EXECUTIVE SUMMARY

This draft environmental impact statement (EIS) for the Fayetteville/Greenville Expansion Project (Project) proposed by Texas Gas Transmission, LLC (Texas Gas) has been prepared by the staff of the Federal Energy Regulatory Commission (FERC or Commission) to fulfill the requirements of the National Environmental Policy Act (NEPA), the Commission's implementing regulations (Title 18 Code of Federal Regulations (CFR) Part 380), and the Council on Environmental Quality Regulations for implementing NEPA (Title 40 CFR Parts 1500-1508). The purpose of this document is to make public our[1] analysis of the environmental impacts that would likely result from the construction and operation of the proposed Project. This document has been prepared in cooperation with the following federal agencies: the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), the Natural Resource Conservation Service (NRCS); and this state agency: the Arkansas Natural Heritage Commission (ANHC).

PROJECT BACKGROUND

On December 15, 2006, Texas Gas filed a request with the FERC to use its pre-filing process for the proposed Project. This request was approved on December 28, 2006, and a pre-filing Docket No. (PF07-2-000) was established to place information filed by Texas Gas and related documents issued by the FERC into the public record.

On July 11, 2007, Texas Gas filed an application with the FERC for a Certificate of Public Convenience and Necessity (Certificate) to construct, operate, and maintain natural gas pipeline, compression, and related facilities in Arkansas and Mississippi. The application was filed in Docket No. CP07-417-000 pursuant to Section 7(c) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations. We have prepared our analysis based on this application and subsequent filings by Texas Gas, and on comments filed about the scope and impact of the Project.

PROPOSED ACTION

The Project would be designed to transport up to 853 MMcf/d[2] of natural gas through the proposed Fayetteville Lateral and up to 751 MMcf/d[3] of natural gas through the proposed Greenville Lateral. The proposed facilities would include:

- 166.2 miles of 36-inch-diameter pipeline in Conway, Faulkner, Cleburne, White, Woodruff, St. Francis, Lee, and Phillips Counties, Arkansas; and Coahoma County, Mississippi (Fayetteville Lateral);
- 96.4 miles of 36-inch-diameter pipeline in Washington, Sunflower, Humphreys, Holmes, and Attalla Counties, Mississippi (Greenville Lateral);
- 0.8 mile of 36-inch-diameter tie-in pipeline in Attalla County, Mississippi (Kosciusko 36-inch Tie-in Lateral);

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[1] "We," "us," and "our" refer to the environmental staff of the FERC's Office of Energy Projects.

[2] Based on 985.2 British thermal units (Btu) per standard cubic feet (scf), 841,000 million Btu per day (MMBtu/d) approximately equals 853 MMcf/d.

[3] Based on 1,021.3 Btu/scf , 768,000 MMBtu/d approximately equals 751 MMcf/d.

- 0.4 mile of 20-inch-diameter tie-in pipeline in Attalla County, Mississippi (Kosciusko 20-inch Tie-in Lateral);

- a 10,650-horsepower (hp) compressor station at milepost 96.4 on the Greenville Lateral in Attala County, Mississippi (Kosciusko Compressor Station);

- pipe modifications at Texas Gas's existing Greenville Compressor Station in Washington County, Mississippi; and

- 29 metering and regulating (M&R) stations, 30 interconnects (tie-ins), 21 main line valves (MLVs), and three launchers and three receivers.

The Project would be constructed in two phases over about 8 months. Phase I would include construction of the first 66 miles of the Fayetteville Lateral and related facilities from Conway County to the Bald Knob area of White County, Arkansas. Phase II would include construction of the remaining 100 miles of the Fayetteville Lateral from White County, Arkansas to Coahoma County, Mississippi, and the entire Greenville Lateral, including the Kosciusko Compressor Station and tie-in laterals. Texas Gas proposes beginning construction of both Phases I and II in June 2008. However, Phase I would be placed in service by August 1, 2008, and Phase II would be placed in service by January 1, 2009.

PUBLIC OUTREACH AND COMMENTS

On March 6, 2007, we issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Texas Gas Fayetteville/Greenville Expansion Project and Request for Comments on Environmental Issues and Notice of Public Scoping Meetings* (NOI). The NOI explained the pre-filing process, described the proposed Project, and provided a preliminary list of environmental issues. The intent of the pre-filing process is to initiate scoping early in the project planning process and to encourage citizens, governmental entities, and other interested parties to identify and resolve issues prior to an application being formally filed with the FERC. The NOI was sent to interested parties, including affected landowners; federal, state, and local officials; agency representatives; conservation organizations; Native American tribes; local libraries and newspapers; and other interested parties. We conducted public scoping meetings in Lexington, Mississippi, and in Forrest City and Searcy, Arkansas, on March 19, 20, and 21, 2007, respectively, to provide an opportunity for the public to comment on the environmental issues to be addressed in the EIS.

On July 20, 2007, the FERC issued a Notice of Application for the proposed Project in Docket No. CP07-417-000. The notice announced that Texas Gas's application had been filed with the Commission on July 11, 2007, informed us that pre-filing process had ended, invited additional written comments on the proposed Project from the public, and established a closing date for receipt of comments on the application of August 13, 2007.

In response to our notices and scoping meetings, we received 22 written comments and several oral comments about the Project. The comments expressed concern about location; safety; easements; use of eminent domain; noise; impacts on agriculture, wetlands, soils, water resources, wildlife, vegetation, threatened and endangered species, national wildlife refuges, land use, wetland reserve program lands, the Natchez Trace Parkway, and residences. This draft EIS was filed with the U.S. Environmental Protection Agency (EPA) and mailed to various federal, state, and local agencies; elected officials; Native American tribes, newspapers, public libraries; television and radio stations; intervenors to the FERC's proceeding; and other interested parties (*i.e.*, landowners, miscellaneous individuals, and environmental groups who provided scoping comments or asked to remain on the mailing list). A formal notice indicating that the draft EIS is available for review and comment will be published in the Federal Register. The public has

45 days after the date of publication in the Federal Register to comment on the draft EIS in the form of written comments and at public meetings to be held in the project area. All environmental comments received on the draft EIS will be addressed in the final EIS.

ENVIRONMENTAL IMPACTS AND MITIGATION

Construction of the Project would disturb about 5,057.2 acres of land (including the pipeline construction rights-of-way, aboveground facility construction workspaces, additional temporary workspaces, access roads, and pipe/contractor yards). About 1,731.2 acres would be required for the permanent pipeline right-of-way and aboveground facilities.

Construction and operation of the proposed Project would have minimal impact on geologic resources and geologic hazards are not expected to be an issue for Project construction and operation. About 55 miles of the westernmost portion of the proposed Fayetteville Lateral would cross Southwestern Energy Company's (Southwestern) Fayetteville Shale gas production area. Texas Gas has consulted with Southwestern to develop a pipeline route through the gas production area to minimize conflicts with ongoing development of this resource and to plan locations for tie-ins to interconnect with Southwestern's gathering pipelines. Blasting may be required along portions of the Fayetteville Lateral but would not be required for construction of the Greenville Lateral.

Construction and operation of the proposed Project would have minimal impact on soils. About 79 percent of the soil affected by the proposed Fayetteville Lateral would be considered agriculturally important, i.e., Prime Farmland or Farmland of Statewide Importance. About 67 percent of the soil that would be affected by construction of the Greenville Lateral would be classified as Prime Farmland or Prime Farmland when adequately drained. Texas Gas would implement the mitigation measures described in our[4] Upland Erosion Control, Revegetation and Maintenance Plan (Plan) to minimize impacts on soils due to construction of the Project. In agricultural and residential areas, up to 12 inches of topsoil would be removed and segregated from spoil. Subsoil would be decompacted, if needed, topsoil would be returned following construction, and the construction right-of-way would be revegetated according to our Plan. Impacts on soils resulting from construction and operation of the proposed pipelines would be temporary because the proposed pipeline would be buried and disturbed areas within the construction and permanent rights-of-way would largely revert to their preconstruction uses following restoration. Operation of aboveground facilities would permanently affect about 58 acres of Prime Farmland soil. Based on the prevalence of Prime Farmland soils in the Project area, we do not believe this loss to be significant. Texas Gas would use its Exotic and Invasive Species Control Plan to minimize the spread of invasive plants.

Construction and operation of the Project would have minimal impact on groundwater resources. No public water supply wells would be within 150 feet of the Fayetteville Lateral. Three public water supply wells would be within 150 feet of the Greenville Lateral. The Mississippi Department of Environmental Quality has no specific requirements for construction near these wells other than a request that caution be observed to avoid damage to the wellheads. Texas Gas would clearly mark the wellheads to prevent damage during construction. The greatest potential for impact on groundwater would be from spills, leaks, or other releases of hazardous substances during Project construction or operation. Texas Gas would use best management practices (BMPs) and implement the procedures of its Spill Prevention, Control, and Countermeasures (SPCC) Plan to prevent and control spills of hazardous materials near these wells.

[4] "We," "us," and "our" refer to the environmental staff of the FERC's Office of Energy Projects.

The Arkansas Department of Health and Human Services (ADHHS) identified three well head protection areas within 1 mile of the proposed Fayetteville Lateral and informed that two watersheds (Brewer Lake and Little Red River watersheds) would be crossed. The ADHHS suggested a route variation and alternative to move the Fayetteville Lateral out of these watersheds or, alternatively, that Texas Gas should provide the ADHHS with its plan for constructing through the watersheds so that ADHHS may document any potential impact on the water supply. We analyzed the route variation and alternative suggested by the ADHHS but concluded that the corresponding segments of the proposed route were the preferred alternatives particularly due to the increased impact on residences along the alternative routes. We have, however, recommended that Texas Gas consult with the ADHHS about the construction methods it would use to cross the Brewer Lake and Little Red River watersheds so that any additional mitigation measures to protect these resources could be identified prior to construction.

Thirty-seven private water supply wells would be within 150 feet of Project construction workspaces. Texas Gas would conduct pre- and post-construction yield and water quality tests on water wells within 150 feet of construction workspaces, with landowner permission, and would repair any water supply systems damaged by construction activities. Texas Gas would provide a temporary source of water if water supplies are disrupted until repairs are made. We have recommended that Texas Gas update the locations of water wells and springs within 150 feet of construction workspaces prior to construction.

The Project would impact surface water resources since it would cross a total of 483 waterbodies (70 perennial and 413 intermittent) including the Mississippi River. To minimize impacts, Texas Gas would cross the Mississippi River and 15 other waterbodies by horizontal directional drill (HDD). Texas Gas would cross Cadron Creek (a state-designated Extraordinary Resource Waters and a National River Inventories [NRI] listed waterbody) by open cut. We have recommended that Texas Gas consult with the Arkansas Department of Environmental Quality (ADEQ) and NPS about crossing Cadron Creek and to file a supplemental site-specific crossing plan based on this consultation. To minimize Project construction impacts on surface waters, Texas Gas would implement the measures described in its Storm Water Pollution Prevention Plan (SWPPP) and our Wetland and Waterbody Construction and Mitigation Procedures (Procedures), and the requirements in the permits issued by the other federal and state agencies.

Construction of the proposed Project would impact a total of 141.3 acres of wetlands. Of this total, 107.4 acres would be temporarily impacted during construction and allowed to revert to preconstruction conditions. About 33.9 acres of wetlands would be within the 30-foot-wide maintained portion of the permanent right-of-way. Of those 33.9 acres, about 13.2 acres would be permanently converted from forested and scrub-shrub wetland types to wetlands with herbaceous vegetation. These impacts would occur in a 10-foot-wide herbaceous strip Texas Gas would maintain above the centerline to facilitate operation and maintenance of the pipeline. The remaining 20.7 acres of impact would be associated with the conversion from a forested community to a shrub-scrub or emergent system within two 10-foot-wide strips on either side of the centerline strip. To minimize impacts on wetlands, Texas Gas would implement the construction, restoration, and maintenance measures described in our Procedures. The proposed pipeline routes have been developed in consultation with the U.S. Army corps of Engineers (USACE) and would avoid and minimize impacts to wetlands where practicable. Wetland impacts would be minimized further by using HDDs to cross several larger wetlands and associated. Texas Gas would develop compensatory mitigation for all wetland impacts, in consultation with the USACE Little Rock, Memphis, and Vicksburg Districts. Compensation may include the purchase of wetland mitigation bank credits at a mitigation ratio determined by the USACE, but specific compensation would be finalized during the course of the USACE Section 404 permitting for the proposed Project. Also, about 0.2 acre of forested wetland would be permanently lost due to operation of the proposed Kosciusko Compressor Station. However, we have recommended that Texas Gas reconfigure the site layout to avoid this permanent loss.

Twelve federally listed endangered and threatened species potentially occur within the proposed Project area. These include: one mammal (Louisiana black bear), four birds (bald eagle, interior least tern, ivory-billed woodpecker, and woodstork), one fish (pallid sturgeon), four mussels (fat pocketbook, pink mucket, scaleshell, and speckled pocketbook), one insect (American burying beetle), and one plant (pondberry). In addition, one candidate fish species was identified: the yellow cheek darter. A number of state-listed plant and mussel species also were identified within the vicinity of the Project area. The FWS and Arkansas Game and Fish Commission (AGFC) recommended that a survey for the listed mussel species be conducted in 12 Arkansas waterbodies that would be crossed by the open-cut method. Texas Gas completed this survey in October 2007; however, the survey report has not yet been provided to the FERC or the FWS. Texas Gas indicates, however, that none of the federally listed mussel species were found. The FWS and ANHC are concerned about possible impacts on habitat of the pondberry, and the ANHC recommended avoiding its potential habitat. We recommend that Texas Gas identify the milepost locations of potential pondberry habitat within or immediately adjacent to construction workspaces and explain how it would implement the ANHC's recommendations to avoid suitable pondberry habitat at each location. We believe that, except for the federally listed mussel species, the Project is not likely to adversely affect federally listed threatened or endangered species. A determination on the federally listed mussel species would be made only after review of Texas Gas's pending mussel survey report. We also have recommended that Texas Gas not begin construction activities until our consultation with the FWS about federally listed threatened or endangered species is concluded.

Agricultural land would be the primary land use affected by construction and operation of the Project. Upland and managed forest land use would have the next greatest impact. Open land use types (non-forested rangeland, pastureland, non-agricultural fields, prairie and open land in the early stages of succession) and open water, and minor amounts of commercial/industrial land and residential land are the remaining land use types that would be affected by the Project. Land use impacts would include disturbance of existing land uses within construction work areas during construction and creation of a new permanent right-of-way for operation and maintenance of the pipeline and aboveground facilities. Most land uses would revert to preconstruction land use during operation.

The primary impact on agricultural land would be the loss of crops within the work area, and possibly immediately adjacent areas, since this land would be taken out of production for one growing season. Construction may affect irrigation which may affect crop yields. About 99 acres of the agricultural land crossed by the Project has pivot-irrigation and construction activities may interfere with it. Operation of the Project would not likely affect pivot irrigation systems. Construction may affect special crops such as rice. We have recommended that, prior to construction, Texas Gas provide site-specific plans for crossing rice fields impacted by construction since adequate restoration of these fields would be needed to reestablish productivity. Following construction, most agricultural land uses would continue within the permanent right-of-way and any loss of production would be a short-term impact. However, about 30.6 acres of orchards would be affected by Project construction, and 15.4 acres within the permanent right-of-way would be lost to orchard production during operation of the Project. Texas Gas would compensate landowners for the loss of orchard crops and this land use within the permanent right-of-way.

The primary impact of construction on forest land and managed forest land by the Project would be the removal of trees and shrubs from the construction right-of-way. Following construction, trees and shrubs would be allowed to regenerate in temporary workspaces, but since regrowth of forests could take over 20 years, the impact would be long-term to permanent. The impact on forest land use within the permanent 50-foot-wide right-of-way would be a permanent change to open land. Texas Gas would compensate landowners for loss of timber in accordance with negotiated easement agreements.

The Project would cross two federally managed areas: the Cache River National Wildlife Refuge (NWR) in Woodruff County, Arkansas, and the Hillside NWR in Holmes County, Mississippi. Both would be crossed by HDD, thereby minimizing impacts.

The Greenville Lateral would cross one tract that is in the NRCS Wetland Reserve Program (WRP). Impacts to the WRP land would be minimized by avoiding existing wetland habitat as much as possible and paralleling an existing road right-of-way. Impacts on WRP lands generally would be temporary. Following construction, the right-of-way would be restored to preconstruction conditions, or better. Texas Gas would select specific native species for revegetation of the WRP tract in consultation with the landowner/tenant and NRCS. Based on our consultation with the NRCS, the proposed route appears reasonable. However, the NRCS states that Texas Gas would be required to obtain a subordination of NRSC's easement for this tract prior to construction. We have recommended that Texas Gas complete consultation with the NRCS and develop a site-specific restoration plan for the affected WRP land prior to construction.

The proposed Greenville Lateral would cross the Natchez Trace Parkway (Parkway), which is managed by the NPS. Texas Gas would cross the Parkway by HDD to minimize and avoid direct construction impacts to the Parkway, its viewshed, and adjacent forested areas. The route across the Parkway and the crossing method were developed in consultation with the NPS to minimize impacts on this resource.

Texas Gas consulted with the Arkansas and Mississippi SHPOs and performed cultural resource investigations for areas that would be potentially affected by construction and operation of the Project.

Surveys are outstanding and the consultation process for the Project is not yet complete. Therefore, we have recommended that construction not be authorized until the required studies have been completed and we have received the SHPOs' comments on such studies.

Texas Gas prepared a Plan for the Unanticipated Discovery of Historic Properties and Human Remains during Construction for the Project, to be used in the event that any unanticipated historic properties (consisting of prehistoric or historic archaeological resources) or human remains are encountered during construction of the proposed Project.

Conservative modeling for the proposed Kosciusko Compressor Station emission sources indicates that the total facility impact would be below the National Ambient Air Quality Standards. Therefore, impacts on air quality are not expected to be significant. The calculated noise level for the proposed compressors would be below 55 decibels on the A-weighted scale (dBA).

To minimize and mitigate the environmental impacts of constructing and operating the proposed Project, Texas Gas has developed and would implement several measures and plans including but not limited to:

- our Plan;
- our Procedures;
- BMPs;
- SPCC Plan;
- Hydrostatic Test Plan;
- SWPPP; and

- Exotic and Invasive Species Control Plan.

Based on our review of these measures, we have determined that they are acceptable and consistent with our guidance documents,[5] but we have made several recommendations to further avoid, minimize, and mitigate environmental impacts. Also, Texas Gas would be required to obtain and adhere to several federal, state, and local permits and authorizations that may include additional requirements to minimize and mitigate environmental impacts resulting from construction and operation of the Project. Detailed descriptions of environmental impacts including cumulative impacts, Texas Gas's proposed impact avoidance and mitigation measures, and our recommendations are included in sections 2.0, 3.0, 4.0, and 5.0 of the draft EIS.

ALTERNATIVES CONSIDERED

We considered the alternatives of no action or postponed action. While the no action or postponed action alternatives would eliminate or postpone the environmental impacts identified in this EIS, the objectives of the proposed Project would not be met and Texas Gas would not be able to provide the additional infrastructure to support a new source of natural gas supply in the U.S.

There are no other pipeline systems that would be able to meet this Project's purpose and need. With respect to the pipeline alternatives, we concluded that there were no practicable system alternatives or design alternatives. We evaluated eight route alternatives and 24 route variations for the Project that were developed during pre-filing. Consultation with federal and state agencies about these route alternatives and variations and our analysis resulted in the incorporation of some of them into the pipeline route that was ultimately proposed by Texas Gas in its application We identified no other route alternatives or variations that would significantly reduce environmental impacts. We have recommended that Texas Gas develop an alternative site plan for the Kosciusko Compressor Station that would minimize or avoid permanent impact to a forested wetland.

CONCLUSION

As part of our review, we developed measures that we believe would appropriately and reasonably avoid, minimize, or mitigate environmental impacts associated with construction and operation of the proposed Project. We are recommending that these measures be attached as conditions to any authorization the Commission may issue. We conclude that if the Project is found to be in the public interest and is constructed and operated in accordance with Texas Gas's proposed mitigation measures and our mitigation measures, then the proposed Project would result in a limited adverse environmental impact. In support of this conclusion, we offer the following:

- The Fayetteville Lateral would generally be collocated with or parallel to existing rights-of-way for about 90.5 miles, or 54 percent, of its length. While the Greenville Lateral would largely require construction of a new right-way, the proposed route is largely located within agricultural land use, minimizing the need to clear more forested areas and wetlands.

- HDD construction methods would be used to cross many sensitive resources.

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[5] The Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures.

- Texas Gas would implement our Plan and Procedures, BMPs, SPCC Plan, and SWPPP, to mitigate impacts on soils, wetlands, and waterbodies.

- Texas Gas would implement an agency-approved wetland mitigation plan to mitigate for, and minimize impacts, on wetlands.

- Consultation with the FWS, as required by Section 7 of the Endangered Species Act, would be completed, and appropriate mitigation measures would be in-place before construction would be allowed to commence.

- Consultation with the SHPOs and, if necessary, the Advisory Council on Historic Preservation, as required by Section 106 of the National Historic Preservation Act, would be completed before construction would be allowed to commence.

- Texas Gas would implement an environmental inspection and mitigation monitoring program that would ensure compliance with all mitigation measures that become conditions of any FERC authorization.