EXECUTIVE SUMMARY

This final environmental impact statement (EIS) for the Cypress Pipeline and FGT Expansion Projects 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 (CEQ) Regulations for implementing NEPA (Title 40 CFR Parts 1500-1508). Because the U.S. Department of Army, Corps of Engineers (COE) must also ensure that the proposed actions are consistent with the requirements of NEPA before granting its authorization, the COE is a cooperating agency in the preparation of this EIS. The COE is a federal agency that regulates dredge and fill activities in waters of the U.S., and activities in navigable waters, which would be affected by the Cypress Pipeline and FGT Expansion Projects. The purpose of this document is to inform the public and the various federal and state agencies about the potential adverse and beneficial environmental impacts of the proposed project and its alternatives, and to recommend mitigation measures to reduce impacts to the maximum extent possible.

The vertical line in the margin identifies text that has been modified in the final EIS and differs from the corresponding text in the draft EIS.

PROPOSED ACTIONS

On June 29, 2005, Southern Natural Gas Company (Southern), a wholly owned subsidiary of El Paso Corporation, filed an application with the Commission in Docket No. CP05-388-000, under section 7 of the Natural Gas Act (NGA), as amended, and Parts 157 and 284 of the Commission's regulations. Southern is seeking a Certificate of Public Convenience and Necessity (Certificate) to construct, own, and operate a new interstate natural gas pipeline system in Georgia and Florida. The purpose of the Cypress Pipeline Project is to support the increased use of imported liquefied natural gas (LNG) from Southern's existing Elba Island LNG Terminal as a source of gas supply in the Southeast. The project would enable Southern to transport up to 500 million cubic feet per day of natural gas in a three-phased expansion. Specifically, Southern proposes to construct and operate the following facilities:

- about 166.9 miles of new 24-inch-diameter mainline pipeline (mainline) that would extend from Southern's existing Rincon Gate Meter Station in Effingham County, Georgia to Florida Gas Transmission Company's (FGT) existing pipeline system in Clay County, Florida;
- about 9.8 miles of 30-inch-diameter pipeline loop[1] (loop) adjacent to Southern's existing Wrens-Savannah pipelines between Southern's existing Port Wentworth Meter Station in Chatham County, Georgia and the Rincon Gate Meter Station in Effingham County, Georgia;
- about 0.1 mile of 12-inch-diameter lateral pipeline from Southern's proposed mainline to the Jacksonville Electric Authority (JEA) Brandy Branch Power Plant in Duval County, Florida;
- three new gas-turbine-driven compressor stations, 10,350 horsepower (hp) each, to be located in Liberty and Glynn Counties, Georgia, and Nassau County, Florida;

[1] A loop is a segment of pipeline that is usually installed adjacent to an existing pipeline and connected to it at both ends. The loop allows more gas to be moved through the existing system.

- four new meter stations including:

  –Atlanta Gas and Light (AGL) Meter Station in Glynn County, Georgia;
  –South Georgia Natural Gas (South Georgia) Meter Station in Nassau County, Florida;
  –JEA Brandy Branch Meter Station in Duval County, Florida; and
  –FGT Meter Station in Clay County, Florida;

- modifications to two existing meter stations including the Port Wentworth Meter Station in Chatham County, Georgia and the Marietta Meter Station in Cobb County, Georgia;

- expansion of the Rincon Gate Meter Station in Effingham County, Georgia;

- 16 new mainline block valves (MLV) including 14 associated with the new mainline and 2 associated with the loop; and

- four new pig launcher/receiver facilities associated with the Port Wentworth, Rincon Gate, and FGT Meter Stations, and the new compressor station in Glynn County, Georgia.

In a related filing, FGT, a wholly owned subsidiary of Citrus Corp., filed an application with the FERC on October 5, 2005, under section 7 of the NGA. FGT is seeking a Certificate to construct, own, and operate new natural gas pipeline loop and ancillary facilities downstream of the proposed Southern facilities. The purpose of the FGT Expansion Project is to interconnect with and deliver natural gas from the Cypress Pipeline Project to Progress Energy Florida Inc. for its Hines Energy Complex (a natural gas-fueled power generation complex in Polk County, Florida). Specifically, FGT proposes to construct and operate the following facilities:

- about 5.0 miles of 36-inch-diameter loop adjacent to FGT's existing pipeline in Gilchrist County, Florida (Loop J);

- about 15.2 miles of 36-inch-diameter loop adjacent to FGT's existing pipeline in Levy County, Florida (Loop K);

- about 12.4 miles of 36-inch-diameter loop adjacent to FGT's existing pipeline in Hernando County, Florida (Loop G);

- replacement and upgrades to existing compressors for a net increase of about 7,800 hp at FGT's Compressor Station no. 26 in Citrus County, Florida;

- replacement of an existing compressor to add about 2,000 hp at FGT's existing Compressor Station no. 24 in Gilchrist County, Florida;

- miscellaneous modifications and upgrades to existing compressors with no increases in hp at FGT's Compressor Station nos. 16, 27, and 17 in Bradford, Hillsborough, and Marion Counties, Florida, respectively;

- a new interconnection with Southern's new mainline in Clay County, Florida;

- modifications to five existing metering and/or regulation stations in Clay, Polk, Bradford, and Duval Counties, Florida; and

- new remote blowdown piping associated with the proposed pipeline loops at two locations in Levy County and two locations in Hernando County, Florida.

PUBLIC INVOLVEMENT AND AREAS OF CONCERN

Prior to filing their applications with the Commission, Southern and FGT filed requests with the FERC to implement the Commission's Pre-Filing Process for each project. Southern filed its request on December 21, 2004 and FGT filed its request on April 29, 2005. The intent of the Commission's Pre-Filing Process is to initiate public involvement 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 FERC granted Southern's and FGT's requests and established pre-filing docket numbers PF05-7-000 and PF05-11-000, respectively, to place information related to each project into the public record.

On February 18, 2005, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Cypress Pipeline Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (Cypress NOI). The Cypress NOI was sent to 725 parties, including affected landowners and abutters; federal, state, and local government agencies; elected officials; Native American tribes; environmental and public interest groups; other interested parties; and local libraries and newspapers. The Cypress NOI described the project and environmental review process, provided a preliminary list of project related issues, invited written comments on the environmental issues to be addressed in the EIS, and listed the dates and locations of three public scoping meetings to be held in communities in the project area. These meetings were held in Bloomingdale and Brunswick, Georgia, and Jacksonville, Florida, during the evenings of March 8, 9, and 10, 2005, respectively. During the same period, we[2] attended separate agency coordination and scoping meetings in Brunswick, Georgia on March 9, 2005 and in Jacksonville, Florida on March 10, 2005. Other agencies that attended one or both of these meetings included the COE, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service (FWS), Georgia Department of Natural Resources (GADNR), Georgia Department of Transportation (GADOT), Florida Department of Environmental Protection (FLDEP), Savannah-Ogeechee Canal Society, and St. Johns River Water Management District.

On June 22, 2005, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed FGT Phase VII Expansion Project and Request for Comments on Environmental Issues* (FGT NOI). The FGT NOI was mailed to 1,130 parties including affected landowners and abutters; federal, state, and local government agencies; elected officials; Native American tribes; environmental and public interest groups; other interested parties; and local libraries and newspapers. The FGT NOI described the project and environmental review process, provided a preliminary list of EIS issues, and invited written comments on the environmental issues to be addressed in the EIS.

In response to the Cypress NOI, a total of 20 letters were received commenting on the Cypress Pipeline Project, including 7 from agencies and 13 from the public. When combined with the comments received during our public scoping meetings[3] and agency scoping meetings, 191 comments were received. In response to the FGT NOI, we received eight letters from agencies, one letter from a Native American tribe, one letter from FGT, and two letters from the public.

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[2] The pronouns "we," "us," and "our" refer to the environmental staff of the FERC's Office of Energy Projects.

[3] The public scoping meeting transcripts and written comment letters are available for viewing on the FERC Internet website (http://www.ferc.gov). Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket Number" (i.e., PF05-7, PF05-11, CP05-388 and CP06-1), and follow the instructions. Be sure to select an appropriate date range.

The FERC prepared a draft EIS for the Cypress Pipeline and FGT Expansion Projects and issued a Notice of Availability (NOA) of the draft EIS on December 30, 2005. In accordance with CEQ's regulations implementing NEPA, the NOA established a 45-day comment period ending on February 20, 2006; described procedures for filing comments on the draft EIS; and announced the time, date, and location of public comment meetings. The NOA also indicated that additional project information could be obtained from the Commission's Office of External Affairs and on the FERC's Internet website. A formal notice was also published in the Federal Register on January 12, 2006, indicating that the draft EIS was available and had been mailed to individuals and organizations on the mailing list prepared for the project.

The FERC mailed 1,384 copies of the draft EIS to interested parties, including federal, state, and local officials and agencies; special interest groups; parties to the proceeding; area libraries and newspapers; and individuals and affected landowners who requested a copy of the draft EIS. The FERC also conducted public meetings in Bloomingdale, Georgia on February 6; Brunswick, Georgia on February 7; Jacksonville, Florida on February 8; and Brooksville, Florida on February 9, 2006. A total of seven people provided comments at these four meetings. In addition, the FERC received 14 comment letters regarding the draft EIS. Transcripts of the public meeting comments and the comment letters are part of the public record for the Cypress Pipeline and FGT Expansion Projects. The final EIS was mailed to the agencies, individuals, and organizations on the mailing list and submitted to the U.S. Environmental Protection Agency for formal issuance of a NOA.

PROJECT IMPACTS

Construction of the Cypress Pipeline and FGT Expansion Project facilities would affect a total of about 2,713.2 acres of land, including about 2,161.6 acres associated with the Cypress Pipeline Project and about 551.6 acres associated with the FGT Expansion Project. Of the 2,713.2 acres of land affected by construction, about 1,024.7 acres would be retained as new permanent right-of-way. The Cypress Pipeline Project would retain about 863.8 acres of new permanent right-of-way and the FGT Expansion Project would retain about 160.9 acres. Included in these totals, Southern's aboveground facilities would require about 49.6 acres for construction and about 22.6 acres for permanent operation, and FGT's aboveground facilities would require about 25.8 acres for construction and about 5.9 acres for permanent operation.

Approximately 95 percent of Southern's proposed pipeline facilities would be located directly adjacent to or within other existing powerline and pipeline rights-of-way. FGT's proposed pipeline facilities would be located within or adjacent to other existing pipeline or powerline rights-of-way for about 99 percent of its length. Most of the lands that would be affected by construction and operation of the pipelines, including about 164.5 miles (93 percent) of Southern's pipeline routes and 32.5 miles (99 percent) of FGT's routes, are privately owned. All of the Southern and FGT aboveground facilities, except one of Southern's proposed meter stations and one proposed MLV, would be located on private land. Southern's proposed AGL Meter Station would be located on state land within the Sansavilla Wildlife Management Area and Southern's MLV 4 would be located on federal land within the Fort Stewart Military Reservation.

Geology

Construction and operation of the Cypress Pipeline and FGT Expansion Projects would not materially alter the geologic conditions of the project area. No impacts on mining resources are anticipated during construction and operation of the pipeline facilities. No significant geologic hazards would be crossed by the projects. Karst features, particularly sinkhole formations, are common in the area of the FGT pipeline loops. FGT would monitor for karst features during construction and has

identified potential mitigation measures it would implement in the event these features are identified during construction or operation of the pipeline facilities. We believe FGT's measures would adequately address the potential hazards associated with karst terrain.

Soils

Pipeline construction activities such as clearing, grading, trench excavation, and backfilling, as well as the movement of construction equipment along the rights-of-way may result in adverse impacts on soil resources. Impacts on soils can be effectively minimized through the use of the proposed erosion control and revegetation measures. Southern and FGT would implement the mitigation measures contained in the FERC staff's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan), with approved modifications, in order to control erosion and sedimentation during construction and to ensure revegetation.

Water and Wetland Resources

Groundwater serves as a water source to a majority of the population in the Cypress Pipeline and FGT Expansion Project areas. Surficial aquifers are generally used in rural areas of both projects and are considered supplemental water supplies. None of the aquifers are designated as sole-source aquifers in the areas crossed by the Cypress Pipeline and FGT Expansion Projects. To ensure that potential impacts on groundwater resources from spills and leaks of hazardous materials are prevented and minimized to the extent possible, Southern and FGT would implement a Spill Prevention, Control, and Countermeasure Plan that would be consistent with the requirements in the FERC staff's Wetland and Waterbody Construction and Mitigation Procedures (Procedures), with approved modifications.

The Cypress Pipeline Project would cross within 150 feet of seven water wells and three groundwater seeps/springs. The construction work area for the FGT Expansion Project would be located within 150 feet of 12 private water wells and within 270 feet of 8 public water wells. No springs have been identified to date along FGT's pipeline routes. Both Southern and FGT would continue to investigate for the presence of wells and springs during civil and engineering surveys and landowner negotiations. Southern and FGT would prohibit refueling and storage of hazardous materials within 150 feet of wells. Because Southern and FGT have an ongoing effort to identify and protect these water resources, we have recommended that Southern and FGT provide the FERC with information about additional wells or springs before construction begins, and to provide information about any wells that are damaged and repaired as a result of construction.

The Cypress Pipeline and FGT Expansion Projects would cross a combined total of 108 waterbodies (101 and 7 respectively). None of the waterbodies are classified as a source of drinking water or potable water supply and all waterbodies are considered warmwater fishery resources. Only two of the waterbodies that would be crossed by FGT's pipeline facilities are classified as perennial, and neither is designated major (i.e., wider than 100 feet) or sensitive. Fifty four of the streams crossed by Southern's pipeline facilities are perennial waterbodies, of which six are major waterbodies and one is a canal listed on the National Register of Historic Places (NRHP).

Southern would cross the six major waterbodies and the historic canal using the horizontal directional drill (HDD) crossing method. Southern would cross the remaining waterbodies using other dry or wet open cut methods. FGT would cross waterbodies using wet or dry open cut methods. Waterbody crossings would be constructed by both Southern and FGT in accordance with applicable permits and our Procedures with approved modifications, which would minimize impacts to the maximum extent practicable.

Southern proposes to use surface waters for hydrostatic testing its pipeline facilities, including water from the Ogeechee River, Peacock Creek, Altamaha River, Satilla River, and St. Marys River. FGT would use water from wells to hydrostatically test its pipeline facilities. Both Southern and FGT would minimize the potential effects of hydrostatic testing on surface water and wetland resources by adhering to the measures in our Procedures, with approved modifications.

Southern's loop and mainline centerline would cross 315 wetlands with a total crossing length of about 68.4 miles, or about 40 percent of the total pipeline length. About 60 percent of the wetlands crossed are forested wetlands, 32 percent are emergent wetlands, and 7 percent are scrub-shrub wetlands. Of the forested wetlands affected by the Cypress Pipeline Project, about 15 percent are identified as hydric plantation pine, which are generally considered to be low quality wetlands due to periodic disturbance and the limited vegetation diversity. Based on COE wetland quality assessments, 35 wetlands crossed by Southern's mainline would be considered high quality. No high quality wetlands were identified along the loop. The GADNR identified seven sensitive wetlands that would be crossed by Southern's mainline.

FGT's pipeline facilities would not cross any wetlands on Loops J and G. Loop K would cross 42 wetlands for a total distance of about 9.9 miles, of which about 95 percent are scrub-shrub and emergent wetlands and the remaining 5 percent are forested. Based on COE wetland quality assessments, two of the wetlands crossed by FGT's Loop K are rated as high quality. However, none of the wetlands were identified by the state as sensitive.

The installation of pipeline facilities would result in temporary impacts on the scrub-shrub and palustrine emergent wetlands, which are expected to return to preconstruction conditions within a few years. Impacts on forested wetlands would be longer due to the time it would take for forested vegetation to return to preconstruction conditions. Given the species that dominate the forested wetlands crossed by both projects, regeneration to preconstruction conditions may take up to 30 years. In addition, wetland vegetation impacts would be permanent where vegetation would be maintained in a herbaceous state over the pipeline centerline to facilitate pipeline inspections.

Both Southern and FGT would limit wetland impacts by reducing the width of the construction right-of-way in some areas, by implementing our Procedures with approved modifications, and by complying with the conditions of applicable authorizations, such as from the COE under section 404 and the FLDEP's Environmental Resource Permit. Southern and FGT would also minimize impacts on forested wetlands by overlapping its temporary construction right-of-way, including temporary extra workspaces, on adjacent maintained and cleared powerline corridor, where possible. Southern and FGT would mitigate impacts on wetlands by implementing our recommendation to develop their respective compensatory wetland mitigation plans.

Vegetation

Of the vegetation communities that would be crossed by Southern's pipeline facilities, upland vegetation comprises about 60 percent while wetland vegetation accounts for about 40 percent. For FGT's pipeline facilities, upland vegetation comprises about 87 percent while wetland vegetation accounts for about 13 percent. The primary upland vegetation cover type that would be crossed by Southern's pipeline facilities (about 48.4 miles) is planted pine. The next two most prevalent vegetation cover types are the upland forest (about 34.9 miles) and herbaceous (about 19.8 miles) cover types. The remaining vegetation cover types would be agriculture (5.9 miles) and landscape (0.1 mile). The FGT Expansion Project loops would primarily affect the herbaceous cover type (31.3 miles), followed by agricultural (0.5 mile) and industrial (0.3 mile).

To reduce impacts on vegetation within the temporary and permanent rights-of-way and improve revegetation potential, Southern and FGT would utilize a portion of previously disturbed, existing pipeline and powerline corridors. By using existing rights-of-way during construction, long term impacts on upland forest, planted pine, and landscape cover types would be lessened and shifted to impacts on the herbaceous cover types (which would be considered a short-term impact), and impacts on previously undisturbed and old growth vegetation would be minimized.

Special Status Species

Based on consultations with the FWS, 20 federally listed or proposed listed species were determined to potentially occur in the general vicinity of the proposed Cypress Pipeline and FGT Expansion Projects. Southern and FGT conducted surveys of their pipeline routes and project work areas to identify the presence of listed species in the project areas. After completing the field surveys, Southern prepared a Sensitive Species Mitigation Plan and FGT prepared an Endangered & Threatened Species Field Reconnaissance Report, which were both submitted to the FERC and the FWS for review and comment. On the basis of these field survey reports, analysis of the potential effects of the proposed actions, and informal consultations with the FWS, we conclude that with the implementation of Southern's and FGT's proposed construction and mitigation plans, and our recommendations, the projects would have no effect on 10 species, are not likely to adversely affect 9 species, and may adversely affect the eastern indigo snake for the FGT Expansion Project. Additional surveys are scheduled to occur prior to construction for six of these species; however, the results of these surveys would not alter our determinations of effect as Southern and FGT would still be required to adhere to their proposed or our recommended conservation measures.

The draft EIS (which served as a Biological Assessment) was sent to the FWS and NOAA Fisheries along with a letter that initiated formal consultation under section 7 of the Endangered Species Act regarding the eastern indigo snake. We have not yet received a Biological Opinion or concurrence letters from the FWS and NOAA Fisheries on our determinations. Neither Southern nor FGT would be allowed to begin construction until we receive concurrence letters from these agencies.

Based on consultations with the GADNR and Florida Fish and Wildlife Commission, 19 state-listed threatened or endangered species potentially occur in the project areas. Of these 19 species, 8 are also federally listed and are addressed in our determinations of effect discussed above. Of the remaining 11 species, no impacts would occur to 1 species and 10 species are not expected to be adversely affected.

Land Use, Recreation, and Visual Resources

Land use crossed by the centerline of the Cypress Pipeline Project is primarily forested (about 44 percent), silvicultural (27 percent), and open (about 25 percent). For FGT's project, the centerline would primarily cross open (consisting mostly of the herbaceous cover type, about 88 percent), industrial (about 5 percent), and forested (about 3 percent) land uses. Visual impacts associated with the pipeline would be greatest where the pipeline route parallels or crosses roads, trails, or prominent off-site observation points, and other places where the rights-of-way may be seen by passing motorists or other recreationists. These visual impacts would not be a significant change from the existing visual characteristics at these observation points because the majority of each pipeline route would be constructed within or directly adjacent to existing utility corridors.

Southern's proposed aboveground facilities would be new features in the landscape. Southern's new compressor stations, meter stations, block valves, launcher/receivers, and interconnects would be within or adjacent to existing utility corridor areas, and collocated with each other or with other existing facility sites where possible, which would minimize their visual impact. Southern would further

minimize the visual impact of the new compressor station facilities by leaving vegetative buffers between the facility sites and nearby observation points. We have recommended that Southern develop a visual screening plan for its proposed South Georgia Meter Station to screen the facility from nearby residences. FGT's aboveground facility modifications would occur primarily at existing facility sites or be buffered by existing vegetation or within existing utility corridor areas. Therefore, FGT's aboveground facilities would not affect the surrounding visual landscape.

Cultural Resources

Cultural resources inventories have been conducted for the majority of Southern's pipeline route, access roads, and ancillary facilities in Georgia (except for about 8.7 miles due to denied access) and in Florida (except for about 6.2 miles of the mainline due to denied access). Southern identified 32 cultural resources sites and 5 standing structures more than 50 years old in Georgia. Of these, one site (the Savannah Ogeechee Canal) is listed on the NRHP, and one standing structure (the Wayfarer Church/Hardshell Church) is recommended as potentially eligible for the NRHP. The potential eligibility of three sites could not be determined because two were previously recorded but could not be relocated during survey, and access was denied to the third. The remaining 28 sites and 4 structures are recommended as not eligible for the NRHP. Southern's construction plans would avoid the Savannah Ogeechee Canal by the HDD method, and would avoid the Wayfarer Church/Hardshell Church. Both the Georgia State Historic Preservation Office (SHPO) and FERC staff concur that the project would have no adverse effect on these properties. Southern identified four cultural resources sites in Florida, but none are recommended as eligible for the NRHP. Both the Florida SHPO and FERC staff concur that the project would have no effect on NRHP properties for the surveyed areas.

All of FGT's pipeline route, access roads, and ancillary facilities have been inventoried for cultural resources. Twenty cultural resources sites and nine historic-period structures were identified. None were recommended as eligible for the NRHP. The Florida SHPO has not yet commented on FGT's cultural resources survey report. Southern has not yet completed survey and evaluations for the area of potential effect, and FGT has not received SHPO comments on its cultural resource survey report. Therefore, at this time, the FERC has not completed the process of complying with section 106 of the National Historic Preservation Act for Southern's or FGT's proposed facilities. Once cultural resources surveys and evaluations are completed, if any historic properties would be adversely affected, treatment plans would be prepared.

Socioeconomics and Transportation

Construction of the projects would result in a temporary increase in population, traffic, and demand for temporary housing and public services. Due to the temporary and limited nature of these impacts, they are not considered significant. Construction and operation of the projects would have a beneficial impact on local tax revenues and economies. The operation and maintenance of the pipeline, aboveground facilities, and the permanent staff associated with them would permanently contribute to each states' property and sales tax revenues, although the contributions would be negligible compared to the overall tax revenues generated in each state.

Air Quality and Noise

Construction of the proposed pipeline and aboveground facilities would result in intermittent and short-term fugitive emissions. Emissions from construction of the pipeline and aboveground facilities are not expected to cause or significantly contribute to a violation of an applicable ambient air quality standard. Southern's proposed new compressors would operate on natural gas. FGT's compressor station modifications would include replacing one existing natural gas powered compressor with an electric

driven compressor, and uprating the horsepower on an existing gas powered compressor. Both Southern's and FGT's emissions for criteria pollutants associated with each compressor station would be less than applicable thresholds. Therefore, the Cypress Pipeline and FGT Expansion Projects would be considered as "minor sources" and would not require best available control technology or prevention of significant deterioration air quality modeling.

Noise would be generated during construction of the pipeline and during the construction and operation of the aboveground facilities. Construction activities in any one area could last from several weeks to several months on an intermittent basis. Construction equipment would be operated on an as-needed basis during this period. 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. The compressor stations that Southern proposes to install and the upgrades that FGT proposes to install would generate noise on a continuous basis once operating. The noise attributable to these new and modified facilities would comply with the FERC noise standards and neither project would result in significant noise impacts.

Safety

Southern and FGT would comply with U.S. Department of Transportation pipeline materials and construction standards for natural gas pipeline facilities. Following construction, Southern and FGT would initiate a pipeline integrity management plan to ensure public safety during operation of the proposed facilities.

Cumulative Impacts

We identified existing and foreseeable projects that overlap or could overlap with the Cypress Pipeline Project or the FGT Expansion Project throughout the length of the pipeline facilities. The major existing projects are the existing pipelines and powerlines that the projects would parallel over nearly the entire length of the projects. The foreseeable projects consist mainly of housing subdivision construction and road widening.

The majority of cumulative impacts would be temporary and minor. However, long-term cumulative impacts on vegetation and land uses in forested areas could occur if the other reasonably foreseeable future projects would be constructed and affect similar vegetation/land uses. Similarly, a number of wetlands could experience long-term cumulative impacts due to either maintenance activities, cutting trees, or filling of wetlands for constructing aboveground facilities. Alternatively, the projects could have some benefits such as a boost to the local economy associated with tax revenues or short-term benefits from jobs and wages and purchases of goods and materials.

ALTERNATIVES CONSIDERED

The No Action or Postponed Action Alternative was considered. While the No Action or Postponed Action Alternative would eliminate or delay the environmental impacts identified in this EIS, the stated objectives of the Southern and FGT proposals would not be met. The new supply source of natural gas from the Elba Island LNG Terminal would not be made available to the proposed service areas. Under this scenario, the existing natural gas transportation systems in Georgia and Florida would continue to provide natural gas service to this region. Denying or postponing a decision on Southern's and FGT's applications could limit access to new supplies of natural gas in the future, which could in turn contribute to higher natural gas prices, and could potentially result in customers conserving or reducing the use of natural gas. Denying or postponing action on Southern's and FGT's applications would more

than likely force their customers into seeking natural gas from other sources, using alternative energy sources, or using alternative fuels.

Alternatives involving the use of other existing transmission systems were evaluated. We did not identify any existing pipeline systems between the Elba Island LNG Terminal and northern Florida, or any pipeline system whose expansion would be environmentally preferable to Southern's proposed facilities. FGT's proposed looping and compression appears to maximize use of FGT's existing facilities and would minimize construction of new facilities. Other FGT system alternatives, such as less looping and greater compression, would reduce system reliability due to downtime for maintenance and repairs, and would result in increased noise and emissions. As a result, no system alternatives to FGT's proposed project are considered environmentally preferable. Therefore, we eliminated pipeline system alternatives from further consideration.

We evaluated two major route alternatives to Southern's proposed route, including one that would be shorter but also closer to the coastline and more congested areas, and one that would avoid terrestrial impacts by being located primarily offshore in the Atlantic Ocean. However, neither of these routes were environmentally preferably to the proposed route and were dropped from further consideration. In order to address specific issues or sensitive features identified during scoping or environmental review, several route variations were evaluated for Southern's proposed mainline. This included a collocation variation that would place Southern's entire proposed mainline within existing powerline corridors, rather than adjacent to the powerline corridors. Based on our review, the collocation variation was not considered practical due to concerns about worker safety in proximity to the high voltage powerlines and associated facilities, and due to the presence of other physical constraints such as guy wires and other foreign utilities. However, we determined that about 9 miles of the proposed route located within Effingham County, Georgia, could be collocated within the existing powerline corridor, and we recommended in the draft EIS that Southern shift its right-of-way into the powerline corridor in that segment. Since the issuance of the draft EIS, Southern has adopted the collocation variation along this 9-mile-long segment, which would reduce the amount of forestland cleared.

Several route variations were also evaluated to avoid land use and residential impacts, and to minimize forest clearing and fragmentation. Of those route variations, none were determined to be preferable to Southern's proposed route or more practicable, except for one minor variation, which we recommended in the draft EIS that Southern adopt to minimize forest clearing. Since the issuance of the draft EIS, Southern adopted this route variation.

We considered site alternatives for each of Southern's new compressor stations but none were found to be environmentally preferable to Southern's proposed compressor station sites. Since the issuance of the draft EIS, Southern has adopted an alternative site for its Rincon Gate Meter Station that would avoid permanently filling a pond. Additionally, FGT has adopted an alternative site for its remote blowdown valve that would avoid permanently filling a wetland. At other aboveground facility sites, we concluded that relocating these facilities to other sites offered no environmental advantages and we eliminated them from further consideration. Because FGT's proposed compressor station modifications and upgrades would occur within existing aboveground facility sites, we evaluated no alternative compressor station sites.

MAJOR CONCLUSIONS

We have determined that construction and operation of the Cypress Pipeline and FGT Expansion Projects would result in limited adverse environmental impacts based on information provided by Southern and FGT and further developed from data requests; field investigations; scoping; literature research; alternatives analysis; contacts with federal, tribal, state, and local agencies; and input from

public groups and organizations. These limited impacts would be most significant during the period of construction.

As part of our analysis, we developed specific mitigation measures that we believe are appropriate and reasonable for the construction and operation of the projects. We believe environmental impacts would be minimized if the projects are constructed and operated in accordance with applicable laws and regulations, Southern's and FGT's proposed mitigation, and our additional mitigation measures. The primary reasons for our decision are:

- about 95 percent of Southern's pipeline facilities and 99 percent of FGT's pipeline facilities would be located within or directly adjacent to existing pipeline and powerline corridors, both of which have been historically disturbed, are actively maintained, and have visual impacts consistent with the proposed projects;

- Southern and FGT would implement our Plan and Procedures to protect natural resources during construction and operation of the projects;

- the appropriate consultations with the FWS and SHPOs, and any appropriate compliance actions resulting from these consultations, would be completed before Southern and FGT would be allowed to begin construction in any given area; and

- an environmental inspection and mitigation monitoring program would ensure compliance with all mitigation measures that become conditions of the Certificate.