled at York Station. Emergency Generator G004 was not modeled at Gallion Station. Combustion Turbine No. 1, Combustion Turbine No. 2, and Fuel Gas Heater No. 2 were not modeled for CO, NO₂, PM_{2.5}, or PM₁₀ at Gallion Station. Emergency Generator No. 3 was not modeled at Selma Station. Emergency Generator No. 2 was not modeled at Elmore Station. Compressor Turbine No. 1, Compressor Turbine No. 2, and Fuel Gas Heater No. 1 were not modeled for NO_x at Elmore Station. Emergency Generator No. 3 was not modeled at Auburn Station. Compressor Engine Emergency Generator No. 2 was not modeled at Ellerslie Station. Natural Gas Turbine No. 1 was not modeled for NO₂ at Ellerslie Station. Emergency Generator G004 was not modeled at Thomaston Station. Emergency Generator No. 3 was not modeled at Hall Gate Station. Compressor Engine No. 3 and Fuel Gas Heater No. 2 were not modeled for CO, NO₂, PM_{2.5}, and PM₁₀ at Hall Gate Station. Emergency Generator No. 4 was not modeled at Wrens Station. Natural Gas Turbine No. 1 and Fuel Gas Heater No. 2 were not modeled for CO, NO₂, PM_{2.5}, and PM₁₀ at Wrens Station. Emergency Generator No. 2 was not modeled at Jefferson County Station. Emergency Generator No. 2 was not modeled at Rincon Station.

c/ Tables of background values for each compressor station are located in appendix I.

d/ All Project Effects + Background Values below NAAQS.

4.11.5 Conclusion

Project construction would result in temporary and localized effects on air quality from increases of mobile diesel- and gasoline-fueled equipment tailpipe emissions, and fugitive dust emissions from surface disturbance and construction vehicle travel on unpaved roads. Based on the information provided, we conclude that emissions generated during construction of the Project would not have a significant effect on air quality.

Direct emissions of regulated air pollutants would result from the operation of the compressor stations associated with the Projects. The emissions would be generated due to combustion of natural gas and from potential leaks in valves and piping components, and from blowdowns during maintenance and shutdown events. As shown in table 4.11-5, the potential emissions for the compressor stations associated with MSX are significantly less than the major source threshold of 250 tpy for each regulated air pollutant. Similarly, table 4.11-6 shows that for SSE4 there would be a net decrease in the potential emissions of combustion pollutants NO_x, CO, and VOCs (combined total of all compressor stations) and HAPs as a result of the modifications. For all 14 compressor stations associated with SSE4 combined, there would be an estimated potential increase of approximately 31 tpy SO₂ emissions and approximately 22 tpy of PM₁₀/PM_{2.5} emissions, quantities that are relatively minor compared to the total SO₂ and PM₁₀/PM_{2.5} emissions from all other existing sources in the Project area.

The Companies performed air dispersion modeling to evaluate the air quality effects from the operation of the proposed new and modifications to compressor stations associated with both

MSX and SSE4. As shown by the modeling results presented in table 4.11-5 and table 4.11-6, the maximum model-predicted effects for all pollutants and averaging times are below the respective PSD Class II SIL, which are thresholds used by EPA and state regulatory agencies to determine if the modeled emissions are significant enough to be able to cause or contribute to any violations of the NAAQS. Since the Project would be required to comply with all applicable federal and state air quality standards and that effects are below the SILs and NAAQS thresholds, we conclude that operational emissions from MSX and SSE4 would result in direct, long-term, minor effects on air quality but would not result in significant air quality effects.

4.12 NOISE

Noise is generally defined as sound exceeding ambient background levels, which are shaped by both natural and anthropogenic sources. The Projects' activities are expected to influence overall sound levels in the area, with environmental noise varying in magnitude and frequency throughout the day and week due to factors such as weather conditions and seasonal vegetation cover.

During the scoping periods, we received public comments that expressed concerns about noise pollution from construction activities, noting that elevated noise levels could disrupt daily life for nearby residents and disturb local wildlife, including hunting and recreational use of private lands. Concerns over noise generated during construction is provided in section 4.12.

4.12.1 Existing Noise Environment

Sound is generated by vibrating objects and propagates as pressure waves through air, measured in decibels (dB). The noise environment can be affected both during construction and operation of pipeline projects. The magnitude and frequency of environmental noise may vary considerably over the course of the day, throughout the week, and across seasons, in part due to changing weather conditions and the effects of seasonal vegetative cover. Two measures to relate the time-varying quality of environmental noise to its known effect on people are the 24-hour equivalent sound level (L_{eq}) and day-night sound level (L_{dn}). The L_{eq} is the level of steady sound with the same total (equivalent) energy as the time-varying sound of interest, averaged over a 24-hour period. The L_{dn} is the L_{eq} plus 10 decibels on the A-weighted scale (dBA) added to account for people's greater sensitivity to nighttime sound levels during late evening and early morning hours (between the hours of 10:00 p.m. and 7:00 a.m.). The A-weighted scale is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. The human ear's threshold of perception for noise change is considered to be 3 dBA; 6 dBA is clearly noticeable to the human ear, and 9 dBA is perceived as a doubling of noise.

Measured Ambient Noise Levels

4.12.1.1 Mississippi Crossing Project

TGP anticipates beginning construction activities January 1, 2027, placing all Project facilities in-service by November 1, 2028. Ambient noise surveys were conducted from April 16–18 and April 26–29, 2025 to quantify the existing noise environment at the closest identified NSAs. Measured daytime and nighttime equivalent sound levels (L_{eq} , dBA) and day-night levels (L_{dn} , dBA) are summarized in table I.4.12-1 for the HDD locations and table I.4.12-5 for the compressor and meter stations. Audible sources included natural sounds (e.g., birds, insects) and traffic. For

NSAs near proposed compressor and meter stations, overnight monitors captured representative sound levels. Corresponding figures and additional measurement details can be reviewed in MSX Resource Report 9 - Air and Noise Quality.²⁴⁸

4.12.1.2 South System Expansion 4 Project

SNG/EEC anticipates beginning construction activities in the 4th quarter of 2026, with Phase I facilities and Phase II facilities in service by November 2028 and November 2029, respectively. Ambient noise surveys were conducted between August 2024 to March 2025 during several field campaigns. Measured L_{eq} , dBA and L_{dn} , dBA are summarized in table I.4.12-2 for the compressor and meter stations and nighttime construction of HDDs. Audible sources typically included existing station operations, natural sounds (e.g., birds, insects) and traffic. For NSAs near proposed compressor and meter stations, overnight monitors captured representative sound levels. Additional measurement details are provided by SNG/EEC in its February 17, 2026, Supplemental Filing.²⁴⁹

4.12.2 Federal Noise Regulations

In 1974, the EPA published *its Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA, 1974). This document provides information for state and local regulators to use in developing their own ambient noise standards. Two measurements used by some federal agencies to relate the time-varying quality of environmental noise to its known effects on people are the L_{eq} and the L_{dn} . Noise levels are perceived differently, depending on length of exposure and time of day. For an essentially steady sound source that operates continuously over a 24-hour period and controls the environmental sound level, the L_{dn} is approximately 6.4 dB above the measured L_{eq} .

The EPA has indicated that an L_{dn} of 55 dBA protects the public from indoor and outdoor activity interference. This would be equivalent to a steady, continuous L_{eq} of 48.6 dBA. FERC has adopted this criterion and uses it to evaluate the potential noise effects from the proposed Projects at NSAs. FERC also requires that during operation, the noise attributable to any new compressor station, station modifications, meter stations during full-load operation, or certain nighttime construction activities are not to exceed an L_{dn} of 55 dBA at any NSAs. NSAs are defined as within one mile of the new compressor station and 0.5-mile of proposed meter stations and HDD sites.

4.12.3 Local Noise Regulations

4.12.3.1 Mississippi Crossing Project

The project sound-emitting equipment falls within 10 Mississippi counties of Lauderdale, Humphreys, Attala, Washington, Holmes, Leake, Neshoba, Newton, Clarke, and Neshoba, and within Choctaw County Alabama. Mississippi and Alabama do not have state-wide sound level

²⁴⁸ TGP's Resource Report 9 and subsequent appendices are available to the public for review on FERC's eLibrary at Accession no.: 20250630-5152.

²⁴⁹ SNG/EECs February 17, 2026, Supplemental Filing is available to the public for review on FERC's eLibrary at Accession no.: 20260217-5265.

limitations applicable to MSX. No applicable local noise regulations were identified for any of the identified counties.

4.12.3.2 South System Expansion 4 Project

The project sound-emitting equipment falls within two Mississippi counties of Lauderdale and Clarke, within nine Alabama counties of Sumter, Perry, Dallas, Autauga, Elmore, Tallapoosa, Macon, Lee, and Hale, and within 16 Georgia counties of Muscogee, Harris, Talbot, Upson, Crawford, Monroe, Bibb, Jones, Baldwin, Washington, Glascock, Jefferson, Richmond, Monroe, Spalding, and Henry. Mississippi, Alabama, and Georgia do not have state-wide sound level limitations applicable to SSE4. No applicable local noise regulations were identified for any of the identified counties.

4.12.4 Construction Noise Effects and Mitigation

Construction noise from the MSX and SSE4 Projects would be expected to be short-term and localized, with limited effects on nearby NSAs. The construction noise associated with the Projects would occur at stationary locations such as compressor stations and also along the length of the pipeline. Construction noise associated with the stationary locations would occur at the same general location during the entire duration of the construction period. Construction noise associated with the pipeline construction would however move along the length of the pipeline as the pipeline is constructed in segments. Any specific location may therefore be affected by pipeline construction noise for only a short period of time when compared with stationary locations.

Construction activities would generally occur from 7:00 a.m. to 7:00 p.m., Monday through Saturday however, some actions may require activity 24 hours per day, nighttime or Sunday work. These activities may include, but are not limited to:

- HDD activities;
- hydrostatic testing of HDD sections, mainline pipe, and facilities;
- dewatering of test sections, conventional bore pits, and trench or bell holes ahead of mainline installation crews;
- mainline tie-in and specialty crews at resource and road crossings, as needed pending schedule and progress;
- aboveground facilities construction;
- commissioning, line purge, and line fill activities; and
- equipment maintenance and service activities.

HDD activities and work at hydrostatic testing sites would occur 24-hours per day during certain periods. Additionally, equipment and material unloading, operation of pumps, non-destructive testing, and dry-ditch stream crossings may require uninterrupted completion extending into nighttime hours. Where nighttime work is required, a noise management plan would be implemented to meet the Commission's nighttime limits of 55 dBA L_{dn} . Individuals in the immediate vicinity of the construction activities would experience temporary and local increase in noise during pipeline and aboveground facility construction. Noise effects due to pipeline

construction are expected to have minimal effects at any one location due to the nature of pipeline construction continuously moving down the pipeline right-of-way. Construction equipment noise levels are expected to be less than 85 dBA at a distance of 50 feet when equipment is operating at full load. TGP does not anticipate the need for controlled blasting as part of the MSX construction, but controlled blasting may be required for a portion of the SSE4 pipeline loops. We evaluated the need for additional noise mitigation for sites experiencing nighttime construction, including NSAs within one mile of the new compressor station construction and 0.5-mile of proposed meter station construction and HDD entry and exit workspaces. Receptors beyond those distances do not need to be included in the sound level predictions or require mitigation analysis. We received comments from the public regarding concerns over noise generated during construction and the clearing of foliage that acts as a natural sound barrier. A discussion of the anticipated noise from construction of MSX and SSE4 and any relevant mitigation measures required for nighttime construction activities is provided in sections 4.12.4.1. The analysis was completed without consideration of attenuation from existing foliage to be conservative.

4.12.4.1 Mississippi Crossing Construction Effects

The construction sound levels based on the anticipated construction phases with the maximum number of noise generating equipment operating are presented in the table 4.12-1, with supporting calculations included in the application and supplemental filings.^{250,251,252} Pile driving would only occur during construction at Station 610 for equipment and retaining wall installation during daytime hours, for a short duration. If pile driving is determined to be required during nighttime hours, then a nighttime construction noise mitigation plan would be developed based upon the number of anticipated piles and included within a supplemental noise assessment. The only nighttime noise source at contractor yards would be a single mobile generator located at varying distances from the closest NSAs that sound levels would be below 48.6 dBA. The remainder of noise sources would generally occur between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday; however, weather conditions, site conditions, specialized construction techniques such as HDDs, dam and pump waterbody crossings, hydrostatic testing, pipeline drying and commissioning activities, emergencies, stream crossing timing windows, or preparation for controlled blasting may necessitate nighttime work, extended work hours, or extended work on Sundays and holidays. If nighttime construction would take place TGP states it would develop a noise management plan to keep sound levels within the Commission's nighttime construction sound level limit of 48.6 dBA L_{eq} or 55 dBA L_{dn} at the NSAs during nighttime construction.

²⁵⁰ TGP's Resource Report 9 and subsequent appendices are available to the public for review on FERC's eLibrary at Accession no.: 20250630-5152.

²⁵¹ Collocation details obtained from individual meter station reports in TGP's September 23, 2025, Supplemental Filing 2 (Accession no.: 20250923-5058)

²⁵² TGP filing response to April 9, 2026 data request, Appendix A, Attachment DR 17 (Accession no.: 20260423-5193).

Table 4.12-1: MSX HDD Construction \ Noise at Closest NSA

| Noise Sensitive Location | Distance to Closest NSA (feet) | Measured Ambient Ldn (dBA, L _{dn}) | Predicted Construction Noise Level (dBA, L _{dn}) (mitigated) ^a | Ambient + Construction (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|---|--------------------------------|--|---|--|--|
| HDD Locations | | | | | |
| HDD - Deer Creek | 2,900 | 54.1 | 52.2 | 56.3 | 2.2 |
| HDD – Bogue Phalia NSA | 6,500 | No NSA identified within 1 mile | | | NA |
| HDD – Big Sunflower River NSA | 4,260 | 38.9 | 44.9 | 45.9 | 6.9 |
| HDD – Yazoo River Levee West | 2,380 | 34.8 | 53.5 | 53.6 | 18.8 |
| HDD – Yazoo River NSA | 4,520 | 44.4 | 43.3 | 46.9 | 2.5 |
| HDD – Yazoo River Levee East | 740 | No NSA identified within 1 mile | | | |
| HDD – Belmont Road NSA | 430 | 44.2 | 55.0 | 55.3 | 11.1 |
| HDD – Hwy 49 E and Canadian National NSA | 680 | 69.8 | 63.3 | 70.7 | 0.9 |
| HDD – Sensitive Resource NSA | 2,150 | 37.9 | 52.7 | 52.8 | 14.9 |
| HDD – Interstate 55 NSA | 4,800 | 52.2 | 38.8 | 52.4 | 0.2 |
| HDD – Big Black River & Wetland NSA | 2,900 | 44.6 | 44.7 | 47.7 | 3.1 |
| HDD – Natchez Trace Parkway NSA | 1,480 | 39.8 | 52.2 | 52.4 | 12.6 |
| HDD – Rice Creek and Pearl River NSA | 3,400 | 47.5 | 48.0 | 50.8 | 3.3 |
| HDD – Interstate 59 NSA | 1,850 | 51.2 | 54.4 | 56.1 | 4.9 |
| HDD – Hurricane Creek NSA | 2,300 | 36.1 | 42.2 | 43.2 | 7.0 |
| ^{a/} Predicted sound levels include mitigation measures such as the use of 24-foot-high barriers and restricting mud-pump operations at night. Notes: TGP’s Resource Report 9 and subsequent appendices are available to the public for review on FERC’s eLibrary at Accession no.: 20250630-5152. Collocation details obtained from individual meter station reports in TGP’s HDD Noise Study filed in response to our Recommended Measures in the January 30, 2026 Draft EIS. The full Noise Study report is available under Attachment 2 at Accession no.: 20260323-5236. Mitigated and updated predicted construction noise levels from TPG’s response to our April 9, 2026, EIR at Appendix A, Attachment DR 17, Accession no.: 20260423-5193. CY = contractor yard | | | | | |

Conservative sound levels were predicted at HDD sites using contractor-supplied equipment lists at exit and entry points. The revised equipment list and subsequent updated predictive modeling resulted in one HDD location exceeding the Commission limits at the nearest NSAs. To mitigate noise at the Belmont Road HDD crossing, TGP would install a 24-foot-high, U-shaped acoustical barrier to attenuate sound propagation and the removal of the mud system on the exit side of the HDD during nighttime construction. Based on these parameters, the resulting sound level meets the Commission limits at the closest NSAs at each HDD entry and exit

location.²⁵⁶ The NSA associated with the Hwy 46 HDD workspace shows a projected sound level above 55 dBA, with existing ambient level at 69.8 dBA, and a predicted increase less than 1 dBA, which is below the threshold of human perception.

The barrier layout and dimensions used in the study were approximate and based on the limited equipment layout information available at the time of preparation, therefore we recommend that the model be reviewed once detailed equipment layouts are finalized. **We recommend that any Commission Order approving the Projects include a mandatory condition requiring TGP to file a Belmont Road HDD noise mitigation plan that identifies specific noise controls to restrict noise to no more than 55 dBA L_{dn} at NSAs, and that TGP monitor and document the noise levels in its construction status reports** (see section 5.2, recommended condition no. 15).

If noise mitigation would not allow access to the property or best available methods can not reduce noise levels to below the Commission limit at the closest NSAs, TGP stated it would offer temporary relocation to the resident(s).

Contractor Yard Construction

To comply with nighttime sound level limits, contractor yard generators must be positioned at least 525 feet from all nearby NSAs as the resulting noise level would be below 48.6 dBA at that distance. Additional details can be found in contractor yards section of the application.²⁵⁷

4.12.4.2 South System Expansion 4 Construction Effects

Construction sound levels are presented below in table 4.12-2 through table 4.12-4 for HDD, meter station, and compressor station construction, respectively. Supporting calculations and details included in the application and supplemental filings.^{258, 259}

²⁵⁶ Revised sound modeling with mitigative measures provided by TGP in its response to our Recommended Measures in the January 30, 2026, Draft EIS. The HDD Noise Study is available under Attachment 2 at Accession no.: 20260323-5236.

²⁵⁷ TGP's Resource Report 9 and subsequent appendices are available to the public for review on FERC's eLibrary at Accession no.: 20250630-5152.

²⁵⁸ SNG/EEC's Resource Report 9 and subsequent appendices are available to the public for review on FERC's eLibrary at Accession no.: 20250630-5311. Construction impacts Tables 9.4-69 through 9.4-112.

²⁵⁹ Obtained from SNG/EEC's February 17, 2026, Supplemental Filing #3 (Accession no.: 20260217-5265).

Table 4.12-2: SSE4 Compressor Station Construction Noise at Closest NSA

| Location | NSA ID | Distance to NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Construction Sound (dBA, L _{dn}) ^a | Ambient + Construction (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|------------------------|--------|------------------------|--|---|--|--|
| Existing Rose Hill CS | NSA1 | 2,950 | 50.9 | 41.2 | 51.3 | 0.4 |
| | NSA2 | 3,000 | 50.3 | 44.3 | 51.3 | 1.0 |
| | NSA3 | 4,600 | 45.0 | 39.2 | 46.0 | 1.0 |
| Existing Enterprise CS | NSA1 | 1,050 | 56.6 | 52.9 | 58.1 | 1.5 |
| | NSA2 | 1,750 | 51.2 | 48.0 | 52.9 | 1.7 |
| Existing York CS | NSA1 | 1,550 | 58.9 | 42.7 | 59.0 | 0.1 |
| Existing Gallion CS | NSA1 | 975 | 64.9 | 56.6 | 65.5 | 0.6 |
| | NSA2 | 875 | 60.9 | 58.4 | 62.8 | 1.9 |
| Existing Selma CS | NSA1 | 1,600 | 45 | 46.7 | 48.9 | 3.9 |
| | NSA2 | 1,700 | 45 | 47.4 | 49.4 | 4.4 |
| | NSA3 | 2,550 | 45 | 38.2 | 45.8 | 0.8 |
| | NSA4 | 3,650 | 45 | 36.5 | 45.6 | 0.6 |
| | NSA5 | 3,050 | 45 | 37.0 | 45.6 | 0.6 |
| Existing Elmore CS | NSA1 | 700 | 74.1 | 57.1 | 74.2 | 0.1 |
| | NSA2 | 760 | 70 | 57.2 | 70.2 | 0.2 |
| | NSA3 | 1,170 | 65.6 | 46.8 | 65.7 | 0.1 |
| Existing Auburn CS | NSA1 | 1,800 | 46.7 | 43.1 | 48.3 | 1.6 |
| | NSA2 | 2,900 | 45 | 40.8 | 46.4 | 1.4 |
| Existing Ellerslie CS | NSA1 | 580 | 57.8 | 55.7 | 59.9 | 2.1 |
| | NSA2 | 1,800 | 47.1 | 45 | 49.2 | 2.1 |
| Existing Thomaston CS | NSA1 | 1,900 | 49.2 | 47.6 | 51.5 | 2.3 |
| | NSA2 | 2,150 | 46.7 | 46 | 49.4 | 2.7 |
| Existing Ocmulgee CS | NSA1 | 700 | 57.1 | 58.2 | 60.7 | 3.6 |
| | NSA2 | 700 | 53.2 | 58.6 | 59.7 | 6.5 |
| | NSA3 | 900 | 48.3 | 48 | 51.2 | 2.9 |
| | NSA4 | 1,500 | 52.1 | 46.2 | 53.1 | 1.0 |
| | NSA5 | 1,750 | 45 | 51.1 | 52.1 | 7.1 |
| Existing Hall Gate CS | NSA1 | 2,000 | 45.0 | 46 | 48.5 | 3.5 |
| Existing Wrens CS | NSA1 | 1,000 | 50.0 | 52.5 | 54.4 | 4.4 |
| | NSA2 | 950 | 46.2 | 53.1 | 53.9 | 7.7 |
| | NSA3 | 925 | 50.7 | 57.2 | 58.1 | 7.4 |
| | NSA4 | 600 | 58.6 | 60.7 | 62.8 | 4.2 |
| Existing Jefferson CS | NSA1 | 2,900 | 45.0 | 41.6 | 46.6 | 1.6 |
| Existing Rincon CS | NSA1 | 2,050 | 45.0 | 47.3 | 49.3 | 4.3 |
| | NSA2 | 2,950 | 45.0 | 43.6 | 47.4 | 2.4 |

^{a/} Predicted sound levels above 55 dBA highlighted in grey

notes:

SNG/EECs August 26, 2025, Supplemental Filing is available to the public for review on FERC's eLibrary at Accession no.: 20250826-5140. Construction impacts Tables 9.4-69 through 9.4-112.

CS = Compressor Station

Table 4.12-3: SSE4 Meter Station Construction Noise at Closest NSA

| Location | NSA ID | Distance to NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Construction Sound (dBA, L _{dn}) ^a | Ambient + Construction (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|------------------------|--------|------------------------|--|---|--|--|
| TGP-Rose Hill #3 MS | NSA1 | 3,400 | 53.4 | 34 | 53.4 | 0.0 |
| | NSA2 | 3,500 | 53.4 | 36.8 | 53.5 | 0.1 |
| MSX Interconnection MS | NSA1 | 500 | 45.4 | 54.3 | 54.8 | 9.4 |
| | NSA2 | 825 | 45.4 | 50.9 | 52.0 | 6.6 |
| Tenaska MS | NSA1 | 325 | 45.2 | 57 | 57.3 | 12.1 |
| | NSA2 | 500 | 45.2 | 53.1 | 53.8 | 8.6 |
| Smarr MS | NSA1 | 2,500 | 43.3 | 33.5 | 43.7 | 0.4 |
| Valdosta #1 MS | NSA1 | 650 | 60.2 | 52.6 | 60.9 | 0.7 |
| Thompson/Wrens MS | NSA1 | 1,425 | 49.9 | 37.8 | 50.2 | 0.3 |
| | NSA2 | 1,250 | 46.2 | 38.8 | 46.9 | 0.7 |
| | NSA3 | 550 | 50.8 | 49.8 | 53.3 | 2.6 |
| | NSA4 | 100 | 58.6 | 64.8 | 65.7 | 7.2 |
| Louisville MS | NSA1 | 850 | 42.0 | 50.9 | 51.4 | 9.4 |
| Statesboro MS | NSA1 | 200 | 52.1 | 61.4 | 61.9 | 9.8 |
| | NSA2 | 500 | 52.1 | 53.1 | 55.6 | 3.5 |
| CGT MS | NSA1 | 1,700 | | | | |
| | NSA2 | 2,000 | | | | |
| Augusta #2 MS | NSA1 | 2350 | 57.8 | 39.8 | 57.9 | 0.1 |
| K1 OPP & Trap Station | NSA1 | 175 | | | | |

^{a/} Predicted sound levels above 55 dBA highlighted in grey
notes:
Obtained from SNG/EEC's February 17, 2026, Supplemental Filing #3, Table 9.4-1 (Accession no.: 20260217-5265)

Table 4.12-4: SSE4 HDD Crossing Construction Noise at Closest NSA

| Location | NSA ID | Distance to NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Construction Sound (dBA, L _{dn}) ^a | Ambient + Construction (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|--------------------------------------|--------|------------------------|--|---|--|--|
| Cahaba River HDD | NSA1 | 4,870 | 39.5 | 31.7 | 40.2 | 0.7 |
| Chattahoochee HDD ^{b/} | NSA1 | 1,350 | 47.2 | 40.7 | 48.1 | 0.9 |
| | NSA4 | 2,300 | 47.2 | 39.0 | 47.8 | 0.6 |
| Chickasawhay River HDD ^{c/} | NSA1 | 146 | 46.8 | 52.4 | 53.5 | 6.7 |
| | NSA5 | 115 | 41.3 | 49.3 | 49.9 | 8.6 |
| Flint River HDD | NSA1 | 10,570 | No NSA's within a half mile | | | |
| I-65 HDD | NSA2 | 1,702 | 45.0 | 49.0 | 50.5 | 5.5 |
| | NSA4 | 760 | 49.6 | 49.1 | 52.4 | 2.8 |
| vI-75 HDD | NSA1 | 1,400 | 65.1 | 43.3 | 65.1 | 0.0 |
| | NSA3 | 4,450 | 41.6 | 30.8 | 41.9 | 0.3 |
| I-185 HDD | NSA2 | 1,700 | 49.1 | 46.2 | 50.9 | 1.8 |
| | NSA5 | 1,060 | 49.1 | 53.8 | 55.1 | 6.0 |
| Oconee River HDD ^{d/} | NSA3 | 600 | 55.6 | 55.6 | 58.6 | 3.0 |
| | NSA5 | 1,830 | 45.9 | 40.8 | 47.1 | 1.2 |
| Tallapoosa River HDD | NSA1 | 600 | 48.2 | 50.9 | 52.8 | 4.6 |
| | NSA4 | 1,270 | 47.4 | 38.4 | 47.9 | 0.5 |
| Uchee Creek HDD | NSA1 | 360 | 44.7 | 50.4 | 51.4 | 6.7 |
| | NSA6 | 1,000 | 49.5 | 38.4 | 49.8 | 0.3 |

^{a/} Predicted sound levels above 55 dBA highlighted in grey
^{b/} SNG/EEC's supplemental filing, Appendix 9D, Noise Impact Assessment for the Chattahoochee HDD (Accession no.: 20251106-5006)
^{c/} SNG/EEC's response to ERI1 Table 9.4-73 (Accession no.: 20251006-5172)
^{d/} SNG/EEC's response to ERI1 Table 9.4-78 (Accession no.: 20251006-5172)

Most SSE4 construction activities would be conducted between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. The exception to that includes planned nighttime construction during peak construction phase of the compressor and meter stations and when weather conditions, site conditions, specialized construction techniques such as HDDs, hydrostatic testing, emergencies, or stream crossing timing windows may necessitate nighttime work, extended work hours, or extended work on Sundays and holidays. Should activities extend into nighttime hours at the sites predicted to exceed FERC's nighttime noise threshold, mitigation measures would need to be installed to ensure nearby NSAs do not experience noise levels above 55 dBA, L_{dn} . Conservative nighttime sound levels have been predicted to identify locations where mitigation measures or additional analysis would be needed. The identified locations include the Existing Gallion, Elmore, Ellerslie, Ocmulgee, and Wrens compressor stations and the Tenaska S, Thompson/Wrens and Statesboro meter stations. Due to high ambient noise levels at NSAs near the existing Gallion, Elmore, and Ellerslie compressor stations, noise increases are predicted to be less than 3 dBA, which is below the human threshold for perceiving a noise level change. Therefore, we do not expect nighttime construction noise to be adverse in these locations. For the remainder of locations where predicted noise levels may exceed 55 dBA, L_{dn} , we recommend additional mitigation measures to reduce nighttime noise. Therefore, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that, prior to any nighttime construction at Ocmulgee and Wrens Compressor Stations, and the Tenaska, Thompson/Wrens, and Statesboro Meter Stations, SNG/EEC file a nighttime noise mitigation plan to reduce the projected noise level attributable to nighttime construction activities to ensure noise does not exceed 55 dBA L_{dn} at nearby NSAs.** (see section 5.2, recommended condition no. 16)

Conservative continuous HDD crossing construction sound levels have been predicted to identify locations where mitigation measures or additional analysis would be needed. The analysis identified the Oconee River HDD crossing. Based on this, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that prior to construction of the Oconee River HDD crossing, SNG/EEC file a HDD noise mitigation plan to restrict noise to no more than 55 dBA L_{dn} at NSAs, and SNG/EEC monitor and document the noise levels in its construction status reports** (see section 5.2, recommended condition no. 17).

It is anticipated that the majority of SSE4 construction would not require controlled blasting. However, controlled blasting may be required for a portion of the SSE4 pipeline loops through Eastern Alabama and Western Georgia, and anywhere else that shallow and hard bedrock is found and blasting is determined to be necessary. Any blasting activities would occur during daytime hours in accordance with TPG's Blasting Plan.²⁶⁰

²⁶⁰ TGP's Blasting Plan is available on FERC's eLibrary as appendix 1.D.6 of the Certificate Application (Accession no.: 20250630-5152).

4.12.5 Operational Noise Effects and Mitigation

4.12.5.1 Mississippi Crossing

MSX operational sound levels are presented in table 4.12-5 with supporting calculations included in the application and supplemental filings.²⁶¹ With mitigation that includes inlet and exhaust silencers, vent silencers, quiet trim values, and piping and ductwork lagging operational noise levels are not expected to exceed 55 dBA, L_{dn} at any of the nearest NSAs.

Table 4.12-5: Operational Noise Effects at MSX Meter & Compressor Stations

| Location | NSA ID | Distance to NSA (feet) | Measured Ambient Sound, (dBA, L _{dn}) | Predicted Station Sound (dBA, L _{dn}) | Ambient + Predicted (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|----------|--------|------------------------|---|---|---|--|
| CS 602 | NSA 1 | 1,450 | 54.7 | 51.4 | 56.4 | 1.7 |
| | NSA 2 | 1,750 | 53.7 | 52.5 | 56.2 | 2.5 |
| CS 606A | NSA 1 | 1,850 | 49.2 | 52.5 | 54.2 | 5.0 |
| | NSA 2 | 4,400 | 51.4 | 41.3 | 51.8 | 0.4 |
| | NSA 3 | 3,350 | 66.1 | 46.3 | 66.1 | 0.0 |
| | NSA 4 | 4,900 | 55.9 | 36.7 | 56.0 | 0.1 |
| CS 610 | NSA 1 | 1,750 | 51.2 | 51.8 | 54.5 | 3.3 |
| | NSA 2 | 970 | 51.2 | 53.0 | 55.2 | 4.0 |
| MSX MS 1 | NSA 1 | 2,250 | 58.0 | 44.3 | 58.2 | 0.2 |
| MSX MS 2 | NSA 1 | 230 | 53.3 | 54.9 | 57.2 | 3.9 |
| MSX MS 3 | NSA 1 | 1,000 | 49.2 | 46.1 | 50.9 | 1.7 |
| MSX MS 4 | NSA 1 | 700 | 53.6 | 54.6 | 57.1 | 3.5 |

a/ Compilation of impact results tables from Attachment DR-78, Response to EIR1 (Accession no.: 20251006-5171).

Under certain conditions, compressor casing and piping pressure must be released in a controlled manner, known as venting (or blowdowns), typically occurring during extended shutdowns. These events typically last about three to five minutes so they would have a minimal effect on the 24-hour L_{dn} sound levels. To minimize the sound exposure during these short events. For the MSX Project the vents are routed through venting silencers to minimize noise. Venting scenarios with silencers have been modeled for each proposed station. Each station also includes an ESD system that triggers full station venting during emergencies or infrequent system tests. For the SSE4 Project venting silencers are not proposed.

With proposed mitigation, compressor station equipment operations would be below the FERC L_{dn} limit of 55 dBA.²⁶² Meter station mitigation was evaluated at meter station 2 and meter station 3 using quiet-trim valves with an insertion loss of 10 dBA and 5 dBA, respectively.²⁶³ With the proposed mitigation meter station 2 and Meter Station 4 predicted L_{dn} levels were just below 55 dBA with an increase to ambient above 3 dBA due to the close proximity of the nearest NSAs to those stations.

To confirm that the actual noise levels attributable to these facilities are not significant, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that TGP file noise surveys with the Secretary no later than 60 days after**

²⁶¹ Compilation of impact results tables from Attachment DR-78, Response to EIR1 public Accession no.: 20251006-5171

²⁶² Compiled from Noise Control Treatment sections from appendix 9.D of TGP's Resource Report 9 are available to the public for review on FERC's eLibrary at Accession no.: 20250630-5152.

²⁶³ Table 5 from the Meter Station Sound Study from Attachment DR-78, Response to EIR1 Accession no.: 20251006-5171

placing Stations 602, 606A, and 610 into service, and after placing the Meter Station 2 and Meter Station 4 into service. (see section 5.2, recommended conditions no. 18 and 19)

4.12.5.2 South System Expansion 4 Project

SSE4 operational sound levels and anticipated increase in the ambient sound level for the meter and compressor stations are presented in tables 4.12-6 and 4.12-7 under the operational conditions outlined in section 4.12.5 with supporting calculations included in the application and supplemental filings.^{264,265} With mitigation that includes inlet and exhaust silencers, vent silencers, quiet trim values, and piping and ductwork lagging operational, predicted noise levels are not predicted to exceed Commission limits at any of the nearest NSAs.

Table 4.12-6: Operational Noise at NSAs from SSE4 Compressor Stations

| Location | NSA ID | Distance to Closest NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Operational Sound (dBA, L _{dn}) | Ambient + Operations (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|------------------------|--------|--------------------------------|--|---|--|--|
| Existing Rose Hill CS | NSA1 | 2,950 | 50.9 | 48.1 | 52.7 | 1.8 |
| | NSA2 | 3,000 | 50.3 | 50.8 | 53.6 | 3.3 |
| | NSA3 | 4,600 | 45.0 | 42.5 | 46.9 | 1.9 |
| Existing Enterprise CS | NSA1 | 1,050 | 56.1 | 46.0 | 56.5 | 0.4 |
| | NSA2 | 1,750 | 50.7 | 42.9 | 51.4 | 0.7 |
| Existing York CS | NSA1 | 1,550 | 57.1 | 47.0 | 57.5 | 0.4 |
| Existing Gallion CS | NSA1 | 975 | 64.3 | 50.3 | 64.5 | 0.2 |
| | NSA2 | 875 | 60.3 | 50.4 | 60.7 | 0.4 |
| Existing Selma CS | NSA1 | 1,600 | 45.0 | 50.3 | 51.4 | 6.4 |
| | NSA2 | 1,700 | 45.0 | 50.6 | 51.7 | 6.7 |
| | NSA3 | 2,550 | 45.0 | 38.7 | 45.9 | 0.9 |
| | NSA4 | 3,650 | 45.0 | 33.7 | 45.3 | 0.3 |
| | NSA5 | 3,050 | 45.0 | 40.9 | 46.4 | 1.4 |
| Existing Elmore CS | NSA1 | 700 | 74.1 | 52.0 | 74.1 | 0.0 |
| | NSA2 | 760 | 70 | 51.9 | 70.1 | 0.1 |
| | NSA3 | 1,170 | 65.6 | 47.6 | 65.7 | 0.1 |
| Existing Auburn CS | NSA1 | 1,800 | 46.7 | 46.5 | 49.6 | 2.9 |
| | NSA2 | 2,900 | 45.0 | 45.1 | 48.1 | 3.1 |
| Existing Ellerslie CS | NSA1 | 580 | 57.8 | 49.3 | 58.4 | 0.6 |
| | NSA2 | 1,800 | 47.1 | 38.1 | 47.6 | 0.5 |
| Existing Thomaston CS | NSA1 | 1,900 | 49.2 | 50.3 | 52.8 | 3.6 |
| | NSA2 | 2,150 | 46.7 | 49.0 | 51.0 | 4.3 |
| Existing Ocmulgee CS | NSA1 | 700 | 57.1 | 43.3 | 57.3 | 0.2 |
| | NSA2 | 700 | 53.2 | 42.0 | 53.5 | 0.3 |
| | NSA3 | 900 | 48.3 | 34.9 | 48.5 | 0.2 |
| | NSA4 | 1,500 | 52.1 | 32.9 | 52.2 | 0.1 |
| | NSA5 | 1,750 | 45 | 34.1 | 45.3 | 0.3 |
| Existing Hall Gate CS | NSA1 | 2,000 | 45.0 | 48.9 | 50.4 | 5.4 |
| Existing Wrens CS | NSA1 | 1,000 | 50.0 | 50.5 | 53.3 | 3.3 |
| | NSA2 | 950 | 46.2 | 50.4 | 51.8 | 5.6 |
| | NSA3 | 925 | 50.7 | 49.1 | 53.0 | 2.3 |
| | NSA4 | 600 | 58.6 | 52.7 | 59.6 | 1.0 |
| Existing Jefferson CS | NSA1 | 2,900 | 45.0 | 43.7 | 47.4 | 2.4 |
| Existing Rincon CS | NSA1 | 2,050 | 45.0 | 48.2 | 49.9 | 4.9 |

²⁶⁴ Compiled from impacts tables 9.4-6 through 9.4-67 SNG/EEC's Resource Report 9 Accession No. 20250630-5311

²⁶⁵ Compiled from impacts tables 9.4-6 through 9.4-67 SNG/EECs August 26, 2025, Supplemental Filing 1, is available to the public for review on FERC's eLibrary at Accession no.: 20250826-5140.

Table 4.12-6: Operational Noise at NSAs from SSE4 Compressor Stations

| Location | NSA ID | Distance to Closest NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Operational Sound (dBA, L _{dn}) | Ambient + Operations (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|----------|--------|--------------------------------|--|---|--|--|
| | NSA2 | 2,950 | 45.0 | 44.6 | 47.8 | 2.8 |

a/ Compiled from impacts tables 9.4-6 through 9.4-67 SNG/EEC's Resource Report 9 Accession No. 20250630-5311
b/ Compiled from impacts tables 9.4-6 through 9.4-67 SNG/EECs August 26, 2025, Supplemental Filing is available to the public for review on FERC's eLibrary at Accession no.: 20250826-5140.

Table 4.12-7: Operational Noise at NSAs from SSE4 Meter Stations

| Location | NSA ID | Distance to Closest NSA (feet) | Measured Ambient Sound (dBA, L _{dn}) | Predicted Operational Sound (dBA, L _{dn}) | Ambient + Operations (dBA, L _{dn}) | Increase Above Ambient (dBA, L _{dn}) |
|------------------------------------|--------|--------------------------------|--|---|--|--|
| TGP-Rose Hill #3 MS | NSA1 | 3,400 | 53.4 | 30.6 | 53.4 | 0.0 |
| | NSA2 | 3,500 | 53.4 | 34.1 | 53.5 | 0.1 |
| MSX Interconnection MS | NSA1 | 500 | 45.4 | 40.9 | 46.7 | 1.3 |
| | NSA2 | 825 | 45.4 | 37.4 | 46.0 | 0.6 |
| Tenaska MS | NSA1 | 325 | 45.2 | 46.4 | 48.9 | 3.7 |
| | NSA2 | 500 | 45.2 | 42.3 | 47.0 | 1.8 |
| Smarr MS | NSA1 | 2,500 | 43.3 | 30.6 | 43.5 | 0.2 |
| Valdosta #1 MS | NSA1 | 650 | 60.2 | 39.3 | 60.2 | 0.0 |
| S. Atl Meter Station ^{a/} | NSA1 | 1,250 | 59.5 | 49.5 | 59.9 | 0.4 |
| | NSA2 | 550 | 59.5 | 47.8 | 59.8 | 0.3 |
| | NSA3 | 100 | 59.5 | 44.3 | 59.6 | 0.1 |
| Thompson/Wrens MS ^{b/} | NSA1 | 1,425 | 54.3 | 15.3 | 54.3 | 0.0 |
| | NSA2 | 1,250 | 53.2 | 16.1 | 53.2 | 0.0 |
| | NSA3 | 550 | 54.1 | 28.2 | 54.1 | 0.0 |
| | NSA4 | 100 | 54.9 | 40.3 | 55.0 | 0.1 |
| Louisville MS | NSA1 | 850 | 42.0 | 37.7 | 43.4 | 1.4 |
| Statesboro MS | NSA1 | 200 | 52.1 | 51.2 | 54.7 | 2.6 |
| | NSA2 | 500 | 52.1 | 42.5 | 52.6 | 0.5 |
| Augusta #2 MS | NSA1 | 2350 | 57.8 | 26.0 | 57.8 | 0.0 |
| Port Wentworth MS ^{c/} | NSA1 | 1,050 | 60.7 | 41.7 | 60.8 | 0.1 |
| | NSA2 | 1,750 | 60.7 | 30.8 | 60.7 | 0 |

Compiled from impacts tables 9.4-6 through 9.4-67 SNG/EECs August 26, 2025, Supplemental Filing is available to the public for review on FERC's eLibrary at Accession no.: 20250826-5140.
a/ Results provided in Table 9.4-2 in the Oct. 6, 2025, SSE4 Response to our EIR (Accession no.: 20251006-5172).
b/ Results provided in Table 9.4-4 in the Oct. 6, 2025, SSE4 Response to our EIR (Accession no.: 20251006-5172).
c/ Results provided in Table 9.4-5 in the Oct. 6, 2025, SSE4 Response to our EIR (Accession no.: 20251006-5172).

We note that the noise attributable to operation of the Selma Compressor Station is projected to increase ambient levels at NSA #1 and NSA#2 to 51.4 and 51.7 dBA, respectively. While the projected level would meet our 55 dBA L_{dn} standard, a 6.4 and 6.7-dBA increase over present ambient levels would nevertheless be noticeable increase at these two NSAs. To confirm station operation noise levels, we recommend that any Commission Order approving the Projects include a mandatory condition requiring that SNG/EEC file noise surveys after placing the authorized units at the existing Rose Hill, Enterprise, York, Gallion, Selma, Elmore, Auburn, Ellerslie, Thomaston, Ocmulgee, Hall Gate, Wrens, Jefferson, and Rincon compressor stations into service. (see section 5.2, recommended condition no. 20)

Additionally, we note that Statesboro Meter Station includes an NSA (NSA#1) that is approximately 200 feet away from the station, has a predicted operational sound level of 51.2 dBA, and an increase to baseline of almost 3 dBA. To confirm station operation noise levels, **we recommend that any Commission Order approving the Projects include a mandatory condition requiring that SNG/EEC file a noise survey after placing the Statesboro Meter Station into service.** (see section 5.2, recommended condition no. 21)

Operational noise would be mitigated through project design and best practices, and would include the following measures:

- Walls/roof should be constructed with exterior steel of 22 gauge and interior layer of 4-inch-thick unfaced mineral wool;
- Personnel entry doors should have a minimum STC-30 sound rating and could include door glazing if a 2-foot-by-2-foot maximum viewport is employed. Doors should seal well with the doorframe and be self-closing;
- The building ventilation system should be designed to properly heat and cool the building and equipment during extreme outside ambient temperatures with all personnel and equipment doors closed. Personnel and/or equipment doors shall only be opened during maintenance activities; and
- The A-weighted sound level for each ventilation inlet should not exceed 75 dBA at 50 feet from the building penetration. The A-weighted sound level for each ventilation exhaust outlet should not exceed 75 dBA at 50 feet from the building penetration.

All compressor stations and one meter station included mitigation measures. Detailed equipment mitigation calculations and details are included in the application and supplemental filings.^{266,267}

4.12.6 Conclusion

4.12.6.1 Mississippi Crossing Project

MSX would cause temporary increases in noise during construction, especially near HDD sites where nighttime work may occur. TGP would minimize these effects by limiting most construction to daytime hours, maintaining equipment in good working order, using sound control devices, and implementing site-specific noise mitigation or temporary relocation where necessary. During operation, compressor and meter stations would include multiple vendor supplied noise controls such as silencers, acoustical insulation, and sound enclosures to keep overall noise levels below FERC's 55 dBA day-night limit at nearby residences. Noise surveys would confirm compliance and identify any need for additional mitigation. We conclude that, with these measures in place, and with the implementation of our recommendations, construction and operational noise

²⁶⁶ Compiled from migration tables 9.4-5 through 9.4-44 of SNG/EEC's June 30, 2025, Certificate Application (Accession No. 20250630-5311).

²⁶⁷ Compiled from mitigation tables 9.4-5 through 9.4-44 of SNG/EECs August 26, 2025, Supplemental Filing (Accession no.: 20250826-5140).

from MSX would be temporary or effectively managed and would not result in significant adverse effects on nearby communities.

4.12.6.2 South System Expansion 4 Project

SSE4 would also generate temporary noise during construction from equipment use, truck traffic, and HDDs. SNG/EEC would mitigate these effects through daytime work scheduling, the use of modern equipment with mufflers, application of noise barriers where needed. Nighttime construction is planned during peak construction phase of the compressor and meter stations, and at HDDs. Operational noise from compressor and meter stations would remain below 55 dBA at all identified sensitive receptors through the implementation of vendor supplied design features such as intake and exhaust silencers, compressor building insulation, and controlled ventilation systems. Noise surveys would confirm compliance and identify any need for additional mitigation. We conclude that these design best management practices, along with implementation of our recommendations would keep noise effects minimal and would prevent significant effects on nearby properties or communities.

4.13 RELIABILITY AND SAFETY

The transportation of natural gas by pipeline involves some incremental risk to the public due to the potential for accidental release of natural gas. The greatest hazard is a fire or explosion following a major pipeline rupture. Methane, the primary component of natural gas, is colorless, odorless, and tasteless. Methane is not toxic but is classified as a simple asphyxiant. It possesses a slight inhalation hazard and can result in oxygen deficiency if breathed in high concentrations. Methane has an auto-ignition temperature of 1,000 degrees Fahrenheit and is flammable in air at concentrations between 5 percent and 15 percent. An unconfined mixture of CH₄ and air is not explosive, but a flammable concentration within an enclosed space in the presence of an ignition source can explode. Methane is buoyant at atmospheric temperatures and disperses rapidly in the air.

We received several public comments during the scoping periods that expressed concerns about safety risks from potential gas leaks, explosions, and pipeline failures near residential areas, emphasizing the need for safety protocols and emergency response planning. All project aspects would adhere to PHMSA Minimum Federal Safety Standards in 49 CFR Part 192.²⁶⁸

4.13.1 Safety Standards

The USDOT provides pipeline safety requirements as mandated by 49 U.S.C. 601. The PHMSA, which operates under the USDOT, administers the national regulatory program to ensure the safe transportation of natural gas and other hazardous materials by pipeline by developing safety regulations and other approaches that ensure safety and set performance standards. PHMSA's work to protect people and the environment from the risk of pipeline incidents is shared with others at the federal, state, and local levels. A state agency may assume all aspects of the safety program for intrastate facilities by adopting and enforcing the federal standards at minimum. A state may also act as the USDOT's agent to inspect interstate facilities within its boundaries, but

²⁶⁸ Source: TGP's June 30, 2025, Certificate Application - Resource Report 11 at pgs 11-10 to 11-19 (Accession no.: 20250630-5152) and SNG/EEC's July 3, 2025, Certificate Application - Resource Report 11 (Accession no.: 20250703-5175).

the USDOT is responsible for enforcement actions. PHMSA inspectors would perform inspections on the proposed MSX and SSE4 interstate natural gas pipeline facilities in Mississippi, Alabama, and Georgia.

The proposed pipelines and related facilities would be designed, operated, and maintained in accordance with the PHMSA regulations found in 49 CFR Part 192, “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards.” These safety regulations minimize the opportunity for system failures to ensure both public safety and pipeline reliability (INGAA, 2019). Material selection and qualification, minimum design and construction requirements, operation, maintenance, inspection, and testing requirements that include protection from internal, external, and atmospheric corrosion are specified by the regulations in 49 CFR Part 192. These regulations also require operators to develop emergency plans that involve working with fire departments and other local agencies to identify personnel to be contacted, equipment to be mobilized, and protocol to be followed in the event of a pipeline emergency. The 49 CFR Part 192 regulations also require damage prevention plans, public awareness programs, and communication programs. Operators of transmission and gathering systems under the jurisdiction of the USDOT are required to report pipeline incidents to the PHMSA Office of Pipeline Safety. The definition of an incident can be found in 49 CFR Part 191.3(1).

Unplanned releases of gas from pipelines or other components of the Projects that meet the above criteria would be considered incidents. As required by USDOT regulations at 49 CFR Part 191.5, the proposed project facilities would be incorporated into existing systems that provide notification of such incidents in a timely manner.

On October 1, 2019, PHMSA issued new regulations modifying and expanding the standard pipeline safety standards under 49 CFR 191 and 192. These regulations, in part, established new standards for in-line inspections; requirements for newly established moderate consequence areas (MCA); requirements to consider seismicity and geotechnical risks in its integrity management plan for the pipeline; new regulations on pipeline patrol frequency for high consequence areas (HCA), MCAs, and grandfathered pipelines; a policy to reconfirm maximum allowable operating pressure (MAOP) for certain pipelines; installation of pressure relief for pig launcher/receivers; and reporting requirements for exceedances of MAOP to PHMSA.

PHMSA defines four area classifications based on population density near pipeline facilities. For more populated areas, higher safety factors in pipeline design, testing, and operations are required. A class location unit is an area that extends 220 yards on either side of the centerline of any continuous one-mile length of pipeline. The four area classifications are defined as follows:

- Class 1: Location with 10 or fewer buildings intended for human occupancy;
- Class 2: Location with more than 10 but fewer than 46 buildings intended for human occupancy; and
- Class 3: Location with 46 or more buildings intended for human occupancy, or where the pipeline lies within 100 yards of any building or small well-defined

outside area occupied by 20 or more people on at least five days a week for 10 weeks in any 12-month period.

PHMSA regulations define high-consequence areas (HCA) as areas where a pipeline accident could do considerable harm to people and their property. 49 CFR Part 192 Subpart O requires operators to develop an Integrity Management Program to minimize the potential of such an accident in areas that are HCAs. HCAs are areas where a release could have greater adverse consequences based on population, the current mainline pipe diameter, and maximum allowable operating pressure. More specifically, 49 CFR Part 192.903 defines HCAs as areas within the potential effect radius that have 20 or more structures intended for human occupancy, buildings occupied by populations of limited mobility, buildings not easily evacuated such as nursing homes or schools, or buildings and outside areas occupied by more than 20 persons for a minimum specified number of days each year. Gas transmission pipeline operators would be required by this rule to perform ongoing assessments of pipeline integrity, improve data collection, integration, and analysis, repair and remediate the pipeline as necessary, and to implement preventative and mitigative actions.

4.13.1.1 Mississippi Crossing Project

The MSX Mainline and laterals would cross PHMSA Class 1, Class 2, and Class 3 areas, as displayed in table 4.13-1:

Table 4.13-1: PHMSA Class Locations Along the MSX Mainline and Lateral Routes

| Facility Name | Class 1 (miles) | Class 2 (miles) | Class 3 (miles) |
|-------------------|-----------------|-----------------|-----------------|
| MSX Mainline | 189.86 | 9.19 | 0.12 |
| TGP 500 Lateral | 0.22 | 0 | 0 |
| Transco Lateral | 0.48 | 0 | 0 |
| CGT Lateral | 7.16 | 0 | 0 |
| Tetco Lateral | 0.34 | 0 | 0 |
| Texas Gas Lateral | 0.64 | 0 | 0 |

Source: TGP June 30, 2025, Certificate Application, Resource Report 11, at 11-10 to 11-19 (Accession no.: 20250630-5152)

Table 4.13-2 lists the HCAs along the MSX Mainline. There were no HCAs identified for the CGT, Texas Gas, Tetco, TGP 500, or Transco Lateral portions.

Table 4.13-2: PHMSA HCAs Along the MSX Mainline

| Begin MP | End MP | Basis for HCA |
|----------|--------|--|
| 0.0 | 1.1 | Houses, churches, and schools in area. |
| 30.0 | 30.8 | 10 or more structures intended for human occupancy. |
| 31.1 | 31.3 | 10 or more structures intended for human occupancy. |
| 51.6 | 51.7 | Commercial building within 300 feet of the pipeline. |
| 62.8 | 63.6 | 10 or more structures intended for human occupancy. |
| 64.1 | 65.3 | 10 or more structures intended for human occupancy. |
| 82.1 | 83.7 | Commercial store within 300 feet of the pipeline. |
| 137.7 | 139.1 | 10 or more structures intended for human occupancy. |
| 141.7 | 142.5 | 10 or more structures intended for human occupancy. |

Source: TGP June 30, 2025 application Resource Report 11 at pg 11-13 (FERC Accession no.: 20250630-5152)

4.13.1.2 South System Expansion 4 Project

The proposed SSE4 pipeline loops would cross PHMSA Class 1, Class 2, and Class 3 areas, as displayed in table 4.13-3.

Table 4.13-3: PHMSA Class Locations Along SSE4 Pipeline Loops

| Facility Name | Class 1 (miles) | Class 2 (miles) | Class 3 (miles) |
|---------------------|-----------------|-----------------|-----------------|
| SSE4 Pipeline Loops | 228.34 | 46.02 | 16.22 |

Source: SNG/EEC February 17, 2026, Supplemental Filing #3, Attachment A, Supplemental Tables at Resource Report 11. FERC Accession no.: 20260217-5265

Table 4.13-4 lists the HCAs along the SSE4 pipeline loops.

Table 4.13-4: PHMSA HCAs Along the SSE4 Pipeline Loops

| Loop | Begin MP | End MP | Basis for HCA |
|------|----------|--------|--|
| B1 | 2.99 | 3.60 | Commercial Building. |
| B1 | 4.55 | 5.61 | 20 or more structures intended for human occupancy. |
| B2 | 9.78 | 10.47 | Commercial Building. |
| D1 | 0.78 | 1.24 | 20 or more structures intended for human occupancy. |
| D1 | 2.70 | 3.27 | 20 or more structures intended for human occupancy. |
| D1 | 4.95 | 5.70 | 20 or more structures intended for human occupancy. |
| D1 | 10.26 | 10.79 | 20 or more structures intended for human occupancy. |
| D1 | 11.48 | 15.11 | 20 or more structures intended for human occupancy, Commercial Building, Place of Public Assembly. |
| D2 | 2.11 | 2.71 | 20 or more structures intended for human occupancy. |
| E1 | 7.63 | 8.22 | Commercial Building. |
| E2 | 0.04 | 0.37 | 20 or more structures intended for human occupancy. |
| E2 | 2.80 | 4.50 | 20 or more structures intended for human occupancy. |
| F1 | 0.04 | 0.31 | Commercial Building. |
| F1 | 5.79 | 6.51 | 20 or more structures intended for human occupancy. |
| H1 | 0.91 | 1.51 | 20 or more structures intended for human occupancy. |
| H1 | 4.14 | 4.90 | 20 or more structures intended for human occupancy, Commercial Building. |
| H1 | 5.44 | 6.70 | 20 or more structures intended for human occupancy, Commercial Building, Place of Public Assembly, School. |
| H2 | 9.86 | 10.40 | Hospital. |
| I1 | 3.22 | 3.69 | 20 or more structures intended for human occupancy. |
| I1 | 3.84 | 4.54 | Place of Public Assembly. |
| I1 | 5.12 | 5.80 | Commercial Building, Place of Public Assembly, School. |
| K1 | 0.55 | 0.94 | Commercial Building. |
| K1 | 1.96 | 2.21 | 20 or more structures intended for human occupancy. |
| K1 | 5.88 | 6.20 | 20 or more structures intended for human occupancy. |
| K1 | 7.91 | 8.16 | 20 or more structures intended for human occupancy. |
| L1 | 0.14 | 0.44 | HCA Defined Outdoor Area. |
| M1 | 2.64 | 2.96 | Place of Public Assembly. |
| M1 | 4.63 | 5.12 | Place of Public Assembly, Daycare. |
| M1 | 10.60 | 10.97 | 20 or more structures intended for human occupancy. |
| M1 | 12.55 | 13.02 | Commercial Building |

Source: SNG/EEC July 3, 2025, Certificate Application, Resource Report 11 (Accession no.: 20250703-5175).

Additionally, MCA, as described in 49 CFR 192.3, includes an area within a potential impact circle containing five or more buildings for human occupancy or any portion of a paved road surface that is a designated interstate, freeway, expressway, or other major arterial roadway with four or more lanes. MCAs for both MSX and SSE4 were identified.^{269,270}

4.13.2 Project Design Requirements

4.13.2.1 Pipeline Safety

The proposed facilities would be designed, constructed, operated, and maintained in accordance with the PHMSA Minimum Federal Safety Standards in 49 CFR Part 192. Proper adherence to applicable federal, state, and local laws, regulations, and other requirements would be maintained through the design, construction, operation, and maintenance of each of the proposed facilities.

TGP and SNG/EEC would respond to notices of excavation or blasting received through participation in various states' One-Call centers.

Pipeline markers and signs on the pipeline right-of-way would be maintained to indicate the presence of the underground pipeline and to provide telephone numbers for excavation notice and emergency. The pipeline right-of-way would be maintained and kept free from erosion and obstructions.

4.13.3 Emergencies

The USDOT requires the National Response Center to be notified as early as practicable following the discovery of an incident, and a report must be submitted within 30 days to PHMSA.

The USDOT regulations in 49 CFR Part 192.615 state that pipeline operations must establish an Emergency Response Plan that provides procedures to minimize the hazards that could arise from a pipeline emergency. Emergency Response Plans that incorporate procedures for identifying an emergency event and establishing communication with local fire, police, and public officials would be implemented by the Companies. These procedures would include, but are not limited to, the following:

- Receiving, identifying, and classifying notices of emergency events that require immediate response, such as leaks, fires, ruptures, or natural disasters.
- Establishing and managing adequate means of communication with emergency responders and other public officials.
- Maintaining readily accessible site-specific information such as evacuation routes, emergency helicopter landing areas, hospital locations, and contact numbers.
- Prompt and effective response to facility emergencies.
- Training appropriate operating personnel to effectively respond to an emergency.

²⁶⁹ MCAs along the MSX Project pipeline are provided by milepost in table 11.4-2 of TGP's Certificate Application (Accession no.: 20250630-5152).

²⁷⁰ MCAs associated with SSE4 are provided by milepost in table 11.3-1 of SNG's Certificate Application (Accession no.: 20250703-5175).

In the event of an incident along pipeline segments, at compressor stations, or other facility, field operations personnel located in the vicinity of the facilities would respond to the event. Field operations personnel would be available to be dispatched 24 hours a day and 7 days a week by TGP and SNG/EEC’s Gas Control Centers via cell phone communication.

4.13.4 Pipeline Accident Data

For the 15-year period from 2010 through 2024, 1,843 incidents were reported by natural gas transmission pipeline operators in the United States. In 2024, there were 94 pipeline incidents, 4 of which resulted in injuries (USDOT, 2025a). Table 4.13-5 summarizes the significant pipeline incidents reported from 2010 through 2024 by cause.

Table 4.13-5: U.S. Gas Transmission Pipeline Significant Incident Summary by Cause (2010-2024)

| Reported Cause of Incident | Number | Percent | Fatalities | Injuries |
|----------------------------------|--------------|------------|------------|------------|
| Corrosion | 363 | 19.7 | 0 | 4 |
| Equipment Failure | 625 | 33.8 | 5 | 12 |
| Excavation Damage | 206 | 11.3 | 7 | 26 |
| Incorrect Operation | 124 | 6.6 | 6 | 12 |
| Material Failure of Pipe or Weld | 201 | 10.9 | 11 | 58 |
| Natural Force Damage | 132 | 7.2 | 0 | 1 |
| Other Incident Cause | 83 | 4.5 | 0 | 3 |
| Other Outside Force Damage | 109 | 6.0 | 3 | 10 |
| Total | 1,843 | 100 | 32 | 126 |

Source: USDOT 2025b

Equipment failure was the leading cause of significant pipeline incidents in the U.S. from 2010 to 2024 at 33.8 percent. Table 4.13-6 details additional insight into the specific types of equipment failures that contributed to these significant pipeline incidents:

Table 4.13-6: Equipment Failure Significant Incident Summary by Cause (2010-2024)

| Reported Cause of Equipment Failure | Number | Percent | Fatalities | Injuries |
|--|------------|-------------|------------|-----------|
| Compressor or Compressor-Related Equipment | 44 | 2.4 | 0 | 1 |
| Malfunction of Control/Relief Equipment | 384 | 20.8 | 2 | 2 |
| Other Equipment Failure | 55 | 3.0 | 2 | 6 |
| Defective or Loose Tubing or Fitting | 17 | 0.9 | 0 | 1 |
| Threaded Connection/Coupling Failure | 67 | 3.6 | 1 | 0 |
| Non-Threaded Connection Failure | 45 | 2.4 | 0 | 2 |
| Failure of Equipment Body (Except Compressor), Vessel Plate, or Other Material | 13 | 0.7 | 0 | 0 |
| Subtotal: | 625 | 33.8 | 5 | 12 |

Source: USDOT 2025b

As indicated in table 4.13-5, the primary causes of significant pipeline incidents between 2010 and 2024 were: 1) equipment failure, 2) corrosion, 3) excavation damage, and 4) material failure of pipe or weld. These potentially adverse events can be addressed and minimized by implementing safety practices and procedures during the design, construction, operation, and maintenance of the proposed facilities that meet or exceed the standards set by PHMSA’s Pipeline Safety Regulations.

Mississippi Crossing Project

TGP has a 0.29 transmission and regulated gathering pipeline onshore PHMSA significant incidents per 1,000 miles over a five-year average (PHMSA 2026a and PHMSA 2026b).

South System Expansion 4 Project

The average number of incidents per transmission line mile per year reported for the last five years on SNG's systems is 0.000181, as compared to the industry average of 0.000268. On EEC systems, there have been no incidents within the past five years.

4.13.5 Effect on Public Safety

PHMSA pipeline safety regulations at 49 CFR Part 192 are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures. These regulations specify material selection and qualification, minimum design and construction requirements, and protection from internal, external, and atmospheric corrosion.

Measures to protect the public from natural gas releases due to accidents or natural disasters can be grouped into passive protection, active controls, and procedural controls.²⁷¹

TGP and SNG/EEC would update an Emergency Response Plan specific to the proposed project facilities to provide operational redundancy, flexibility, rapid response capabilities, and contingency plans as required in 49 CFR Part 192. Integrity Management Programs would be implemented to reduce the risk associated with incidents that could affect the HCAs identified in section 4.13.1.

TGP and SNG/EEC have established comprehensive damage prevention programs that are overseen by teams of damage prevention professionals. These teams protect pipelines from third-party excavation damage by responding to one-call ticket requests, locating and marking their pipelines, monitoring aerial patrol reports, and patrolling their lines for unauthorized encroachment activity. TGP and SNG/EEC also engage with the communities their pipelines operate in by meeting with emergency responders in the area, serving on Local Emergency Planning Committees, and participating in annual meetings with excavators in their areas to promote safe digging practices (Kinder Morgan, 2024). Additionally, TGP and SNG/EEC have public awareness programs that aim to inform the public about pipelines in the areas where they operate and provide important safety information to those living and working near the pipelines. They also aim to increase knowledge of the regulations for working around and preventing damage to its pipelines and educate first responders and the public on its emergency preparedness plans.

Pipeline inspections would be accomplished by ground and aerial surveys, and in accordance with applicable laws and regulations. During periodic pipeline and right-of-way patrols, all permanent erosion control devices installed during construction would be inspected to verify that they are functioning properly. In addition, attention would be given to areas of erosion and washouts along the right-of-way, performance of water/erosion control devices such as diversions, fallen timber or other threats to the pipeline, general health of shrubs and other

²⁷¹ TGP June 30, 2025, Application Resource Report 11 at 11-21 to 11-23 (FERC Accession no.: 20250630-5152). SNG/EEC July 3, 2025, Certificate Application Resource Report 11 (Accession no.: 20250703-5175).

vegetation planted during construction, and other conditions that could endanger the pipeline or cause erosion.

4.13.5.1 Safety and Security

PHMSA regulations in 49 CFR Part 192 sets requirements for pipeline operators to manage physical and cybersecurity threats to pipelines. Security Directive Pipeline-2021-02E, which includes pipeline cybersecurity mitigation actions, contingency planning, and testing, would be implemented to protect the proposed project facilities from the effect of malicious cyber intrusions (Transportation Safety Administration, 2024). TGP and SNG/EEC programs designed to enhance the security of the proposed project facilities include a criticality screening process, security drill/exercise program, security training and awareness, security management policy, audits and assessment program, annual review of the Corporate Security Plan, and an Information Security Policy.

4.13.6 Conclusion

The average number of incidents per transmission line mile per year reported for the last five years on SNG's and TGP's systems is 0.000181 and 0.00029 respectively, with none on the EEC system. TGP and SNG/EEC would comply with all relevant DOT pipeline safety regulations, conduct ongoing inspection and testing, and implement emergency response procedures to minimize potential effects in the event of an incident. Construction and operation of MSX and SSE4 represent a minimal increase in risk to the nearby public. TGP and SNG/EEC would comply with all applicable DOT pipeline safety standards, conduct regular monitoring and testing of the pipeline, and implement the procedures in its emergency action plan to minimize potential hazards from a pipeline emergency. Therefore, we conclude that with implementation of safety design criteria, including those required by PHMSA, the Project would be constructed and operated safely.

4.14 CUMULATIVE EFFECTS

We evaluated the potential for cumulative effects of MSX and SSE4 when combined with other projects or actions in the same area. Cumulative effects represent the incremental effects of a proposed action when added to effects associated with past, present, or reasonably foreseeable future projects, regardless of what agency or person undertakes such other actions. Although the individual effect of each separate project may be minor, the additive or synergistic effects of multiple projects could be significant. We have aggregated past completed actions (more than 5 years old) that shaped today's landscape into our discussion of the affected environment at the beginning of section 4. Therefore, this section focuses on recent past, ongoing or current, and reasonably foreseeable future actions that may contribute to cumulative effects.

The geographic scope for cumulative effect analysis varies depending on the type of resource. It is more localized for stationary resources like geology and soils, broader for widespread effects such as air emissions and visual effects and shaped by jurisdictional boundaries for resources like socioeconomics and public lands. We evaluated cumulative effects from a geographical perspective, recognizing that the proximity of other actions to the Projects is a major predictor of whether cumulative effects would occur. In general, the closer another action is to the Projects, the greater the potential for cumulative effects. The geographic scope for each resource evaluated for cumulative effects considered in this analysis is presented in table 4.14-1. Actions

occurring outside the geographic scope were generally not evaluated because their potential to contribute to a cumulative effect in a significant way diminishes with the increasing distance from the Projects.

Table 4.14-1: Resource-Specific Cumulative Effects Assessment Areas

| Resource | Geographic Scope | Justification for Geographic Scope |
|--|--|---|
| Geology and Soils | Construction workspaces | Effects on geological resources and soils are expected to be highly localized, primarily confined to the designated construction workspaces. These resources are generally not influenced by activities occurring outside of these areas. Because direct effects are limited in both spatial extent and duration, occurring mainly during the construction phase, cumulative effects on geology and soils are most likely to arise only if other projects are constructed within the same geographic area as MSX and SSE4. |
| Water Resources, Wetlands, Vegetation, Wildlife and Fisheries, and Protected Species | HUC-12 Watersheds | Watersheds are well-defined, published natural boundaries for surface water flow and are large enough to be deemed ecologically relevant to the effects caused by the Projects (CEQ, 1997). Effects on water resources, including wetlands, are typically assessed at the watershed level. The watershed serves as a natural boundary and can also act as a geographic proxy for evaluating effects on vegetation, wildlife and fisheries, and protected species that would be directly affected by construction activities and indirect effects such as changes in habitat availability and displacement of transient species. |
| Land Use, Recreation, and Special Interest Areas | 1.0 mile of construction workspace | Effects on general land uses, including public recreation areas, would be restricted to the construction workspaces and the adjacent landscape up to 1 mile where indirect effects could occur. |
| Visual Resources | Within 0.25-mile of the pipeline and 0.5-mile of aboveground facilities | Assessing the effect based on the viewshed allows for the effect to be considered with any other feature that could affect visual resources. |
| Socioeconomics | Counties and municipalities where project activities are proposed | County boundaries are well-defined and commonly used for assessing socioeconomic effects due to their relevance to employment, housing, public services, transportation, traffic, property values, local economies, and tax structures. This scope reflects the limited duration and localized nature of potential effects from the Projects and other regional developments. |
| Cultural Resources | APE, which typically includes overlapping effects within the Project's footprint (direct APE) and within 0.25-mile of aboveground facilities (indirect APE). | The effect area for direct effects (physical) includes areas subject to ground disturbance, while indirect effects (visual or audible) include aboveground ancillary facilities or other project elements that are visible from historic properties in which the setting contributes to their NRHP eligibility. |
| Air Quality – Construction ^{a/} | Within 0.25-mile of all active construction | Air emissions during construction would be limited to vehicle and construction equipment emissions, and dust and would be localized to the Project's active construction work areas and areas adjacent to these active work areas. |
| Air Quality - Operation ^{a/} | 20 kilometers (~12.4 miles) from compressor stations | Any air quality effects from the pipeline and appurtenant facilities would be temporary, localized, not occurring on a steady basis, spread out across the entire project area, and below the de minimis emission threshold levels established for General Conformity. However, MSX includes new compressor stations and SSE4 includes modifications to existing compressor stations. Therefore, the geographic scope for the air quality during operation is 20 kilometers from new and modified compressor stations. |

Table 4.14-1: Resource-Specific Cumulative Effects Assessment Areas

| Resource | Geographic Scope | Justification for Geographic Scope |
|--|--|---|
| Noise - Construction | 0.25-mile from the pipeline or aboveground facilities / 0.5-mile from HDD | Areas in the immediate proximity of pipeline or aboveground facility construction activities would have the potential to be affected by construction-generated noise. NSAs within 0.5-mile of HDDs could be cumulatively affected if other projects had a concurrent noise effect on the NSA. |
| Noise - Operation | NSAs within 1 mile of compressor stations and 0.5-mile from meter stations | Noise from the Projects' permanent above-ground facilities, when combined with other noise-emitting sources could result in cumulative noise effects on NSAs. |
| <p>^{a/} We note that GHGs do not have a localized geographic scope. GHG emissions from the Projects combined with projects all over the planet lead to increased CO₂, CH₄, and other GHG concentrations in the atmosphere.</p> <p>^{b/} EPA's distance for modeling of large PSD sources, at 40 CFR 51, appendix W.</p> | | |

To avoid unnecessary discussions of insignificant effects or projects that are outside of the geographic scope and timeline as compared to the proposed Projects, and to adequately address and accomplish the purpose of this analysis, the cumulative effects analysis for MSX and SSE4 was conducted using the following guidelines:

- Projects and activities included in this analysis are generally those identified from public resources and applicant knowledge within the same general locations as MSX and SSE4 (i.e., within the geographic scope of one or more of the resources listed in table 4.14-1).
- MSX and SSE4 activities occurring during the same timeframe that another planned, proposed, or ongoing project occurs could contribute toward a cumulative effect relative to the Projects, depending on whether the effects are temporary, short-term, long-term, or permanent. Once the effects cease, the proposed Projects could no longer contribute towards a cumulative effect. As discussed in the preceding environmental analysis, most of the Projects' effects would be temporary or short-term. Notable exceptions are operational air emissions, as well as land use conversion for aboveground facilities, which are either long-term or permanent.

Both beneficial cumulative effects (e.g., new jobs and tax revenues) and adverse cumulative effects (e.g., contribution toward ongoing air emissions) were identified in the analysis. Where we determined that MSX or SSE4 could potentially contribute towards cumulative effects, we quantified the effects to the extent practicable. However, in some cases the potential effects can only be described qualitatively. This is particularly the case for projects in the early planning stages, which may be contingent on economic conditions, availability of financing, and/or issuance of permits, or projects for which there is a lack of publicly available information.

MSX and SSE4 could contribute towards cumulative effects on certain resources when combined with one or more of the other projects listed in table K.4.14-1, which includes project information, distance from MSX and/or SSE4, and resources potentially experiencing cumulative effects.

4.14.1 Geology and Soils

We identified eight projects, that when combined with the proposed Projects have potential to cumulatively affect geology and soils. These other projects include one FERC-regulated pipeline project, and four roadway projects, one airport improvement project, one energy generation project, and one commercial project (table K.4.14-1). In general, the effects could include land disturbance from clearing, grading, trench excavation, blasting, and backfilling, as well as the installation of aboveground facilities and impervious surfaces. These activities could result in localized alterations of surficial geology or minor changes to topography; however, effects would generally be limited to areas directly disturbed by construction that are within overlapping or directly abutting areas.

The Kosciusko Junction Pipeline Project would involve similar ground-disturbing activities as the Projects, including trenching and grading (Boardwalk Pipelines, 2025). Given the proposed facilities would intersect, cumulative effects from overlapping construction are possible. These effects would be concentrated on the areas around MP 96.5 on MSX and at MP 0.5 on Loop A2 of SSE4. The Kosciusko Junction Pipeline Project would be subject to the same level of construction and operational FERC requirements as the proposed Projects, thus limiting cumulative effects to locations in the immediate areas where construction activities associated with this project overlap with the proposed Projects.

The I-75 Commercial Vehicle Lanes Project proposed to add two new lanes, which would likely require clearing and grubbing of roadside vegetation, earthwork and excavation, subgrade preparation and stabilization, drainage installation, and construction staging and stockpiling. SSE4 Loop L1 crosses under both I-75 and I-475; however, the potential for cumulative effects on geological resources and soils would depend primarily on whether construction activities occur concurrently. Given that SSE4's ground disturbance would be largely temporary and localized, and the roadway improvements would occur within an already developed transportation corridor, cumulative effects on geological resources and soils from the two projects are expected to be limited. Additionally, it is anticipated the I-75 Commercial Vehicle Lanes Project would install sediment and erosion controls to adhere to Georgia Department of Transportation (GDOT) and NPDES standards.

The Rumble Technology Campus, Smarr Combined Cycle Energy Facility, and the New Replacement Griffin-Spalding County Airport would involve significant grading and the creation of large impervious surfaces (DCD, 2025). While these projects are adjacent to SSE4 loops, their ground-disturbing effects would be highly localized within their own footprints. For SSE4 to contribute towards a cumulative effect, construction would need to occur in the same area at the same time as the other projects. Given that the effects are limited to adjacent areas, and because these projects would be geographically separated from SSE4, the opportunity for SSE4 to contribute towards a cumulative effect on geology and soils would be highly diminished by the time construction were to begin. Even if schedules for these projects overlap with SSE4 construction, through the use of NPDES soil and erosion BMPs, any cumulative effect would be minimal. For the proposed Projects to contribute to cumulative effects on geological resources and soils, when combined with the nearby highway projects, construction would need to occur during overlapping timeframes. Highway overlay and reconstruction activities are generally less intensive and more surficial than those associated with new pipeline installation. For the roadway

projects, typical ground-disturbing activities may include excavation and earthwork, roadbed and subgrade preparation, and staging or stockpiling areas. Because these are improvement projects on existing infrastructure, permanent effects are expected to remain within previously disturbed corridors. These road projects are also anticipated to implement erosion and sediment controls consistent with each state's Departments of Transportation standards.

Controlled blasting is likely to be required in limited areas associated with SSE4 construction, and a Blasting Plan with appropriate BMPs would be implemented to minimize potential effects. Although the pipeline right-of-way would be permanently altered, topographic and drainage conditions would be restored to approximate their original configurations. While SSE4 is located near karst terrain, effects are expected to be minimal.

Overall, the ground-disturbing effects associated with all identified projects would be highly localized and limited to each project's specific footprint. Given the limited extent of surface disturbance and the Companies' implementation of established mitigation measures, the Projects in combination with these other past, present, and reasonably foreseeable roadway projects, are not expected to result in significant cumulative effects on geologic resources and soils.

4.14.2 Water Resources

Twenty-five other projects have been identified within the same geographic scope as the proposed Projects. The Projects' effects on water resources, when combined with 25 other past, present, and reasonably foreseeable projects that are assessed at the Hydrologic Unit Code (HUC)-12 watershed level, could contribute towards cumulative effects on water resources. These projects include other FERC-regulated natural gas facilities like the Kosciusko Junction Pipeline Project, industrial projects such as the Big River Landfill, an airport repair and maintenance project, and multiple road improvement projects by the state's DOTs (table K.4.14-1).

Groundwater: Most of the other projects within the geographic scope would involve similar ground disturbing activities that could temporarily affect groundwater quality or recharge; however, areas that are permanently converted from vegetated land to industrial uses with impervious cover would result in a localized reduction in groundwater infiltration. No sole-source aquifers occur within any of the HUC-12 watersheds that could be affected by the proposed Projects. Therefore, the Projects would not contribute to adverse cumulative effects on sole-source aquifers. Where groundwater withdrawals would occur during construction or operation, environmental effects would be minimized through the protective measures outlined in the SSE4 Plan and Procedures with requested deviations. Additional plans, including the Projects' HDD Contingency Plan, and Blasting Plan, would further protect groundwater by ensuring those activities are conducted in a way that protects groundwater supplies, flow, and quality, using appropriate BMPs to safeguard water quality.

As discussed in section 4.3.1.5, construction and operation of the Projects is not expected to cause significant effects on groundwater resources. Any potential effects would be avoided or minimized through standard and specialized pipeline construction techniques. Because we have concluded that the Projects would not significantly affect groundwater resources, it would not add incremental cumulative effects when considered alongside other past, present, or reasonably foreseeable future projects in the area.

Surface Water: We identified 25 other projects within the surface water geographic scope (HUC-12 sub-watershed) of the proposed Projects that, when combined, may cumulatively affect water resources (listed in table K.4.14-1). These other projects would involve ground-disturbing activities such as vegetation clearing, grading, excavation, and soil stockpiling that could temporarily increase sedimentation, turbidity, or stormwater runoff to nearby surface waters during construction. These effects would generally be short term and minimized through standard erosion and sediment control measures required under state and federal regulations. Projects that expand impervious surfaces, such as the airport improvements, the Buc-ee's Travel Center, the Rumble Technology Campus, and certain roadway upgrades, could result in a localized, long-term increase in stormwater runoff volumes or rates, although these projects are also expected to incorporate stormwater management BMPs to maintain water quality and reduce downstream effects as required by local and state NPDES permitting. Construction of the proposed Projects would result in short-term, temporary effects on surface waters from activities such as stream crossings, clearing, grading, and potential water withdrawals, as described in section 4.3.2. These effects include brief increases in turbidity and sedimentation, temporary changes in water temperature and dissolved oxygen, and minor decreases in water quality during and immediately following construction.

The Companies would implement their Wetland and Waterbody Construction and Mitigation Procedures, SPCP, and other environmental construction guidelines described in each of their ECMPs to minimize adverse effects on surface waters. These BMPs include dry crossings, HDD, or other forms of trenchless stream-crossing methods, secondary containment for fuel and lubricants near waterbodies, installation of silt fences and other sediment barriers, and strict restoration requirements for streambeds and banks. The other nearby and overlapping projects are expected to apply similar BMPs. FERC-regulated actions would be required to implement our Plan and Procedures or equivalent measures.

Given our expectations for the Companies to comply with these protective measures, the temporary nature of the Projects' effects, and the fact that other projects are expected to employ comparable controls, the combined cumulative effects on surface water resources are expected to be minor and short-term.

4.14.3 Wetlands

We identified 25 other projects listed in table K.4.14-1, that could result in cumulative effects on wetlands. These types of projects include other FERC-regulated natural gas facilities, other industrial projects, and regional transportation improvements. Most transportation projects occur in previously disturbed or paved corridors, with minimal wetland presence, while the pipeline projects are required to obtain Section 401/404 CWA approvals and to implement BMPs, compensatory mitigation, and wetland construction plans. FERC-regulated actions would be required to implement our Plan and Procedures or equivalent measures.

Together, the proposed Projects would convert about 112 acres of PFO or PSS wetlands to PSS or PEM, as well as the combined permanent fill of 5.4 acres of wetlands. The Companies would be required by the USACE to abide by compensatory mitigation requirements to offset unavoidable adverse effects on wetlands after all appropriate and practicable avoidance and minimization measures have been achieved. This would include mitigation necessary to account for unavoidable permanent conversion of forested and scrub-shrub wetlands.

Because the direct effects on wetland resources from MSX and SSE4 are relatively spread out linearly across each HUC-12 and all effects are subject to mitigation and monitoring required under section 404 of the CWA, and because the other identified projects are likewise regulated under federal and state wetland protection programs, the combined or cumulative effects on wetland resources are expected to be minor. Any overlapping construction windows could produce localized, short-term disturbance, but adherence to permit conditions, erosion and sediment controls, and compensatory mitigation by all projects should ensure that the overall wetland function and value within the affected watersheds are maintained.

4.14.4 Vegetation

When combined with the anticipated effects on vegetation from 26 projects listed in table K.4.14-1, the proposed Projects could contribute towards cumulative effects on the same resources. The types of projects include other FERC-regulated natural gas facilities, other industrial projects, and regional transportation improvement projects. Effects on vegetation are expected to be generally temporary and minor, with the exception of permanent removal of vegetation and wildlife habitat associated with new or expanded aboveground facility construction. Most transportation projects occur in previously disturbed or paved corridors. FERC-regulated actions would be required to implement our Plan and Procedures (or equivalent measures).

There would be temporary and permanent effects on vegetation due to the construction of MSX and SSE4. When combined, the Projects would disturb 4,417 acres of forest areas (includes upland forest, managed timber, and forested wetlands). Although these effects are mostly temporary in nature and associated with temporary workspaces, the time that it could take for these forested areas to return to their pre-construction conditions would take decades. Of the over 4,000 acres of forested areas affected by the Projects, about 1,564 acres would be permanently converted to herbaceous and shrubby vegetation within the Projects' operational footprints. Some of the contributing factors would be the grading and clearing and permanent effects resulting from the conversion of forested communities to open or industrial land. The Companies would minimize the temporary and permanent effects on vegetation communities by collocating to the maximum extent possible with other linear corridors and adhering to the Plan and Procedures. Areas that are not forested would return temporarily affected areas along the pipeline corridor back to its pre-construction state quite quickly following the completion of construction activities and all forested wetland effects would require mitigation as outlined in section 404 of the CWA.

Given the scale of the Projects' effects on vegetation, especially on forested areas, even with the protective measures and permits in place, when combined with the other projects described above, the contribution towards cumulative effects on vegetation is expected to be minor and short-term for most vegetation types. However, the clearing of mature forested areas, even within the temporary workspaces, would contribute towards a long-term, and in some cases, permanent cumulative effect on existing forested communities. We note that the proposed Projects would be located in regions where plenty of large undisturbed forested areas are available beyond the immediate Project areas. When combined with other past, present, and reasonably foreseeable projects that also require forest clearing, the proposed Projects would result in permanent cumulative effects that would be moderate but not significant.

4.14.5 Wildlife, Fisheries, and Protected Species

When combined with the 26 other projects listed in table K.4.14-1, the proposed Projects could contribute towards cumulative effects on the same resources. The magnitude of cumulative effects on wildlife, including protected species, is related to disturbances to habitat during construction and permanent conversion during operation. Most of the other projects within the geographic scope, including one landfill project, eight FERC-regulated pipeline actions, one airport improvement project, commercial developments, and multiple roadway improvement projects, would involve ground-disturbing activities. During construction of the proposed Projects and these other projects, wildlife may be temporarily displaced to nearby suitable habitat due to noise, lighting, and human presence. The transient species are anticipated to return to cleared areas following the completion of construction activities as revegetation occurs.

Where construction schedules overlap, particularly where MSX (MP 96.5) and Loop A2 (MP 0.5) on SSE4 are crossed by the Kosciusko Junction Pipeline Project, the cumulative increase in construction activities including the presence of workers and construction equipment, the increased disturbance may negatively affect wildlife. Overlapping timelines for habitat removal could reduce foraging and breeding habitats and may result in cumulative effects on local wildlife populations. Even construction activities that do not overlap can have cumulative effects if habitat is fragmented to the extent that the area is no longer suitable to more sensitive species. Permanent habitat conversion from projects such as the Big River Landfill and Meridian Regional Airport would remove habitat, while linear projects like the Kosciusko Junction Pipeline and roadway overlays would increase fragmentation. An overall increase in noise associated with these projects could limit available habitat for wildlife that use echolocation (e.g., bats) or vocalization (e.g., songbirds) and alter prey-predator behavior. However, wildlife in the region may be habituated to a human-dominated landscape with existing agriculture and transportation corridors. Any FERC-jurisdictional project is required to comply with the FERC Plan and Procedures (or equivalent), and all projects with a federal nexus must comply with section 7 of the ESA to ensure actions do not jeopardize federally protected species. As part of this process, project proponents consult with FWS and implement species-specific conservation and mitigation measures to avoid and minimize adverse effects. Similarly, the Companies have ongoing consultation with FWS, MDWFP, ACDNR, and DGNR regarding protected species for MSX and SSE4 and would implement all required conservation measures to minimize effects. Given that a majority of the projects would have temporary to short-term effects on vegetation and wildlife, and sufficient available habitat exists within the geographic area, and each project with a federal nexus undergoes its own review and mitigation process under the ESA we conclude that the Projects, when combined with the other projects, would not result in significant cumulative effects on wildlife or protected species.

Within the same HUC-12 watersheds, changes to surface water quality could lead to changes in the aquatic environment, and cumulative effects on fisheries may occur if MSX and/or SSE4 and another project affect the same aquatic habitats. This is particularly relevant as the Projects cross several rivers listed on the NRI that support sensitive species. For example, the Flint River supports a high diversity of fish fauna, including protected darters and freshwater mussels. To avoid direct effects on aquatic habitats of NRI streams, the Companies have proposed HDD as the crossing method for these streams. In other areas, temporary turbidity plumes generated by various projects would be unlikely to overlap at the same time; however, sedimentation could result in cumulative effects where deposition aggregates at common

downstream locations. The potential effects of the proposed Projects on fisheries and aquatic resources would be temporary and short-term, occurring primarily during construction. With the implementation of standard erosion and sediment control practices required by state and federal permits for all identified projects, these projects would have minor, temporary cumulative effects on fisheries. The Companies would implement the Procedures, their SPCPs, and other project-specific environmental construction plans included in each Project's ECMP to minimize these effects. Based on the proposed Projects' temporary effects on aquatic resources and the mitigation measures expected for other projects, we conclude that MSX and SSE4 would not significantly contribute to an adverse cumulative effect on fisheries.

4.14.6 Land Use, Recreation, Special Interest Areas, and Visual Resources

We identified 20 projects listed in table K.4.14-1 that could contribute towards cumulative effects on land use, recreation, special interest areas, and visual resources. The types of projects with potential for cumulative effects to land use include other FERC-regulated natural gas facilities, large-scale commercial and industrial developments such as data centers, power generation facilities, airport construction and improvement projects, transportation and roadway improvements, and waste management facilities.

Land Use: Potential cumulative effects on land use include temporary and permanent changes as well as effects on residential, agricultural, conservation, and recreational areas. Construction of the proposed Projects would affect a combined 11,057 acres of land. Construction-related activities would result in temporary and permanent land use changes, primarily effecting upland forest, silviculture, and agricultural areas. However, as much of the Projects' construction would take place along existing rights-of-way, the need for new land conversion is otherwise reduced.

For the other projects within the MSX geographic scope, effects vary. The TGP-19061 anomaly digs involve temporary, localized excavation for pipeline maintenance, after which the land is restored. Its cumulative land use effect is therefore negligible. The roadway improvement projects (Overlay-US 49E, SR 16 Mill and Overlay, and SR 16 Lane Reconstruction) occur on land already dedicated to transportation. Cumulative land use effects are limited to the temporary disruption of concurrent construction activities where MSX crosses these corridors.

The other projects within the geographic scope of SSE4 also have varying degrees of land use effects. Several of the identified projects involve maintenance or upgrades to existing infrastructure, such as the York Compressor Station Overhaul and the Hall Gate and Wrens Compressor Station Upgrades. These activities are confined to existing, disturbed industrial footprints, and their cumulative land use effect is negligible. Additionally, linear and transportation projects like the I-75 Commercial Vehicle Lanes Project and various MDOT road overlays, occur on land already dedicated to transportation use, limiting the cumulative land use effect in these corridors to the temporary disruption of concurrent construction. In contrast, the most significant cumulative land use effects stem from projects involving permanent land conversion. The Rumble Technology Campus, the Smarr Combined Cycle Energy Facility, and the New Replacement Griffin-Spalding County Airport would permanently convert hundreds of acres of likely rural or undeveloped land to industrial, commercial, and aviation uses. The proximity of these large-scale developments to SSE4's pipeline loops (L1 and M1) would result

in a notable and permanent cumulative effect, creating a concentration of industrial and commercial development that changes the fundamental land use character of those specific areas.

The Kosciusko Junction Pipeline Project, which would occur within both MSX and SSE4's geographic scopes, involves permanent land use conversion for new pipelines and permanent aboveground facilities. The proposed Kosciusko Compressor Station would be located just 0.2-mile from MSX's Station 606A. The proximity of these facilities would result in a permanent, localized cumulative effect by creating a concentration of industrial energy infrastructure in what was previously a rural area. Despite this localized effect, the overall size of new, permanent aboveground facilities for all projects would be small compared with the total available land use types within the geographic scope. Nevertheless, the combined effects would be moderate and long-term in nature. Although the proposed Projects, when combined with Kosciusko and other projects would collectively contribute to an overall moderate cumulative effect on the existing land, we do not expect the proposed Projects' to result in significant cumulative effects on land use.

Recreation and Special Interest Areas: MSX and SSE4 would cross several federally and state-managed lands, including the Natchez Trace Parkway, the Bartram Forest WMA, and Little Creek Community Preserve. Direct effects would be minimized through the use of HDD at the Natchez Trace Parkway, as well as collocation with existing corridors and restoration of disturbed areas. None of the other projects identified in table K.4.14-1 are located within these same special interest areas, so the proposed Projects would not result in cumulative effects on recreation and special interest areas.

Visual Resources: MSX would introduce localized visual changes where new rights-of-way and aboveground facilities are installed, with temporary visual contrasts arising from vegetation removal and equipment activity during construction. SSE4 would largely follow existing utility corridors, reducing its visual effect. These effects would largely cease with the completion of construction. For other projects with overlapping construction schedules, the presence of construction equipment and vehicles on-site and traveling along roadways could result in temporary cumulative visual effects for some viewers.

Visual effects from the TGP-19061 dig maintenance project would be temporary and limited to the immediate construction footprint. When combined with MSX, these activities would have a negligible cumulative visual effect. Maintenance projects at existing compressor stations, such as at York, Hall Gate, and Wrens Compressor Stations, and work within existing transportation corridors like the MDOT overlays and the I-75 Commercial Vehicle Lanes project, would not introduce significant new visual elements. Visual effects from roadway projects would primarily occur during construction within existing, visually altered road corridors. Where the proposed Projects' rights-of-way overlap with these roadways (e.g., US 49E and MS 16), the cumulative visual effect would be limited to the temporary disruption from concurrent construction activities.

A traveler on Interstate 75 near SSE4's Loop L1 could have a view that includes the pipeline right-of-way, the proposed data center buildings of the Rumble Technology Campus, and the industrial structures of the Smarr Combined Cycle Energy Facility. This concentration of development would fundamentally and permanently alter the visual character of the area from

likely rural or undeveloped land to a dense industrial corridor. Similarly, the New Replacement Griffin-Spalding County Airport, located just 0.05-mile from Loop M1, would introduce runways, terminals, and lighting systems, creating a new visual feature in the landscape adjacent to the pipeline corridor (Michael Baker International, 2017).

The Kosciusko Junction Pipeline Project would also permanently alter the visual landscape due to linear tree clearing for new pipeline rights-of-way and the construction of similarly sized new aboveground facilities. The close proximity of the proposed Kosciusko Compressor Station to MSX's proposed Station 606A would lead to a permanent, localized cumulative visual effect. Viewers in this area would perceive a wider, more intensive industrial landscape due to the combined presence of both facilities and their associated cleared rights-of-way. Where SSE4's Loop A2 crosses the Kosciusko Junction Pipeline Project, both of which would parallel existing rights-of-way, observers may see two wider intersecting cleared rights-of-way, creating a more noticeable visual pattern on the landscape.

Long-term visual effects from both of the proposed Projects would be reduced by collocating with existing utilities where possible and implementing design measures such as vegetative screening and non-reflective color treatments. While MSX would contribute to a noticeable cumulative visual change in the specific area near the Kosciusko Compressor Station, the overall cumulative effects on visual resources across the entire geographic scope, when considered with the other projects, would not be significantly adverse. Visual contrasts from construction would diminish as vegetation is restored.

In these specific areas, SSE4's proposed right-of-way expansion along existing utility corridors contributes on a small scale to an ongoing regional transformation that commercial and industrial projects have imposed on what were previously very rural landscapes. Given the proposed SSE4 loops would be buried, the addition of the SSE4 pipeline right-of-way is a minor component of a landscape now defined by these much larger and more visually prominent industrial, commercial, and energy projects. Therefore, SSE4's contribution to cumulative visual effects remains minor.

4.14.7 Socioeconomics

We identified 56 projects listed in table K.4.14-1, that could contribute toward cumulative effects on the existing socioeconomic environment. Socioeconomics is a broadly affected resource because these projects, which are all located 20 miles or less from the proposed Projects, touch upon workforce, housing, public services, and regional economic activity in many different ways.

Population: The primary cumulative effect on population would be a temporary increase resulting from non-local construction workers relocating to the area for the proposed Projects and other concurrent projects. This influx would be limited to the construction period, as temporary workers would be unlikely to bring their families. The small increase in permanent population from new employees hired to operate the completed facilities is not expected to result in a significant cumulative effect (either beneficial or adverse).

Housing and Public Services: The largest cumulative effects on housing would stem from non-local workers temporarily relocating to the proposed Projects' areas along with workers for the other major concurrent projects, such as the Delta Blues Advanced Power Station, Meta Data

Center, the Montgomery Intermodal Container Transfer Facility, and the Kosciusko Junction Pipeline Project, seeking temporary lodging. While the affected counties contain a substantial inventory of temporary housing, the combined demand from concurrent construction projects could cause demand to reach or exceed capacity. This could restrict the supply available to other users, such as vacationers, and potentially increase the prices of short-term housing. Many construction contractors who specialize in long-term construction assignments, travel to the project areas with their personal travel trailers and fifth-wheel recreational vehicles, which helps to alleviate the demand for housing in rural areas. Regardless, the cumulative effects on the availability of temporary housing would be substantial but temporary, restricted to the overlapping construction periods.

The cumulative effect on public services would depend on the number of projects under construction simultaneously. The incremental demands of several projects could strain police, fire, and emergency services, an effect amplified by construction-related traffic. This effect would be temporary, occurring only for the duration of construction. Mitigation could be achieved through project sponsors consulting with local emergency responders, providing their own personnel to augment local capacity, or providing additional funds. All construction contractors would be required to develop an individual emergency services coordination plan, and it is assumed other regulated and non-regulated projects would require similar plans.

Effects on educational resources are expected to be insignificant, as the temporary workforce is unlikely to relocate with their families. Therefore, the proposed Projects' contribution to the cumulative effect on public services is not anticipated to be significant.

Property Values: Based on multiple studies of similar energy infrastructure, a significant negative cumulative effect on property values as a result of the proposed Projects combined with the other regional projects is not anticipated. Research indicates that well-designed and sited energy facilities with adequate buffers have not had a statistically significant effect on nearby property values.

Transportation and Traffic: A temporary, adverse cumulative effect on transportation and traffic is anticipated from the combined construction activities of the proposed Projects and the other projects identified in the region, if construction is concurrent. For the proposed Projects, construction would generate traffic from worker commutes, as well as equipment and material deliveries. Traffic would be highest between 6:00 a.m. and 8:00 a.m. as workers travel from designated contractor yards to the various work areas, using a combination of existing roads and newly constructed access roads.

When the MSX and SSE4 project's construction traffic is combined with that from other concurrent projects, including other large industrial developments and numerous road and bridge improvement projects, there is a potential for increased traffic congestion, travel delays, and accelerated wear on local and state roads. While direct site conflicts associated with MSX and SSE4 may be unlikely, this traffic would enter a regional network already experiencing construction from major transportation initiatives like the I-75 Commercial Vehicle Lanes Project, the I-16/I-75 interchange, and the West Alabama Highway Project (WAH, 2025). However, these effects are expected to be managed through project-specific Traffic Management Plans and coordination with state and local transportation departments. Mitigation measures, such as using

contractor yards for parking and busing or carpooling workers to construction sites, would help reduce the number of vehicles on public roads during peak commute hours. Therefore, the Projects' contribution towards cumulative effects on traffic would be temporary and limited to the construction period.

Economy, Employment, and Tax Revenues: Cumulative effects on the local economy and employment are expected to be substantially beneficial in the short term. With up to half of the estimated construction workforce for the proposed Projects being local hires, a temporary decrease in local unemployment is anticipated. When combined with the labor demand from other large-scale industrial projects (Kosciusko Junction Pipeline Project, Delta Blues Advanced Power Station, Compass Data Center Campus, Meta and Rumble data centers, the Smarr Combined Cycle Energy Facility, and the New Replacement Griffin-Spalding County Airport) and various infrastructure projects, the demand for short-term construction laborers with similar skill sets would be high. The proposed Workforce Development Center would further support this demand by providing local training (Kicks 96 News, 2024). Once construction is complete, these beneficial effects would diminish, as the small demand for permanent workers would be easily met by local labor resources with a negligible cumulative effect on regional employment.

The cumulative effect on the regional economy from tax revenues is expected to be beneficial. The temporary and permanent workforces for the proposed Projects, combined with the workforces from other projects listed in table K.4.14-1, would spend money locally, generating sales tax revenue. In the long term, there would be a significant beneficial cumulative effect on local economies from property tax collections associated with the proposed Projects combined with tax collections from the other new permanent facilities, such as the Big River Landfill, the Compass Data Center (Compass Datacenter, 2025), the Delta Blues Advanced Power Station, the Buc-ee's Travel Center, the Meta and Rumble data centers, and the Smarr energy facility. The development of major industrial and commercial facilities like these would generate major, long-term property, sales, and income tax receipts, including funds for local governments.

4.14.8 Cultural Resources

The projects listed in table 4.14-1 that are within the cumulative effects area for cultural resources include those that overlap the Projects' APE. The projects that are defined as federal actions would have to comply with section 106 of the NHPA and include mitigation measures designed to avoid or minimize additional effects on cultural resources. Where effects on cultural resources are unavoidable, mitigation (e.g., recovery of data, curation of materials) would take place before construction. Non-federal actions would need to comply with any mitigation measures required by the states.

The Companies have developed project-specific plans to address unanticipated discoveries of cultural resources and human remains during construction. Given the previously mentioned federal and state laws and regulations that protect cultural resources, it is not likely that there would be significant cumulative effects on historic properties resulting from the Projects when considering the other projects within the geographic scope. For these reasons, cumulative effects on cultural resources are not discussed in further detail for MSX or SSE4.

4.14.9 Air Quality

When combined with the anticipated air quality effects from construction of other projects' activities listed in table K.4.14-1 within 0.25-mile of the construction workspace could contribute towards cumulative effects on air quality if construction occurs concurrently. During operation, projects were identified within 20 kilometers for Title V sources, and five kilometers for minor sources near the compressor and meter stations that could potentially contribute to cumulative effects when considered collectively.

4.14.9.1 Construction

Construction of the Projects and the actions identified in table K.4.14-1 would involve the use of heavy equipment that would generate temporary, localized emissions from diesel- and gasoline-powered equipment, worker vehicles, and surface disturbances. Five projects with potential concurrent activity within this 0.25-mile radius are identified. The types of projects include another FERC-regulated natural gas pipeline project, pipeline maintenance activities, and multiple roadway improvement projects.

If construction of these projects overlaps with either MSX or SSE4 construction activities, short-term additive effects from diesel exhaust and fugitive dust could occur. However, pipeline construction at any given location is expected to last up to a few weeks, limiting the window for overlapping. Companies would control fugitive dust with methods such as applying water to disturbed areas. Given that emissions from each project are controlled by federal and state standards, and Companies would implement dust suppression and engine-emission controls, no significant cumulative effects on air quality resources during construction are anticipated.

4.14.9.2 Operation

During operation, emissions from the Projects would result primarily from combustion and fugitive sources at the new and modified compressor and meter stations. When considered in conjunction with other identified projects in the region, both MSX and SSE4's operational emissions would represent a small overall contribution to regional air pollutant levels. Projects identified within the geographic scope with the potential to contribute to cumulative operational air quality effects when considering alongside MSX include the Kosciusko Junction Pipeline Project (including the proposed Kosciusko and Holmes Compressor Stations and modifications at its Isola and Greenville stations). Projects identified within the graphic scope of SSE4 include other FERC-regulated energy infrastructure, such as the Kosciusko Junction Pipeline Project and the York Compressor Station Unit 1 Overhaul Project.

Although the emissions from MSX and SSE4 Project sources combined with the emissions from other operational sources within the geographic scope would result in an incremental increase in ambient air pollutant concentrations, we do not expect this incremental cumulative increase to cause or contribute to violations of any applicable NAAQS or result in significant cumulative effects on air quality.

4.14.10 Noise

The geographic scope for cumulative noise effects generated from construction-related activities is a 0.25-mile radius of the Projects' construction workspaces, except for at HDDs where the scope is a 0.5-mile radius of each HDD drilling rig. The geographic scope for cumulative noise

effects generated by operational noise-emitting facilities is other operating facilities that would affect the same NSAs located within 1 mile of the proposed MSX and SSE4 aboveground facilities.

4.14.10.1 Construction

Construction of MSX and SSE4 would involve typical heavy equipment and temporary generators, while noise from HDD operations would be temporary but might occur around the clock. If construction of any of the 18 projects identified in table K.4.14-1 occurs at the same time and within a 0.25-mile radius (or 0.5-mile radius of HDD entry points) as construction is occurring along MSX or SSE4, the Projects would contribute towards a cumulative temporary increase in local noise levels. The types of projects include multiple FERC-regulated natural gas facility projects, several large-scale industrial, commercial, and airport developments, and numerous roadway improvement projects.

Given the limited duration of construction at each location associated with MSX and SSE4, generally two to three months or less, and implementation of mitigation measures described in section 4.12.4, The Projects' contribution towards cumulative construction noise effects would be temporary, highly localized, and minor if construction of nearby projects occurs concurrently.

The other nearby projects with potential for concurrent construction that would contribute towards cumulative noise effects (when combined with the proposed Projects' construction noise) include another major FERC-regulated pipeline, the Kosciusko Junction Pipeline Project, as well as several roadway improvement projects (on US 49E and SR 16) and pipeline maintenance activities (TGP-19061 digs), and large-scale commercial and industrial construction such as the Rumble Technology Campus. If construction schedules for these projects overlap with the proposed Projects' construction, the combined noise from heavy equipment could result in a temporary, additive effect. However, most construction activities associated with the proposed Projects would occur during daytime hours and be intermittent. Based on the transient nature of pipeline construction and the implementation of noise mitigation measures, the proposed Projects would not result in significant construction noise effects but could contribute to minor and short-term cumulative noise effects if construction periods with other nearby projects overlap.

4.14.10.2 Operation

Two other projects have been identified as contributing permanent, noise-producing operational facilities within the 1-mile geographic scope of proposed aboveground facilities associated with MSX and SSE4. The Kosciusko Junction Pipeline Project, specifically the proposed 51,554 hp Kosciusko Compressor Station in Attala County, MS, would be located 0.2-mile east of MSX's proposed Station 606A. Based on table 4.12-5, there are four NSAs located within one mile of the proposed Station 606A; therefore, we assume these same four NSAs would experience a cumulative increase in noise if both Station 606A (23,470 hp) and the Kosciusko Compressor Station are operating simultaneously. Given this proximity to each other and the NSAs, cumulative noise modeling for the NSAs associated with the Compressor Station 606A, Meter Stations MS-2 and MS-3, the Kosciusko Compressor Station associated with the Kosciusko Junction Pipeline Project, and the Kosciusko Compressor Station Project was completed.²⁷² The

²⁷² From TPG's response to our April 9, 2026, data request, EIR 16 (Accession no.: 20260423-5193).

cumulative effects from these projects are summarized in Table 4.12-2 below and the resulting cumulative noise would not exceed the 55 dBA L_{dn} criterion at any nearby NSAs.

| Table 4.14-2: Compressor Station 606A Cumulative Noise Effect Assessment | | | | | | | | |
|---|--|----------------------------|-------------------------------------|-------------------------------------|------------------------------------|--|---|----------------------------------|
| NSA | Approx. Distance from 606A Center to NSA | Direction from 606A to NSA | Measured Ambient, Day-Night Average | TGP 606A Proposed Station Equipment | TGP MS2 and MS3 Proposed Equipment | Kosciusko Junction Pipeline Project ^a | Kosciusko Compressor Station Project ^{b,c} | Cumulative Project Contributions |
| | Feet | | L _{dn} dBA | L _{dn} dBA | L _{dn} dBA | L _{dn} dBA | L _{dn} dBA | L _{dn} dBA |
| 1 | 1,850 | NE | 49.2 | 52.5 | 27.7 | 42.6 | 48.0 | 54.1 |
| 2 ^d | 4,400 | SE | 51.4 | 41.3 | 15.4 | 33.8 | - | 42.0 |
| 3 | 3,350 | SW | 66.1 | 46.3 | 30.4 | 42.4 | 51.1 | 52.8 |
| 4 | 4,900 | NW | 55.9 | 36.7 | 26.8 | 45.9 | 48.2 | 50.4 |

Note: Assessment results obtained from TGP's April 23, 2026, response to our EIR number 16 (Accession No. 20260423-5193)

^a Gulf South Pipeline Company, LLC CP25-547-000

^b Texas Eastern Transmission, LP CP26-24-000. Data from Table 2 of Noise Impact Assessment Dated May 2, 2025.

^c NSA 2 is not included within the CP26-24-000 noise impact assessment and is located beyond 1 mile of the proposed site

^d Not included within Kosciusko Compressor Station assessment

NG's York Compressor Station Unit 1 Overhaul Project is located within the existing York Compressor Station, in Sumter County, AL. As part of SSE4, SNG is proposing to install a new 24,000 hp compressor unit at the York Compressor Station. As shown in table 4.12-6, there is only one NSA within 1 mile of the York Compressor Station. Therefore, if the York Compressor Station Unit 1 Overhaul Project results in an increase in noise, that would be combined with the increase caused by the proposed Project modification at the same facility, resulting in a minor permanent cumulative noise effect on the single NSA. The predicted operational noise level at the NSA is expected to increase by 0.4 dBA L_{dn} due to the proposed modifications at the York Compressor Station. Therefore, SSE4 would contribute towards a minimal cumulative effect on the overall noise level at the NSA.

4.14.11 Climate Change

Climate change is the variation in the Earth's climate (including temperature, precipitation, humidity, wind, and other meteorological variables) over time. Climate change is driven by accumulation of GHG in the atmosphere due to the increased consumption of fossil fuels (e.g., coal, petroleum, and natural gas) since the early beginnings of the industrial age and accelerating in the mid- to late-20th century.²⁷³ The GHGs produced by fossil-fuel combustion are CO₂, methane, and N₂O.

²⁷³ Intergovernmental Panel on Climate Change, United Nations, *Summary for Policymakers of Climate Change 2021: The Physical Science Basis*. (Valerie Masson-Delmotte et al., eds.) (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (IPCC Report) at SPM 5. Other forces contribute to climate change, such as agriculture, forest clearing, and other anthropogenically driven sources.

In 2017 and 2018, the U.S. Global Change Research Program (USGCRP)²⁷⁴ issued its *Climate Science Special Report: Fourth National Climate Assessment*, Volumes I and II.²⁷⁵ This report and the report by the Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis*, states that climate change has resulted in a wide range of effects across every region of the country and the globe. Those effects extend beyond atmospheric climate change alone and include changes to water resources, agriculture, ecosystems, human health, and ocean systems.²⁷⁶ According to the Fourth Assessment Report, the United States and the world are warming; global sea level is rising and oceans are acidifying; and certain weather events are becoming more frequent and more severe.²⁷⁷ These effects have accelerated throughout the end of the 20th and into the 21st century.²⁷⁸

GHG emissions do not result in proportional local and immediate effects; it is the combined concentration in the atmosphere that affects the global climate. These are fundamentally global effects that feed back to local and regional climate change effects. Thus, the geographic scope for cumulative analysis of GHG emissions is global rather than local or regional. For example, a project 1 mile away emitting 1 ton of GHG would contribute to climate change in a similar manner as a project 2,000 miles distant also emitting 1 ton of GHG.

Climate change is a global phenomenon; however, for this analysis, we focus on the existing and potential cumulative climate change effects in the Projects areas. The USGCRP's Fourth Assessment Report notes that the following observations of environmental effects are attributed to climate change in the Southeast region (which includes the Projects areas):²⁷⁹

- the near decade of 2010 through 2017 has been warmer than any previous decade since 1920 for average daily maximum and average daily minimum temperature;
- since 1960, there have been lower numbers of days above 95°F compared to the pre- 60 period but during the 2010's the number of nights above 75°F has been nearly double the average over 1901 – 1960. The length of the freeze free season was 1.5 weeks longer on average in the 2010s compared to any other historical period on record;
- the number of days with 3 or more inches of rain has been historically high over the past 25 years. The 1990s, 2000s, and 2010s rank first, third, and second, respectively in the number of these events;
- summers have been either increasingly dry or extremely wet, depending on

²⁷⁴ The U.S. Global Change Research Program comprised representatives from 13 federal departments and agencies and issued reports every 4 years that described the state of the science relating to climate change and the effects of climate change on different regions of the United States and on various societal and environmental sectors, such as water resources, agriculture, energy use, and human health.

²⁷⁵ U.S. Global Change Research Program, *Climate Science Special Report, Fourth National Climate Assessment | Volume I* (Donald J. Wuebbles et al. eds) (2017); U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II Impacts, Risks, And Adaptation In The United States* (David Reidmiller et al. eds.) (2018).

²⁷⁶ IPCC Report at SPM-5 to SPM-10.

²⁷⁷ USGCRP Report Volume II at 73-75.

²⁷⁸ See, e.g., USGCRP Report Volume II at 99 (describing accelerating flooding rates in Atlantic and Gulf Coast cities).

²⁷⁹ USGCRP Report Volume I and II.

location;

- due to a combination of sea level rise and soil subsidence, approximately 2,006 square miles of land have been lost in Louisiana between 1932 and 2016, or about 23 square miles per year; and
- in south Louisiana, relative sea level is rising at a rate of 1 to 3 feet per 100 years.

The USGCRP's Fourth Assessment Report notes the following projections of climate change effects in the Southeast with a high or very high level of confidence:²⁸⁰

- climate models project nighttime temperatures above 75°F and daytime maximum temperatures above 95°F become the summer norm. Nights above 80°F and days above 100°F, which are now relatively rare, would become common;
- lowland coastal areas are expected to receive less rainfall on average, but experience more frequent intense rainfall events followed by longer drought periods;
- coastal areas along the Gulf of Mexico are flat; therefore, expected sea level rises may cause inundation in certain low-lying areas;
- drought and sea level rise will create stressful conditions for coastal trees that are not adapted to higher salinity levels;
- other coastal species may also be stressed by sea level rise and warmer temperatures, prompting migration out of the area; and
- tropical storms and hurricanes may become more intense.

It should be noted that while the effects described above taken individually may be manageable for certain communities, the effects of compound events (such as simultaneous heat and drought, wildfires associated with hot and dry conditions, or flooding associated with high precipitation on top of saturated soils) can be greater than the sum of the parts.²⁸¹

The GHG emissions associated with construction and operation of the Projects were identified and quantified in section B.4.11 of this final EIS. Emissions of GHG are typically expressed in terms of CO₂e.²⁸² Construction CO₂e emissions from MSX and SSE4 would occur over a three-year period. Total construction emissions for MSX represent the total emissions occurring over the full construction period (2027 through 2028), and are estimated to be 162,451 tons (147,373 metric tons) CO₂e.²⁸³ Total construction emissions for SSE4 represent the total emissions occurring over the full SSE4 construction period (2027 through 2029), and are estimated

²⁸⁰ USGCRP Report Volume II.

²⁸¹ USGCRP Report Volume II.

²⁸² GHG gases are converted to CO₂e by means of the GWP; the measure of a particular GHG's ability to absorb solar radiation; and its residence time within the atmosphere, consistent with the EPA's established method for reporting GHG emissions for air permitting requirements that allows a consistent comparison with federal regulatory requirements.

²⁸³ Construction emission calculations for MSX, including speciated GHGs, were provided by TGP in the June 30, 2025, Certificate Application under appendix 9.A, FERC accession No. 20250630-5152.

to be 868,348 tons (787,752 metric tons) CO_{2e}.²⁸⁴ Operational CO_{2e} emissions resulting from MSX and SSE4 are estimated to be 685,063.00 tpy (621,478.9 metric tpy) and 1,047,105.46 tpy (949,918.4 metric tpy), respectively. Upstream and downstream GHG emissions are outside the scope of the environmental review for this project.²⁸⁵

Construction and operation of the Projects would increase the atmospheric concentration of GHGs in combination with past, current, and future emissions from all other sources globally and contribute incrementally to future climate change effects. To assess effects on climate change associated with the Projects, Commission staff considered whether it could identify discrete physical effects resulting from the Projects' GHG emissions or compare the Project's GHG emissions to established targets designed to combat climate change.

To date, Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource effects, Commission staff are unable to assess the Project's contribution to climate change through any objective analysis of physical effect attributable to the Project. Additionally, Commission staff have not been able to find an established threshold for determining the Project's significance when compared to established GHG reduction targets at the state or federal level. Ultimately, this EIS is not characterizing the Project's GHG emissions as significant or insignificant.²⁸⁶ However, as we have done in prior NEPA analyses, we disclose the Project's GHG emissions in comparison to national and state GHG emission inventories.

In order to provide context of the Project emissions on a national level, we compare the Project's GHG emissions to the total GHG emissions of the United States as a whole. At a national level, 5,489 million metric tons of CO_{2e} were emitted in 2022 (inclusive of CO_{2e} sources and sinks) (EPA, 2024). An average one year of construction emissions from MSX and SSE4 combined could potentially increase CO_{2e} emissions based on the national 2022 levels by 0.006 percent; in subsequent years, operation could result in a potential increase in CO_{2e} emissions by 0.029 percent based on the national 2022 levels.

To provide context on a state level, we compare the Projects' estimated GHG emissions to the state emission inventories. The Projects' construction and operational emissions would occur in Mississippi, Alabama, and Georgia. At a state level, 33.1, 40.5, and 41.3 million metric tons of CO₂ were emitted in 2023 from energy related sources in Mississippi, Alabama, and Georgia, respectively.²⁸⁷ Construction of the Projects could potentially increase CO₂ emissions based on statewide 2023 levels by 508,842 metric tons CO_{2e} or 0.02 percent in Mississippi, 288,924 metric tons CO_{2e} or 0.007 percent in Alabama, and 90,385 metric tons CO_{2e} or 0.002 percent in Georgia.

²⁸⁴ Construction emission calculations for SSE4, including speciated GHGs were provided by SNG/EEC in the August 26, 2025, Supplemental Filing under appendix 9.A, FERC accession No. 20250826-5140.

²⁸⁵ *Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colo.*, 605 U.S. 168, 186-90 (2025).

²⁸⁶ See e.g., *Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 63 (2023) ("...there currently are no accepted tools or methods for the Commission to use to determine significance, therefore the Commission is not herein characterizing these emissions

²⁸⁷ U.S. Energy Information Administration (2025). "State carbon dioxide emissions from fossil fuels tables." <https://www.eia.gov/environment/emissions/state/>

²⁸⁸ In subsequent years, operation of the Projects could potentially increase CO₂e emissions based on the state 2023 levels by 1.88 percent in Mississippi, 1.06 percent in Alabama, and 0.70 percent in Georgia.

We also typically compare a project's operational emissions in the context of state GHG reduction goals.²⁸⁹ At the time of this assessment, neither Mississippi, Alabama, nor Georgia had GHG reduction targets established.

4.14.12 Conclusion

MSX and SSE4 construction, in combination with the other projects within the geographic scopes of the analysis, could result in minor cumulative effects on a range of environmental resources, as discussed above. The majority of cumulative effects associated with the projects would be minor and temporary, limited to the period of active construction. However, some long-term cumulative effects would occur in forested areas where mature trees are cleared for construction and operation of the proposed facilities. Additionally, the long-term operational emissions increase from new and expanded compressor stations would contribute towards effects on air quality at a regional level over the operating life of the projects.

Federal projects are subject to laws and regulations that protect waterbodies and wetlands, threatened and endangered species, and historic properties, and limit effects from air and noise pollution. We have limited information about other potential or foreseeable non-federal projects in the region. For most resources, state laws and regulations apply to municipal and private projects, thus lessening potential cumulative effects.

Given the design features and mitigation measures that would be implemented to reduce effects during MSX and SSE4 construction and operation, and the federal and state laws and regulations protecting resources that would apply to the other projects identified, we conclude that when added to other past, present, and reasonably foreseeable future actions, cumulative effects on environmental resources within the geographic scopes affected by the Projects would not be significant.

²⁸⁸ Conservatively assumes all SSE4 2027 pipeline and meter station construction emissions occur in Alabama, 2028 pipeline and meter station construction emissions occur in Mississippi, and 2029 pipeline and meter station construction emissions occur in Georgia.

²⁸⁹ We reviewed the U.S. State Greenhouse Emission Targets site for individual state requirements at: <https://www.c2es.org/document/greenhouse-gas-emissions-targets/>.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF ENVIRONMENTAL ANALYSIS

The conclusions and recommendations in this final EIS were developed by the Commission's environmental staff with input from the USACE, EPA, FWS, NOAA, NPS, ADCNR, and MDWFP as cooperating agencies. These agencies may adopt this final EIS following independent review if their permitting and regulatory requirements are satisfied, but each will issue its own conclusions in its respective record of decision or conduct supplemental analysis if necessary.

Construction and operation of the Projects would result in some adverse environmental effects across multiple resource areas, including geology, soils, water resources, wetlands, vegetation, wildlife, protected species, land use, cultural resources, air quality, and noise. Most effects would be short term and occur during construction, while long-term effects would be limited primarily to localized conversion of forested areas and wetlands to maintained open land. The Companies' proposed avoidance, minimization, and mitigation measures, together with implementation of the MSX and SSE4 Plans and Procedures, would substantially reduce these effects. Additional design features such as the use of HDD at major waterbody crossings, erosion and sediment controls, and adherence to approved blasting, spill prevention, and restoration plans would further minimize disturbance.

Our conclusions are based on a thorough review of information provided by the Companies, supplemented through data requests, field investigations, scoping, literature review, alternatives analysis, and consultation with federal, state, and local agencies and Tribal Nations. We conclude that, with implementation of the proposed and recommended environmental conditions, the Projects' overall effects would be minimized and would not be significant. No major route alternatives, systems, or facility configurations were identified that would provide a substantial environmental advantage. Accordingly, Commission staff find that the proposed Projects, with the recommended environmental conditions, represent the preferred alternative to meet the Projects' purpose.

5.2 FERC STAFF RECOMMENDED MITIGATION

If the Commission authorizes the Projects, we recommend that the following measures be included as specific conditions in the Commission's Order. We have determined that these measures would further mitigate the environmental effects associated with construction and operation of the Projects as proposed. The section number in parentheses at the end of a condition corresponds to the section number in which the measure and related resource effects analysis appears in the EIS. As noted below, these measures apply to either both Companies or TGP or SNG/EEC.

- 1) The Companies shall follow the construction procedures and mitigation measures described in their applications and supplements, including responses to staff data requests and as identified in the EIS, unless modified by the Order. The Companies 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 all necessary actions 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 effect resulting from Project construction and operation.
- 3) **Prior to any construction**, the Companies 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 EIs' 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 EIS, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, the Companies shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

The Companies' exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. The Companies' right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to

acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

- 5) The Companies 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 will be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP, 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;
 - d. and agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
- 6) **Within 60 days of the acceptance of the authorization and before construction begins**, the Companies shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. The Companies must file revisions to the plan as schedules change. The plan shall identify:
 - a. how the Companies will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EIS, and required by the Order;

- b. how the Companies 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 on-site 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 the Companies will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - f. the company personnel (if known) and specific portion of the Companies' organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) the Companies 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 on -site personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
- 7) The Companies shall employ at least one EI per construction spread. 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. a full -time position, separate from all other activity inspectors;

- e. 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
 - f. responsible for maintaining status reports.
- 8) Beginning with the filing of its Implementation Plan, the Companies shall file updated status reports with the Secretary on a **biweekly** basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on the Companies' efforts to obtain the necessary federal authorizations;
 - b. the construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EI 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 the Companies from other federal, state, or local permitting agencies concerning instances of noncompliance, and the Companies' response.
- 9) The Companies must receive written authorization by the Director of OEP, or the Director's designee, **before commencing construction of any Project facilities**. To obtain such authorization, the Companies must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
- 10) The Companies must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Projects into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Projects are proceeding satisfactorily.

- 11) **Within 30 days of placing the authorized facilities in service**, the Companies 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 the Companies 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) **Within 5 days of the final determination of the use of the Nationwide Permit 12 issued by the United States Army Corps of Engineers**, the Companies shall file the complete water quality certification issued categorically by the MDEQ, ADEM, and GAEPD, as appropriate, including all conditions. All conditions attached to the water quality certification constitute mandatory conditions of the Certificate Order. **Prior to construction**, the Companies shall file, for review and written approval by the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions.

- 13) **Prior to HDD construction**, the Companies shall file with the Secretary revised HDD Feasibility studies that incorporate geotechnical investigation results for each HDD proposed. If the results of these studies lead to changes in the drill path or HDD entry/exit locations, the Companies shall file with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, any modifications to the applicable HDD workspaces or drill paths. (section 4.1.5)

- 14) The Companies **shall not** begin construction activities **until**:
 - a. FERC staff receives comments from the FWS regarding the proposed action;
 - b. FERC staff completes ESA consultation with the FWS, and
 - c. the Companies have received written notification from the Director of OEP, or the Director's designee, that construction or use of mitigation may begin. (section 4.7.2)

- 15) **Prior to construction of the Belmont Road HDD**, TGP shall file with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, a review of the proposed Belmont Road HDD noise impact modeling with revised mitigation analysis (if needed) and detailed mitigation plans to reduce the projected noise level attributable to the

proposed drilling operations to no more than 55 dBA L_{dn} at the NSAs. During drilling operations, TGP shall implement the approved plan, monitor noise levels, document the noise levels in the construction status reports, and restrict the noise attributable to drilling operations to no more than 55 dBA L_{dn} at the NSAs. (section 4.12.4)

- 16) **Prior to any nighttime construction at Ocmulgee and Wrens Compressor Stations, and the Tenaska, Thompson/Wrens and Statesboro Meter Stations**, SNG/EEC shall file with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, a noise mitigation plan to reduce the projected noise level attributable to nighttime construction (7 pm to 7 am) at nearby NSAs. During nighttime construction activities, SNG/EEC shall implement the approved plan, monitor noise levels, and restrict the noise attributable to construction activities to no more than a L_{dn} of 55 dBA (48.6 dBA L_{eq}) at the NSAs. (section 4.12.4)
- 17) **Prior to construction of the Oconee River HDD crossing**, SNG/EEC shall file with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, a drilling noise mitigation plan to reduce the projected noise level attributable to the proposed drilling operations at nearby NSAs with predicted noise levels above 55dBA L_{dn} . During drilling operations, SNG/EEC shall implement the approved plan, monitor noise levels, document the noise levels in the construction status reports, and restrict the noise attributable to drilling operations to no more than 55 dBA L_{dn} at the NSAs. (section 4.12.4)
- 18) TGP shall file a noise survey with the Secretary **no later than 60 days** after placing Stations 602, 606A, and 610 in service. If a full-load-condition noise survey of the entire station is not possible, TGP shall instead file an interim survey at the maximum possible horsepower load and file the full-load survey **within 6 months**. If the noise attributable to the operation of all the equipment at any of these facilities under interim or full horsepower load conditions exceeds 55 dBA L_{dn} at any nearby NSAs, TGP shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. TGP shall confirm compliance with the 55 dBA L_{dn} requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. (section 4.12.5)
- 19) TGP shall file a noise survey with the Secretary **no later than 60 days** after placing the Meter Station 2 and Meter Station 4 in service. If a full flow rate noise survey at the station's maximum design capacity is not possible, TGP shall provide an interim survey at the maximum possible flow rate and provide the full flow rate survey **within 6 months**. If the noise attributable to the operation of the MSX Meter Station 2 or Meter Station 4 exceeds an L_{dn} of 55 dBA at any nearby NSAs, TGP shall file a report on what changes

are needed and shall install additional noise controls to meet the level **within 1 year** of the in-service date. TGP shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. (section 4.12.5)

- 20) SNG/EEC shall file noise surveys with the Secretary **no later than 60 days** after placing the authorized unit(s) at the existing Rose Hill, Enterprise, York, Gallion, Selma, Elmore, Auburn, Ellerslie, Thomaston, Ocmulgee, Hall Gate, Wrens, Jefferson, and Rincon compressor stations in service. If a full-load condition noise survey is not possible, SNG/EEC shall provide an interim survey at the maximum possible horsepower load and provide the full-load survey **within 6 months**. If the noise attributable to the operation of the modified stations under interim or full horsepower load conditions exceeds an L_{dn} of 55 dBA at any nearby NSAs, SNG/EEC shall file a report on what changes are needed and install additional noise controls to meet that level **within 1 year** of the in-service date. SNG/EEC shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. (section 4.12.5)
- 21) SNG/EEC shall file a noise survey with the Secretary **no later than 60 days** after placing the Statesboro Meter Station into service. If a full flow rate noise survey at the station's maximum design capacity is not possible, SNG/EEC shall provide an interim survey at the maximum possible flow rate and provide the full flow rate survey **within 6 months**. If the noise attributable to the operation of the Statesboro Meter Station exceeds an L_{dn} of 55 dBA at any nearby NSAs, SNG/EEC shall file a report on what changes are needed and shall install additional noise controls to meet the level **within 1 year** of the in-service date. SNG/EEC shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. (section 4.12.5)