

123 FERC ¶ 61,118
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Sudeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Texas Gas Transmission, LLC

Docket No. CP07-417-000

ORDER ISSUING CERTIFICATE

(Issued May 2, 2008)

1. On July 11, 2007, Texas Gas Transmission, LLC (Texas Gas) filed an abbreviated application pursuant to section 7(c) of the Natural Gas Act (NGA), for a certificate of public convenience and necessity to construct, own, operate, and maintain: (1) approximately 262.6 miles of pipeline consisting of two laterals, one primarily in Arkansas (“Fayetteville Lateral”) and the other in Mississippi (“Greenville Lateral”); (2) one compressor station; (3) certain piping modification; and (4) certain ancillary facilities. Texas Gas also requests authorization to implement separate initial incremental rates for the Fayetteville and Greenville laterals. As discussed below, this order grants the requested certificate authorizations, and approves initial incremental rates.

Background

2. Texas Gas is a limited liability company organized and existing under the laws of the State of Delaware. Texas Gas is engaged in the business of transporting natural gas in interstate commerce, and is therefore a natural gas company as defined by the NGA. Texas Gas states that the general purpose of its proposed project is to provide take-away capacity for gas produced in the Fayetteville Shale production area in north central Arkansas. Texas Gas further states that the new infrastructure would enable Fayetteville producers to access markets in the Midwest, Northeast, and Southeast.

Proposal

3. Texas Gas proposes to construct 166.2 miles of 36-inch diameter pipeline (Fayetteville Lateral) extending from the town of Grandview, Conway County, Arkansas to an interconnection with Texas Gas’ existing mainline system, with 157.2 miles located

in Arkansas and 9.0 miles located in Mississippi. The Fayetteville Lateral is designed to transport 841,000 MMBtu of natural gas per day.

4. Texas Gas also proposes to construct 96.4 miles of 36-inch diameter pipeline (Greenville Lateral) in Mississippi, from Texas Gas' existing Greenville Compressor Station to a new delivery point near the Town of Kosciusko, Attala County, Mississippi. The Greenville Lateral is designed to transport 768,000 MMBtu of natural gas per day.

5. In addition, Texas gas proposes to construct the new Kosciusko Compressor Station. Compression at the proposed station would total 10,650 horsepower (hp).

6. At the existing Greenville Compressor Stations, Texas Gas would make modifications to the yard and station piping, valves, fittings, cooling, control, and metering to allow the three existing reciprocating engines and gas turbine to pump station volumes concurrently and interchangeably north on the existing mainline system and east on the proposed Greenville Lateral. Compressor valve unloaders would be added to the three reciprocating engines and new centrifugal internals would be installed on the turbine. In addition, Texas Gas would construct numerous meter and regulation stations and appurtenant, auxiliary facilities, such as mainline valves and pig launchers and receivers, as described in Exhibit F-1 to its application.

7. Texas Gas' estimated cost of the proposed facilities is \$820,474,000, as detailed in Exhibit-K to its application. Texas Gas proposes incremental firm and interruptible rates as its initial section 7 recourse rates for services on the proposed Fayetteville Lateral based on the Fayetteville Lateral's incremental cost of service. Texas Gas proposes separate incremental recourse rates for services on the proposed Greenville Lateral based on that lateral's associated cost of service.

8. Texas Gas has a binding precedent agreement with Southwestern Energy Services Company (Southwestern) for the firm transportation of up to 500,000 MMBtu per day on the proposed Fayetteville and Greenville Laterals. The primary term is ten years, and Southwestern will pay a negotiated rate. Southwestern would have the right to increase its maximum daily quantity (MDQ) by up to an additional 300,000 MMBtu per day.

Notice, Interventions, and Comments

9. Public notice of Texas Gas' application was published in the *Federal Register* on July 31, 2007, with comments, protests, and interventions due on or before August 13, 2007. Timely interventions were submitted by Peoples Natural Gas Company; Southwestern Energy Service Co.; Memphis Light, Gas and Water Division; Western Tennessee Municipal Group; Jackson Energy Authority; City of Jackson, Tennessee, and the Kentucky Cities; PSEG Energy Resources & Trade; Atmos Energy Corporation;

Louisville Gas and Electric Company; Fletcher Edmonds Lewis II Trust; M.D. Thompson and Son Company, et al.; Fletcher C. Leis, Elizabeth F. Lewis, Grankie Carl Brogdon; and ConocoPhillips. These timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.¹

Discussion

10. Since Texas Gas' application proposes facilities for the transportation of natural gas in interstate commerce, subject to the jurisdiction of the Commission, the proposed project is subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

A. Certificate Policy Statement

11. The Commission's September 15, 1999 Certificate Policy Statement provides guidance as to how it will evaluate proposals for certificating new construction.² The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. Our goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, and the avoidance of the unnecessary exercise of eminent domain or other disruptions of the environment.

12. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any other adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified, after efforts have been made to minimize them, the Commission will evaluate the project by

¹ 18 C.F.R. § 385.214(a)(3) (2007).

² *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128, *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.

13. Because Texas Gas has requested separate incremental rate treatment for each of the proposed laterals, existing shippers on Texas Gas' system will not subsidize the costs of the Project. As explained in more detail below, Texas Gas has stated its willingness to accept the financial risk of the proposed project, and is willing to separately account for project costs to ensure existing customers will not be adversely affected. Additionally, Texas Gas states that the project will not adversely effect the quality of service to existing customers.

14. By providing additional transportation capacity and outlets for newly developed gas reserves, the proposed facilities will enhance competition and ease existing and anticipated future pipeline constraints in production areas of north central Arkansas. Since the proposed capacity will serve new load, the project will not adversely affect other pipelines or their customers. Further, the project will benefit gas markets by creating infrastructure for the delivery of additional onshore supplies and by increasing diversity of supply sources.

15. Texas Gas has minimized landowner impacts by proposing, where possible, rights-of-way in parallel with other pipelines' rights-of-way or existing utility corridors. In addition, Texas Gas has conducted open houses throughout the planned route of the pipeline and states that it has worked with landowners to understand and, where possible, accommodate their concerns. Texas Gas emphasizes that it remains committed to securing rights-of-way through good faith negotiations wherever possible to minimize the need for relying on its requested certificate authority to obtain the exercise of eminent domain.

16. Based on the above considerations, the substantial public benefits of the Texas Gas proposal outweighs any adverse effects on landowners or communities. Consequently, the Commission finds, subject to the environmental and other conditions set forth below, that Texas Gas' proposed Fayetteville/Greenville Expansion Project is required by the public convenience and necessity.

B. Cost and Financing

17. As detailed in Exhibit K, the estimated total costs for the Fayetteville Lateral are approximately \$499,891,000, and the estimated total costs for the Greenville Lateral are approximately \$320,583,000. Texas Gas states that it will finance the project with funds generated internally, and through borrowings, bond offerings and/or equity offerings.

The project's financing is based on a capital structure consisting of 36.59 percent debt and 63.41 percent equity, as detailed in Exhibit N to Texas Gas' application. Texas Gas proposes that the equity component of its capacity structure earn a return of 11.50 percent.

C. Rates and Tariff

1. Fayetteville Lateral

18. Texas Gas states that the Fayetteville Lateral will have a capacity of 840,700 MMBtu per day. Texas Gas' proposed cost of service for the Fayetteville Lateral is \$92,351,445. Based on that cost of service and above described capital structure, Texas Gas proposes an incremental recourse daily reservation rate for firm transportation service (FT) on the Fayetteville Lateral of \$0.3002/Dth. The proposed commodity recourse rate for the Fayetteville Lateral is \$0.0010/Dth. Texas Gas proposes an incremental Short-Term Firm (STF) summer demand rate on Fayetteville Lateral of \$0.1951/Dth, and the STF winter demand rate of \$0.4491/Dth. Texas Gas proposes a summer Interruptible Transportation Service Rate (IT rate) for the Fayetteville Lateral of \$0.1961/Dth, and a winter IT rate of \$0.4501/Dth.

2. Greenville Lateral

19. Texas Gas states that the Greenville Lateral will have a capacity of 768,400 MMBtu per day. Texas Gas' proposed cost of service for the Greenville Lateral is \$66,225,930. Based on that cost of service and above described capital structure, Texas Gas proposes an incremental recourse daily reservation rate for FT for the Greenville Lateral of \$0.2352. The proposed commodity recourse rate on the Greenville Lateral is \$0.0012. Texas Gas proposes an incremental STF summer demand rate on the Greenville Lateral is \$0.1529, and the STF winter demand rate is \$0.3518. Texas Gas proposes a summer IT rate for the Greenville Lateral of \$0.1541, and a winter IT rate of \$0.3530.

3. Engineering Analysis

20. The Commission has determined that the design values of 840,700 MMBtu per day for the Fayetteville Lateral and 768,400 MMBtu per day for the Greenville Lateral are supported by the modeling. Accordingly, the Commission used 840,700, as the billing determinants for the Fayetteville Lateral, and 768,400, as the billing determinants for the Greenville Lateral.

21. Texas Gas' asserts in Exhibit N that its net operating income from the incremental projects in the first year of operations will be approximately \$7,323,028. Texas Gas' also

anticipates that its net operating income will increase to \$11,267,380 in the second year and to \$13,109,009 in the third year.

22. Texas Gas' rates are designed using the Straight Fixed-Variable (SFV) method, consistent with Commission policy. Texas Gas accepts all of the risk associated with this project, and asserts that no existing shipper will subsidize any of the project's costs. Accordingly, the Commission will approve the proposed incremental rates.

4. Comments on Proposed Recourse Rates

23. Memphis Light, Gas and Water (Memphis) acknowledges that Texas Gas states that it will accept the financial risk of the project and that existing shippers will not subsidize the Fayetteville and Greenville Laterals. Memphis further acknowledges that Texas Gas also maintains that the project will have no adverse effect on the quality of service to existing customers. However, Memphis submits that Texas Gas should be required to provide additional information and commitments to better ensure that existing shippers will be fully shielded from subsidizing the project and/or insulated from any degradation of service as a result of these incremental facilities.

24. Memphis asserts that, while Texas Gas states that it is willing to separately account for all of its costs to ensure that existing customers are insulated from the financial effects of this project, it is not exactly clear how Texas Gas will define such costs. Memphis speculates that Texas Gas might deem some costs related to the project, such as costs for facilities that will be shared by existing mainline shippers and shippers on the laterals, to be system costs based on an assertion that the project will provide general system benefits. Memphis asserts that the Commission should direct Texas Gas to provide more detailed information regarding how it intends to define and identify the costs associated with the project so as to avoid subsidization by system shippers.

25. Memphis also asserts that the relatively small amounts of Operation and Maintenance (O&M) and Administrative and General (A&G) expense that Texas Gas identifies for the project, raise the question of how Texas Gas is proposing to assign and/or allocate O&M and A&G to the new facilities. Memphis states that the Commission should specify that approval of Texas Gas' proposed initial incremental rates is without prejudice to the right of parties to argue in Texas Gas' next rate proceeding that Texas Gas has not reasonably allocated O&M and A&G expense, or any other expenses, between incremental and system services.

26. Memphis notes that Texas Gas is proposing to use a 2.86 percent depreciation rate based on a 35-year service life. Memphis asserts that this depreciation rate is significantly lower than the rate that it would be if based on the 10-year term of Texas Gas' only firm precedent agreement with Southwestern. Memphis states that the

Commission should make clear that, to the extent Texas Gas is unable to market the additional project capacity, it will not be allowed to recover these depreciation expenses from existing system customers.

27. With reference to Texas Gas' pledge that the project will have no adverse effect on the quality of service to existing customers, Memphis asserts that Texas Gas should be required to explain how it will avoid capacity constraints in Zone 1 as a result of Southwestern's right to use the proposed facilities to deliver gas to Texas Gas' mainline.

28. Memphis understands that deliveries from the Fayetteville Lateral to Greenville will be accomplished by backhaul from the mainline at Lula, Mississippi to the Greenville Compressor Station. However, Memphis nevertheless is concerned about the availability of unsubscribed firm capacity to accommodate the expansion volumes while maintaining contract requirements to existing shippers in Zone 1. Memphis observes that Texas Gas' website shows that for the 2007-2008 winter season, there is only 429,000 MMBtu per day of unsubscribed firm capacity available up to the Greenville Compressor Station in Zone 1, and only 329,000 MMBtu per day up to the Lake Cormorant Compressor Station, which is in Zone 1 downstream of the Fayetteville interconnect. Memphis contends that if this level of unsubscribed capacity does not increase, it would appear that the Zone 1 mainline system, both upstream of the Greenville Compressor Station and all the way to the Fayetteville interconnect, will not be able to accommodate the 500,000 MMBtu per day of expansion. Memphis states that this concern becomes even more acute since Southwestern has an option to increase its MDQ to 800,000 MMBtu per day. Memphis asserts that Texas Gas should be required to provide a detailed explanation of how this concern is to be addressed.

29. Memphis also asserts that, while Texas Gas states that it intends to fund the project with funds generated internally, and through borrowings, bond offerings, and/or equity offerings, it is impossible to determine from the application precisely what funding methods Texas Gas intends to employ. Memphis states that there is no information regarding the extent to which Texas Gas might incur additional debt and concomitant financial risk. Memphis speculates that if the project will be funded in significant part by debt, and if, for whatever reason, Texas Gas is unable to market the capacity on the Fayetteville and/or Greenville Laterals, Texas Gas could face financial pressure which could result in degradation of service to system shippers. Memphis asserts that in order to have a full record to evaluate this risk, the Commission should direct Texas Gas to provide additional information regarding the expected source of funding for the project and the expected terms under which Texas Gas would access such capital.

30. Finally, Memphis asserts that, notwithstanding Texas Gas' confidence that demand on the project will be sufficient, the fact remains that Texas Gas only has one ten-year precedent agreement for 57 percent of the capacity on the project, if Southern

does not exercise its option to increase its MDQ. Memphis is concerned that the revenues shown in Exhibit N of the application indicate a significant undercollection of the incremental cost of service. Memphis argues that this raises concerns about the prospect that Texas Gas may attempt to pass these costs on to existing customers in the future. Accordingly, Memphis asserts that the Commission should make absolutely clear that Texas Gas will be at risk for any undercollection of the project's incremental cost of service, and the Commission should so condition the requested certificate.

31. In accordance with section 154.309 of the Commission's regulations, and to insure that all parties have full knowledge of the costs and benefits attributable to the Fayetteville and Greenville Laterals, Texas Gas is required to account for the construction costs and benefits separately in its next NGA section 4 general rate proceeding, and to compare actual to projected costs. This requirement includes the formulae and bases used in the allocation of common costs to each incremental facility. This accounting will protect existing shippers from cost overruns, and from subsidization that might result from undercollection of the project's incremental cost of service. It will help the parties and the Commission determine the costs of the project. Finally, it will also help the Commission identify any changes in material circumstances that would warrant a re-examination of the rate treatment. Accordingly, this requirement adequately addresses Memphis concern whether parties in future rate cases will be in a position to ascertain whether the expansion capacity is being subsidized. The Commission will closely scrutinize any future filings by Texas Gas to insure that there will be no subsidization of the project by Texas Gas' existing customers.

32. The Commission will deny Memphis' other requests. Memphis' concern about the availability of unsubscribed firm mainline capacity to accommodate the expansion volumes on the proposed laterals fails to take into account an important consideration. That is, gas supplies destined to be transported by the Greenville Lateral will be delivered off of the mainline at a point upstream of the point where supplies on the Fayetteville Lateral will be delivered into the mainline. Thus, to the extent capacity is needed on the mainline for volumes associated with this project, such mainline capacity will be downstream of Lula, Mississippi, where the Fayetteville Lateral delivers gas into the mainline and will be no more than the amount by which volumes delivered by the Fayetteville Lateral into the mainline exceed volumes diverted upstream off of the mainline into the Greenville Lateral.

33. Texas Gas has a binding precedent agreement with Southwestern for approximately half of the expansion capacity. Moreover, Texas Gas has designed its rates on an incremental basis in accordance with Commission policy. By doing so, it has accepted the financial risk of any unutilized expansion capacity so as to hold harmless its existing shippers. Therefore, the Commission will not condition its acceptance of the

projects based solely on Memphis' entirely speculative concerns that Texas Gas may not be able to market the expansion capacity and, consequently, face financial pressure which could result in degradation of service to system shippers.

34. Memphis has provided no explanation why the Commission should not accept Texas Gas' assertion that the project will be adequately financed with funds generated internally, and through borrowings, bond offerings and/or equity offerings. Texas Gas' proposed capital structure and cost appear reasonable.

5. Tariff

35. Texas Gas has filed three *pro forma* tariff sheets. Pro Forma Sheet No. 35 sets forth the proposed incremental recourse rates for both the Fayetteville Lateral and the Greenville Lateral. Pro Forma Sheet Nos. 241 and 242 modify section 19 of the General Terms and Conditions of Texas Gas' tariff. Section 19 defines the service zones on Texas Gas' system, and Pro Forma Sheet Nos. 241 and 242 modify section 19 to include a description of the Fayetteville Lateral and the Greenville Lateral.

36. Texas Gas will be directed to file actual tariff sheets consistent with the *pro forma* tariff sheets, no more than sixty days, and no less than thirty days prior to the in-service date of the Fayetteville and Greenville Laterals.

D. Environmental Analysis

37. Commission Staff issued a draft Environmental Impact Statement (EIS) addressing Texas Gas' proposal on November 6, 2007, and issued the final EIS on March 7, 2008. The United States Environmental Protection Agency (EPA) prepared a *Notice of Availability of the Final Environmental Impact Statement for the Proposed Fayetteville/Greenville Expansion Project* dated March 14, 2008.³ The draft and final EIS were mailed to federal, state, and local agencies, elected officials, Native American tribes, newspapers, public libraries, interveners to the Commission proceeding, and other

³ On December 15, 2006, Texas Gas filed a request to use the Commission's 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 Commission into the public record. Comment letters were received under the pre-filing docket from Fletcher C. Lewis, the U.S. Department of Interior, U.S. Fish and Wildlife Service; the Arkansas Game and Fish Commission, and the U.S. Army Corps of Engineers. The comments were considered in the draft EIS.

interested parties (i.e., landowners, other individuals, and environmental groups who provided scoping comments). Three scoping meetings, conducted in order to give the public an opportunity to comment on environmental issues to be addressed in the EIS, were held in Lexington, Mississippi, and Forrest City and Searcy, Arkansas, on March 19, 20, and 21, 2007, respectively. Further, public meetings to receive comments on the draft EIS were held in Searcy and Forrest City, Arkansas, and Lexington, Mississippi, on December 11, 12, and 13, 2007, respectively. All comments made at these meetings were addressed in the final EIS.

38. Based on information provided by Texas Gas and further developed by field investigations, literature research, alternative and route variation analyses, and contacts with federal, state, and local agencies and individual members of the public, the final EIS determined that construction and operation of the Fayetteville/Greenville Expansion Project would result in limited adverse environmental impact.

39. The final EIS addressed purpose and need, alternatives, geology, soils, water resources, wetlands, vegetation, wildlife, threatened and endangered species, land use, socioeconomics, cultural resources, air quality and noise, safety, and cumulative impacts. The final EIS addressed comments from eight individuals who commented at the public meetings held in Searcy and Forrest City, Arkansas, and Lexington, Mississippi, on December 11, 12, and 13, 2007, respectively; and the seven comment letters filed in response to the draft EIS. The primary concerns of the individuals at the comment meetings related to easements and compensation, restoration after construction was completed, and impacts to local traffic when roads are crossed by pipeline construction.

40. Comment letters were received from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Geodetic Survey (NOAA, NGS); U.S. Department of the Interior, Office of Environmental Policy and Compliance (DOI) (two letters); U.S. Environmental Protection Agency, Region 6 (EPA); U.S. Army Corps of Engineers (USACE), Memphis District; USACE, Little Rock District; and Mr. Fletcher Lewis, jointly with Ms. Elizabeth F. Lewis and Frankie Carl Brogdon; the Fletcher Edmonds Lewis Trust; Betty Taylor; and the Natural Resources Conservation Service (NRCS). All of the commenters' issues were addressed in the final EIS and are discussed, as relevant, below.

1. Geology

41. The NOAA, NGS commented that if there are any planned Project-related activities that will disturb or destroy geodetic control monuments, the NGS requires notification not less than 90 days in advance of such activities in order to plan for their relocation. The environmental conditions in this appendix to this order include the final

EIS' recommendation that Texas Gas field verify the locations of all geodetic control monuments within Project workspaces and complete notification and consultation with the NOAA, NGS, as needed.

2. Wetlands and Waterbodies

42. Construction and operation of Texas Gas' project will affect a total of 163.7 acres of wetlands, of which 129.8 acres will be temporarily impacted during construction and allowed to revert to pre-construction conditions. The remaining 33.9 acres will be permanently altered to some degree within the maintained permanent right-of-way. Of those 33.9 acres, about 13.2 acres will be permanently converted from forested and scrub-shrub wetland types to wetlands with herbaceous vegetation. These impacts will occur in a 10-foot-wide herbaceous strip Texas Gas will maintain above the centerline to facilitate operation and maintenance of the pipeline. The remaining 20.7 acres of impact will 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 10-foot-wide strip over the pipeline centerline.

43. Texas Gas will implement the construction, restoration, and maintenance measures described in its Erosion and Sediment Control Plan which are in compliance with the Wetland and Waterbody Construction and Mitigation Procedures (Wetland Procedures). The pipeline routes were developed in consultation with the Commission's environmental staff and the USACE, and will avoid wetlands to the greatest extent practicable. Wetland impacts will be further minimized by using horizontal directional drills (HDDs) to cross several larger wetlands and associated waterbodies.

44. Texas Gas will develop compensatory mitigation for all wetland impacts in consultation with the USACE Little Rock, Memphis, and Vicksburg Districts. Texas Gas is proposing to compensate for wetland impacts through purchase of wetland mitigation bank credits, but specific compensation will be finalized during the course of the USACE Clean Water Act section 404 permitting for the project. The environmental conditions in the appendix to this order require Texas Gas to file the final wetland Mitigation Plan it develops with the USACE prior to construction.

45. Texas Gas' project will affect one parcel of land that is enrolled in the Wetland Reserve Program that is managed by NRCS. Following construction, the right-of-way will be restored to preconstruction conditions, or better. Texas Gas will use native species for revegetation selected in consultation with the landowner/tenant and NRCS. Texas Gas will be required by the NRCS to obtain a subordination of the NRCS easement for this tract prior to construction. This coordination is ongoing. Therefore, we will adopt a condition implementing the final EIS' recommendation that Texas Gas update the

status of its consultation on the subordination agreements with the NRCS when it files its Project Implementation Plan. Based on our staff's consultation with NRCS, the proposed route through the Wetland Reserve Program tract is acceptable.

3. Land Use

46. About 64 percent of the land use affected by the project is agricultural, 20 percent is forest, 9 percent is open land, 5 percent is wetlands, less than 1 percent is industrial, and less than 1 percent is residential. Construction may interrupt or damage irrigation systems; both pivot irrigation and surface irrigation are used in the project area. To address this issue, Texas Gas will coordinate project construction and restoration with affected landowners, and if construction activities affect irrigation it will ensure that crop irrigation is achieved by alternative means. Texas Gas will segregate topsoil in lands with annually cultivated or rotated crops, in hayfields, and other areas at the landowner's request. Texas Gas will compensate landowners for anticipated crop losses resulting from construction and operation of the project.

47. About 3.3 percent of the project construction will affect land that is cultivated for rice. To mitigate this impact and since rice fields will need precision leveling during restoration to restore productivity, we will include a condition implementing the final EIS's recommendation that, prior to construction, Texas Gas develop a plan in consultation with affected landowners for construction across and restoration of rice fields affected by the project.

48. The primary impact of construction on forest land by the project will be the removal of trees and shrubs from the 100-foot-wide construction right-of-way. Following construction, trees and shrubs will be allowed to regenerate within the areas that would not be retained as part of the 50-foot-wide permanent right-of-way. After final construction cleanup, the temporary workspaces will be restored in accordance with the plan, agency requirements associated with applicable permits, and landowner requests. The impact on forest land use within the permanent 50-foot-wide right-of-way will be the permanent change to open land. Texas Gas will compensate landowners for loss of timber and orchards in accordance with negotiated easement agreements.

49. Seven residences will be within 50 feet of the proposed pipeline construction work areas. Of these, four would be within 25 feet of proposed construction workspaces. Texas Gas filed site-specific plans for all residences within 50 feet of construction workspaces. Five of these site-specific plans are reasonable; however, the appendix includes a condition as recommended by the final EIS to require that Texas Gas develop additional mitigation and revise two of the plans and file them for additional review and written approval prior to construction.

50. The Fayetteville Lateral will cross the Cache River and the Bayou De View on privately owned land in proximity to the Cache River National Wildlife Refuge (NWR). Portions of both of these waterbodies are within the federally managed Cache River NWR, but the crossing locations described in the final EIS are not within the NWR. During agency consultation, the U.S Fish and Wildlife Service (USFWS) recommended avoiding the Cache River, Bayou De View, and the Cache River NWR to the extent possible; using HDD methods to cross these waterbodies and associated bottomland forests outside the NWR boundaries; and minimizing crossing distances. These recommendations are meant to protect the habitat within the NWR and federally-listed threatened and endangered species in the NWR. The DOI and the USFWS clarified that the proposed pipeline alignment will avoid all federally managed land within the Cache River NWR. By using the HDD method to cross these waterbodies and by aligning the pipeline outside NWR boundaries, the project will not impact the NWR.

51. Mr. Lewis et al. commented that they own properties that will be affected by the project's pipeline alignment near the crossing of the Cache River. They generally suggested alternative alignments that would affect land within the Cache River NWR rather than their properties. However, the pipeline alignment was developed to avoid any impact to the Cache River NWR and will cross the Cache River at a location that is not within the NWR. Texas Gas will minimize the impact of construction on the privately owned properties by implementing the mitigation measures in its Erosion and Sediment Control Plan.

52. The proposed Greenville Lateral will cross the northern tip of the Hillside NWR, in Holmes County, Mississippi. A reasonable alternative pipeline alignment that avoids crossing the Hillside NWR was not achieved due to the presence of cultural and other resources. To minimize impacts on Hillside NWR, Texas Gas will cross the Hillside NWR by HDD. An easement from the USFWS is required for this crossing. Texas Gas filed an application with the USFWS for a Right-of-way Permit across the Hillside NWR pursuant to the authority of 50 C.F.R. § 29.21-2 *et seq.* This application is pending; therefore, the final EIS recommends that Texas Gas provide information on the status of its consultation with the USFWS when it files its Project Implementation Plan.

53. The Natchez Trace Parkway is a 444-mile-long historic and scenic parkway system which the Greenville Lateral will cross in Attala County, Mississippi. To minimize impacts, Texas Gas consulted with the National Park Service (NPS) to develop an appropriate crossing location and method and alternative crossing locations were evaluated. Impacts to the Natchez Trace Parkway will be minimized by crossing it by HDD and by following the alignment recommended by the NPS.

54. Ms. Betty Taylor filed a comment on February 22, 2008, about the project's impact on her property in White County, Arkansas, along the Fayetteville Lateral. She states that the proposed pipeline will divide property on which she plans to build a house for her daughter. Texas Gas states that it had realigned the pipeline per her request in October 2007; however, Ms. Taylor requested the pipeline alignment be changed again. It may be possible for Texas Gas to make additional minor changes to its pipeline alignment within Ms. Taylor's property. If they are feasible, they may be accomplished pursuant to environmental condition 5, which allows for minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

4. Wildlife

55. The DOI commented that the final EIS should further address impacts on migratory birds due to construction and operation of the Project. Impacts on migratory birds and their habitats will be minimized by crossing the Mississippi River, White River, Cache River, Bayou De View, and their associated riparian and wetland habitats by HDD. The final EIS determined that construction and operation of the proposed project will not obstruct any migratory routes of importance. Further, the pipeline route will be collocated with or parallel to existing utility rights-of-way where possible, thereby minimizing new temporary and permanent impacts on migratory bird habitat. During operation, right-of-way maintenance (mowing) will be minimized in accordance with the Wetland Procedures.

5. Water Resources

56. The pipelines will cross 17 major (greater than 100 feet wide) waterbodies, including the Mississippi River. Of these waterbodies, 14 will be crossed by HDD. The remaining major waterbodies will be crossed using open-cut methods. Texas Gas has not yet completed geotechnical investigations to determine if the proposed HDD crossings could be successfully completed. Therefore, we will adopt the final EIS' recommendation that, prior to construction, Texas Gas be required to file with the Secretary for review the reports for these investigations, site-specific construction diagrams and contingency plans for each HDD location. If the geotechnical analysis indicates that a planned HDD crossing is not feasible then Texas Gas will develop a site-specific alternative crossing plan for each waterbody in consultation with all relevant agencies. If an HDD is not completed successfully, Texas Gas will need to obtain permits for an alternate crossing plan from the USACE and the appropriate state agency. Texas Gas will implement its proposed HDD Contingency Plan to minimize impacts in the event that HDD attempts fail.

57. The pipelines will cross four waterbodies listed on the National Rivers Inventory: Big Creek, Cadron Creek, and Bayou De View on the Fayetteville Lateral; and Big Black River along the Greenville Lateral. With the exception of Cadron Creek, these waterbodies will be crossed by HDD. The DOI states that NPS concurs that the crossing the three waterbodies by HDD will avoid or minimize impacts.

58. Texas Gas consulted with the NPS, USFWS, and Arkansas Department of Environmental Quality about the crossing of Cadron Creek. The NPS recommended that Texas Gas adhere to the Upland Erosion Control, Revegetation, and Maintenance Plan (Upland Erosion Plan) and Wetland Procedures, restore the affected riparian corridor, and provide portage routes and ample signage for river users during waterbody crossing activities. In addition, the USFWS has recommended the use of dry crossing methods (flume and/or dam-and-pump) to cross this waterbody, implementation of the mitigation measures described in *Arkansas BMPs for Fayetteville Shale Natural Gas Activities*, and advance notice be provided to resource agencies prior to stream crossing activities. Texas Gas has committed to completing restoration in accordance with the Upland Erosion Plan, the Wetland Procedures, and the Erosion and Sediment Control Plan. Texas Gas filed a Cadron Creek site-specific crossing plan that incorporates the recommendations of these agencies. The DOI comments that the NPS concurs that if these mitigation measures are implemented, then National Rivers Inventory values will be adequately protected. This order's environmental conditions included the final EIS' recommendation that Texas Gas be required to develop a procedure for notifying the Commission and interested resource agencies about the schedule for crossing perennial waterbodies that will be affected by project construction, including Cadron Creek. We also adopt the final EIS' recommendation that Texas Gas be required to develop a plan to provide portage and to install warning signs for river users to alert them to construction activities in Cadron Creek to address this recreational impact consistent with the NPS recommendation.

59. The USACE, Little Rock and Memphis Districts commented that Texas Gas must coordinate with local levee boards regarding crossing levees. This order's environmental conditions adopt the final EIS' recommendation that Texas Gas update the status of this coordination and file the levee crossing plans for review and written approval prior to construction. The USACE, Memphis District commented that all of its permitting concerns have been addressed in the final EIS.

6. Vegetation

60. Texas Gas developed an Invasive Species Plan that prescribes methods to prevent and control the spread of noxious weeds during and following construction. We believe that Texas Gas' Invasive Species Plan will minimize the spread of noxious weeds to the

greatest extent practicable. However, we nevertheless will include a condition as recommended by the final EIS to require that Texas Gas revise its Invasive Species Plan to increase monitoring of invasive species from 3 years to 5 years to assess the success of controlling the spread of noxious weeds and to address the EPA's comments on this issue.

7. Threatened and Endangered Species

61. Based on the presence of habitat and historical records of occurrence, 11 federally listed endangered and threatened species potentially occur within the proposed project area. These include: one mammal (Louisiana black bear), three bird species (interior least tern, ivory-billed woodpecker, and woodstork), one fish species (pallid sturgeon), four mussel species (fat pocketbook, pink mucket, scaleshell, and speckled pocketbook), one insect (American burying beetle), and one plant species (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.

62. No federally or state listed species were observed during Texas Gas' field surveys of the project area. In accordance with recommendations from the USFWS and Arkansas Game and Fish Commission, Texas Gas conducted mussel surveys in 11 Arkansas waterbodies it proposes to cross using open-cut methods. No threatened or endangered mussel species were identified during the surveys. The USFWS and the Arkansas Game and Fish Commission concurred with the results and conclusions of the mussel survey. No occurrences of pondberry were observed during project field surveys conducted in the fall of 2006 and early spring of 2007. Potential pondberry habitat was identified in three locations along the Fayetteville Lateral only: MP 82 (Cache River), MP 95 (Bayou De View), and about 1,800 feet north of MP 74.4. Texas Gas will avoid potential pondberry habitat by using HDD to cross the Cache River and Bayou De View, and by the alignment of the pipeline south of the potential habitat identified near MP 74.4. The Arkansas Natural Heritage Commission and USFWS concur that the project will avoid potential pondberry habitat and impact to pondberry. In a letter dated November 20, 2007, the USFWS, Arkansas field office concludes that the actions and strategies that Texas Gas will undertake to avoid adverse impacts on federally endangered and threatened species will adequately protect natural resource values during construction of the project. In a letter dated July 27, 2007, the USFWS, Mississippi field office states that the project is not likely to adversely affect federally listed species in Mississippi and that, unless there are changes in the scope or location of the proposed project or federally listed species are discovered during construction, no further consultation with the Mississippi field office is required. Based on consultation with the USFWS, the final EIS concludes that the project is not likely to adversely affect federally listed threatened or endangered species in Arkansas or Mississippi.

8. Cultural Resources

63. Texas Gas conducted cultural resource investigations for areas that will be potentially affected by construction and operation of the project. In Arkansas, surveys to date for the Fayetteville Lateral have identified 110 archaeological sites and 75 historic architectural resources. Of these, 36 archaeological sites and 2 architectural resources have been recommended as potentially eligible for the National Registry of Historic Places. Thirty-seven of these will be avoided by route modifications or HDD, and one is currently undergoing additional testing. In a letter dated March 19, 2008, the Arkansas State Historic Preservation Office (SHPO) commented on the final EIS, indicating that “the account of the status of the cultural resources investigations is accurate and Texas Gas has made excellent progress in completing its obligations”.

64. In Mississippi, surveys to date for the Fayetteville and Greenville Laterals have identified 180 archaeological sites and 21 historic architectural resources. Of these, 18 archaeological sites and 5 architectural resources are or have been recommended as potentially eligible for the National Registry of Historic Places, and one architectural resource is undetermined. All of these sites will be avoided by route modifications or HDD. Comments from the Mississippi SHPO are pending.

65. Since some cultural resource surveys are outstanding and the consultation process for the project is not yet complete, the final EIS recommends that construction not be authorized until the required studies have been completed and the SHPOs’ comments on them are filed. We adopt this recommendation in Environmental Condition No. 25 in the appendix to this order.

9. Environmental Justice

66. The EPA commented that the final EIS should address environmental justice in accordance with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*.⁴ Executive Order 12898 requires that specified federal agencies shall make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human or environmental health effects of their programs, policies, and activities on minorities and low income populations. Executive Order 12898 applies to

⁴ 59 Fed. Reg. 7629 (Feb. 11, 1994).

the agencies specified in section 1-102 of that order.⁵ This Commission is not one of the specified agencies, and the provisions of Executive Order 12898 are not binding on this Commission. Nonetheless, in accordance with our usual practice, the final EIS addressed this issue and concluded there is no evidence that the proposed project will cause a disproportionate share of adverse environmental or socioeconomic impacts on any racial, ethnic, or socioeconomic group. Information about the project has been readily available to the public, and no disproportionately high and adverse human health or environmental effects on minority and/or low-income communities or Native American tribes have been identified. Furthermore, project construction would provide some short-term job opportunities and local expenditures by construction workers in the region of influence. The only long-term socioeconomic effects on the project would likely be beneficial, based on the increase in tax revenues that would accrue to state and local governments within the project area.

10. Air Quality

67. The EPA provided several comments about air quality in response to the draft EIS. These included comments about the screening model results including concerns about assessing compliance with prevention of significant deterioration (PSD) increments, about evaluating only nitrogen dioxide (NO₂) and carbon monoxide (CO) and no other pollutants, about the inclusion of background concentrations, and about the results of NO₂ concentrations appearing high considering the emergency generator would only operate 500 hours per year.

68. Most air emissions associated with the project would result from the long-term operation of the proposed Kosciusko Compressor Station in Attala County, Mississippi. The PSD regulations apply to proposed major sources or major modifications to existing sources located in an attainment area. The PSD regulations at 40 C.F.R. § 52.21 define a “major source” as any type belonging to a list of named source categories that emit or have the potential to emit 100 tons per year of any regulated criteria pollutant, or a source not named under the source categories with the potential to emit criteria pollutants in amounts equal to or greater than 250 tons per year. The project will not include facilities or operations listed under a named source category, and the compressor station will not exceed emissions of 250 tons per year of any criteria pollutant. Therefore, the project is not subject to PSD permitting, and Texas Gas is not required to demonstrate compliance with PSD increments through the National Environmental Policy Act (NEPA) process

⁵ See *Millenium Pipeline Company, L.P.*, 97 FERC ¶ 61,292 (2001) and *Weaver’s Cove Energy, LLC*, 114 FERC ¶ 61,058 at P 147 (2006).

even though the project could consume increment.⁶ Should a comparison with PSD increments be necessary, it would be performed by the air permitting agency using the appropriate refined dispersion model during the air permitting process. The conservative screening analysis that was performed determined the “worst case” impacts the project would create and compared the results to the National Ambient Air Quality Standards (NAAQS). The final EIS used this approach to determine whether a refined analysis is needed or to identify impacts. The information in the final EIS was modified to include the background concentrations suggested by the EPA.

69. The screening model provided results in 1-hour concentrations. The results were scaled for various emission rates based on ratios. EPA factors were then used to scale the results to varying averaging times. NO₂ and CO were evaluated since they were the pollutants with the greatest emission rates overall and are typically the pollutants of concern with regard to natural-gas-fired engines. The other criteria pollutants sulfur dioxide (SO₂) and particulate matter less than 10 microns and 2.5 microns (PM₁₀/PM_{2.5}) would be emitted at significantly lower emission rates and, therefore, would be scaled down and have lower impacts than those for NO₂ or CO. There are no NAAQS for volatile organic compounds (VOCs). VOCs contribute to ozone impacts; however, VOCs cannot be modeled this way as there is no VOC concentration impact concern and there are no thresholds to determine significance.

70. The EPA correctly identified a mistake with the projected impacts on NO₂ from the emergency generator. The modeling performed was accurate in determining 1-hour and 8-hour concentrations based on the emission rates. (Low stack height, exit temperature, and exit velocity did contribute to a greater concentration.) However, it was inappropriate to scale these results to the annual level for the hourly emission rate modeled. Doing so made the assumption that the generator would operate 8,760 hours per year, when it would actually operate only 500 hours per year. The results have been rescaled based on an hourly emission rate, which has been scaled down from the annual emission rate at 500 hours per year.

71. Therefore, the final EIS concludes that air emissions resulting from construction of the project will not significantly affect air quality in the region. Air pollutant emissions from the operation of vehicles and the generation of fugitive dust during construction

⁶ PSD increments are the maximum ambient concentration of a regulated pollutant that is allowed from a new or modified source. The ambient concentration produced by a new source (impact) at a receptor in a modeling study reduces the amount of increment available to other new sources, and increment is said to be consumed.

activities are expected to be minor and temporary. No impacts to air quality will result from the operation of the pipeline facilities. Emissions associated with the operation of the Kosciusko Compressor Station will be below the NAAQS.

11. Noise Quality

72. Noise will be generated during construction of the pipeline and aboveground facilities. Construction activities in any one area could last from several weeks to several months on an intermittent, as-needed basis. While individuals in the immediate vicinity of the construction activities would experience an increase in noise, this effect would be temporary and local. Nighttime noise is not expected to increase during construction because most construction activities would be limited to daytime hours. Noise levels associated with HDD activities could potentially exceed 55 decibels on the A-weighted scale (dBA) at the closest noise sensitive areas (NSAs) at two proposed HDD locations (HDD sites 23 and 25). Therefore, the final EIS recommends that Texas Gas develop specific mitigation plans if HDD activities result in exceedances of 55 dBA at the nearest NSAs. We adopt this recommendation in Environmental Condition No. 26 in the appendix.

73. Permanent noise impact will result from operation of the Kosciusko Compressor Station in Attala County, Mississippi. It will be constructed and operated next to an existing Texas Eastern Transmission Company compressor station. Estimated noise levels from operation of the Kosciusko Compressor Station are about 52 dBA or less at the NSAs. No adverse, long-term impacts will, therefore, be anticipated. However, to ensure that noise levels from operation of the Kosciusko Compressor Station do not adversely impact the surrounding area, we will adopt the final EIS' recommendation that Texas Gas be required to make all reasonable efforts to ensure its predicted noise levels are not exceeded at nearby NSAs.

12. Alternatives

74. The final EIS addressed alternatives, including no action or postponed action; system alternatives; pipeline route alternatives; and route variations. The alternatives analysis in the final EIS found no reasonable routes alternatives that would be environmentally preferable to the proposed routes. The final EIS determined that the proposed Fayetteville/Greenville Expansion Project as modified by the recommended mitigation measures, is the preferred alternative.

75. We have reviewed the information and analysis contained in the final EIS regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the final EIS and find that

Texas Gas's project is environmentally acceptable, if the project is constructed and operated in accordance with the conditions recommended by the final EIS and included in the appendix to this order.

76. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. We encourage cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.⁷

77. Texas Gas shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Texas Gas. Texas Gas shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

78. The final EIS concludes that construction and operation of the proposed project will result in limited adverse environmental impact. As part of the analysis in the final EIS, specific mitigation measures are developed for the construction and operation of the proposed facilities, including a program of environmental inspection and monitoring that is designed to contain most of the impact within the project vicinity and to ensure compliance with certificate and permit requirements. The final EIS concludes that these measures will substantially reduce any environmental impact and further concludes that if this project is constructed and operated in accordance with these mitigation measures, it will be an environmentally acceptable action. The Commission adopts the findings and conclusion of the final EIS.

79. The Commission, on its own motion, received and made a part of the record all evidence, including the application, supplemented, and exhibits thereto, submitted in this proceeding and upon consideration of the record,

⁷ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

The Commission Orders:

(A) Texas Gas is issued a certificate of public convenience and necessity to construct and operate facilities, as described more fully in the application and in the body of this order.

(B) The certificate authority issued in Ordering Paragraph (A) is conditioned on:

- (1) Texas Gas' compliance with all applicable Commission regulations under the NGA, particularly the general terms and conditions set forth in paragraphs (a), (c), (e), and (f) of section 157.20 of the regulations; and
- (2) Texas Gas' compliance with the environmental conditions listed in the Appendix to this order.

(C) Texas Gas' facilities authorized in this order must be constructed and made available for service within three years from the date this order is issued, pursuant to paragraph (b) of Section 157.20 of the Commission's regulations.

(D) Texas Gas shall maintain accounts for the incremental expansion facilities approved herein in accordance with section 154.309 of the Commission's regulations to ensure that costs and revenues associated with the expansion facilities can be identified in any future NGA section 4 or 5 rate cases and Texas Gas' other customers are not subsidizing customers using the expansion capacity.

(E) Texas Gas shall notify the Commission's environmental staff by telephone, facsimile, or e-mail of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Texas Gas. Texas Gas shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

Environmental Conditions

As recommended in the Final Environmental Impact Statement, this authorization includes the following conditions:

1. Texas Gas shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff information requests), and as identified in the EIS, unless modified by the Order. Texas Gas 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 **before using that modification.**
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Project. This authority shall allow:
 - a. the modification of conditions to the Commission's Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to ensure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.
3. **Prior to any construction,** Texas Gas shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures

appropriate to their jobs before becoming involved with construction and restoration activities.

4. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets, and shall include all of the staff's recommended facility locations. **As soon as they are available and before the start of construction,** Texas Gas 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 this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Texas Gas' 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. Texas Gas' right of eminent domain granted under Section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Texas Gas shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and 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 **prior to construction** in or near that area.

This requirement does not apply to route variations required herein or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;

- b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of acceptance of the Certificate and prior to the start of construction, Texas Gas shall file** an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Texas Gas will implement the mitigation measures required by the Order. Texas Gas must file revisions to the plan as schedules change. The plan shall identify:
- a. how Texas Gas 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;
 - b. the number of EIs assigned per spread and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - d. the training and instructions Texas Gas 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);
 - e. the company personnel (if known) and specific portion of Texas Gas' organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Texas Gas will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or Program Evaluation and Review Technique (PERT) chart (or similar project scheduling diagram), and dates for:
 - (1) the completion of all required surveys and reports;

- (2) the mitigation training of on-site personnel;
 - (3) the start of construction; and
 - (4) the start and completion of restoration.
7. Texas Gas shall employ one or more EIs per construction spread. The EIs shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract 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 this 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. Texas Gas shall file updated status reports with the Secretary on a **weekly basis until all construction-related activities, including restoration, are complete for each phase of the Project**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. the current 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;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions

- imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
- c. a description of corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints that may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Texas Gas from other federal, state, or local permitting agencies concerning instances of noncompliance, and Texas Gas' response.
9. **Within 30 days of placing the certificated facilities in service**, Texas Gas 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 certificate conditions Texas Gas has complied with or will comply with. This statement also shall 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.
10. Texas Gas must receive written authorization from the Director of OEP **before commencing service** on each pipeline segment. Such authorization will be granted only following a determination that rehabilitation and restoration of the project area is proceeding satisfactorily.
11. Texas Gas shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Project and restoration of the right-of-way. **Prior to construction**, Texas Gas shall mail the complaint procedures to each landowner whose property would be crossed by the Project.

- a. In its letter to affected landowners, Texas Gas shall:
 - (1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - (2) instruct the landowners that, if they are not satisfied with the response, they should call Texas Gas' Hotline; the letter should indicate how soon to expect a response; and
 - (3) instruct the landowners that, if they are still not satisfied with the response from Texas Gas' Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030, or at hotline@ferc.gov.
 - b. In addition, Texas Gas shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:
 - (1) the date of the call;
 - (2) the identification number from the certificated alignment sheets of the affected property and an approximate MP;
 - (3) the description of the problem/concern; and
 - (4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
12. **Prior to construction**, Texas Gas shall file with the Secretary the MP locations of water wells and springs within 150 feet of construction workspaces and include their distance and direction from the construction workspace.
13. **Prior to construction**, Texas Gas shall file with the Secretary for review the results of its geotechnical feasibility investigations, site-specific construction diagrams, and contingency plans for each HDD location. If a planned HDD crossing is not feasible, then Texas Gas shall develop a site-specific alternative crossing plan for each waterbody in consultation with all relevant agencies. Texas Gas's plans and documentation of consultations regarding the site-specific HDD plans shall be filed with the Secretary for review and written approval by the Director of OEP.

14. In the event of an unsuccessful HDD, Texas Gas shall file with the Secretary a site-specific crossing plan for the waterbody. The site-specific plan shall address how Texas Gas would seal the abandoned drill hole and shall include scaled drawings identifying all areas that would be disturbed by construction. Texas Gas shall file the plan concurrent with its application to the USACE for a permit to construct using this plan. The Director of OEP must review and approve this plan in writing **prior to construction of the crossing.**
15. Texas Gas shall provide to the USACE, ADEQ, MDEQ, and FWS, as appropriate, and for each construction spread, the schedule for crossing perennial waterbodies in Arkansas and Mississippi that is included in Texas Gas's weekly construction status report that is filed with the Secretary.
16. **Prior to construction,** Texas Gas shall file the status of consultation with all appropriate levee boards to cross levees at the Mississippi River, the Yazoo River, and Fannegusha Creek by HDD and the site-specific levee crossing plans for review and written approval of the Director of OEP
17. **Prior to construction,** Texas Gas shall file with the Secretary for review and written approval by the Director of OEP a site-specific construction plan for each ATWS with a less than 50-foot setback from wetland boundaries (except where adjacent upland consists of actively cultivated or rotated cropland or other disturbed land) and a site-specific explanation of the conditions that will not permit a 50-foot setback.
18. **Prior to construction,** Texas Gas shall file with the Secretary a copy of the Section 404/10 permit issued by the USACE and the finalized wetland Mitigation Plan developed in consultation with the USACE.
19. Texas Gas **shall file with its Project Implementation Plan** the status of its Right-of-way Permit from the FWS for crossing the Hillside NWR.
20. **Prior to construction,** Texas Gas shall file with the Secretary a crossing plan for construction and restoration of rice fields crossed by the Project that includes provisions for consultation with affected landowners for review and written approval of the Director of OEP.
21. Texas Gas **shall file with its Project Implementation Plan** the status of the subordination agreements with the NRCS for the Wetland Reserve Program tract crossed between MP 43.0 and 43.3 of the Greenville Lateral and the site-specific

restoration plan for construction and restoration of this Wetland Reserve Program tract.

22. **Prior to construction**, Texas Gas shall file with the Secretary for review and approval by the Director of OEP:
 - a. A revised site-specific plan for the residence at MP 46.85 on the Fayetteville Lateral that clearly identifies the limits of the construction right-of-way and any additional measures Texas Gas would implement to minimize impacts on the residence; and
 - b. A revised site-specific plan for the residence at MP 55.1 on the Greenville Lateral that either reduces the construction right-of-way to maintain at least 10 feet of separation between the residence and construction workspaces and any additional measures Texas Gas would implement to minimize impacts on the residence.
23. Texas Gas shall develop a plan in consultation with NPS to provide portage routes and ample signage for river users affected by Project construction across Cadron Creek (MP 14). This plan should be filed with the Secretary for review and written approval by the Director of OEP **prior to construction**.
24. **Prior to construction**, Texas Gas shall field verify the locations of all geodetic control monuments within Project workspaces and complete notification and consultation with the NOAA, NGS, as needed.
25. Texas Gas shall defer construction of the pipeline, compressor station, meter stations, and use of all staging, storage, and temporary work areas and new or to-be improved access roads **until**:
 - a. Texas Gas addresses the Arkansas SHPO's comments on the Arkansas Phase I survey report, including addressing the SHPO's comments regarding avoidance and protection of historic architectural resources 38, 39, 46 and 71, and files a revised Phase I report and the Arkansas SHPO's comments on the report;
 - b. Texas Gas files a Phase II NRHP-eligibility testing report for Site 20E-1 in Arkansas and the SHPO's comments on the report;
 - c. Texas Gas files the Mississippi SHPO's comments on the Mississippi Phase I survey report;

- d. Texas Gas files the Mississippi SHPO's comments on the existing Greenville Compressor Station;
- e. Texas Gas files a Phase I survey report for the two pipe storage yards on the Fayetteville Lateral in Arkansas, any newly identified areas requiring survey, and the SHPO's comments on the report(s);
- f. Texas Gas provides interested Native American tribes with any requested information;
- g. the ACHP is afforded an opportunity to comment if historic properties would be adversely affected;
- h. Texas Gas files any required treatment/mitigation plans and the SHPO's and NPS', comments on the plans; and
- i. the Director of OEP reviews and approves all reports and plans and notifies Texas Gas in writing that it may proceed with treatment/mitigation or construction.

All material filed with the Commission containing **location, character, and ownership** information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **“CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE.”**

- 26. For the HDD locations listed in table 4.11.2-2 of the EIS with projected noise levels above 55 dBA L_{dn} at the closest NSA, Texas Gas shall file noise mitigation plans with the Secretary for review and written approval by the Director of OEP, **prior to construction**. The noise mitigation plan shall include either a commitment to daytime drilling only or provide mitigation measures to reduce noise levels at the NSAs.
- 27. Texas Gas shall make all reasonable efforts to ensure its predicted noise levels from the Kosciusko Compressor Station are not exceeded at nearby NSAs and file with the Secretary noise surveys showing this **no later than 60 days** after placing the Kosciusko Compressor Station in service. However, if the noise attributable to operation of the Kosciusko Compressor Station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, Texas Gas 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. Texas Gas 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.