

1.0 INTRODUCTION

On July 29, 2004, Golden Pass LNG Terminal LP filed an application with the Federal Energy Regulatory Commission (FERC or Commission) in Docket No. CP04-386-000 for authorization under Section 3(a) of the Natural Gas Act (NGA) to site, construct, and operate a liquefied natural gas (LNG) terminal on the Port Arthur Channel of the Sabine-Neches Waterway (SNWW) in Jefferson County, Texas. In related applications filed on August 20, 2004, Golden Pass Pipeline LP seeks a Certificate of Public Convenience and Necessity (Certificate) to site, construct, and operate a new natural gas pipeline system and ancillary facilities to connect the LNG terminal to existing intrastate and interstate gas transmission facilities in Texas and Louisiana (Docket Nos. CP04-400-000, CP04-401-000, and CP04-402-000). Golden Pass LNG Terminal LP and Golden Pass Pipeline LP hereafter are referred to collectively as Golden Pass.

The proposed LNG facilities would import, store, and vaporize an average of approximately 2 billion cubic feet per day (Bcf/d) of natural gas (with a peak capacity of 2.7 Bcf/d) for delivery into the existing intrastate and interstate pipeline systems. The LNG import terminal would be constructed in two phases, and would be completed in about 60 months. The start of Phase 2 would depend on commercial supply and demand decisions, and would increase the annual average capacity from 1.0 to 2.0 Bcf/d. The import terminal would be designed to accept LNG cargoes, temporarily store and vaporize LNG, and would contain the following facilities:

- A protected LNG unloading slip, and an LNG ship and support vessel maneuvering area that would be capable of receiving up to 200 LNG ships per year;
- Ship unloading facilities consisting of two berths, each capable of accommodating LNG ships ranging from 125,000 cubic meters (m^3) to 250,000 m^3 , and associated facilities (both berths and the maneuvering area would be dredged during Phase 1; then the first berth would be completed during Phase 1 and the second during Phase 2);
- A total of five full-containment LNG storage tanks each with a working capacity of 155,000 m^3 (three tanks would be constructed during Phase 1 and two during Phase 2);
- A total of ten shell-and-tube heat transfer fluid (HTF) LNG heat exchangers¹ to vaporize the LNG (five exchangers would be installed during Phase 1 and five during Phase 2);
- A waterline that would extend for a distance of 2,400 feet from the Port Arthur Department of Water Utilities (Port Arthur DWU) at State Highway (SH) 87 to the LNG terminal; and
- Associated support facilities, including administrative buildings, storage and maintenance areas, electric power systems, access roads, and other facilities related to the LNG import terminal.

Golden Pass also proposes to construct a pipeline system, capable of transporting up to 2.5 Bcf/d of natural gas and consisting of three pipelines and associated pipeline support facilities, including pig launchers and receivers, and meter stations. The pipeline system would be installed in overlapping phases across three counties in Texas and one parish in Louisiana, and would consist of:

¹ As part of its preliminary design, Golden Pass originally proposed to use seawater for the vaporization process. In response to comments and concerns about the use of seawater and potential environmental impact on aquatic resources, Golden Pass eliminated the use of seawater for vaporization and instead proposes to use shell and tube vaporization technology.

- Mainline – A 77.8-mile-long, 36-inch-diameter pipeline extending from the LNG import terminal in Jefferson County through Orange, and Newton Counties, Texas (66.5 miles), and Calcasieu Parish, Louisiana (11.3 miles) to an interconnection with an existing Transcontinental Gas Pipe Line Corporation (Transco) interstate pipeline near Starks, Louisiana (to be installed over an estimated 12-month period);
- Loop – A 42.8-mile-long, 36-inch-diameter pipeline that would be installed adjacent to (*e.g.*, loop²) the Mainline and would extend from the LNG import terminal in Jefferson County to an interconnection with the existing American Electric Power Texoma Pipeline (AEP Texoma) in Orange County, Texas (to be installed over an estimated 8-month period beginning and concurrently with the Mainline);
- Beaumont Lateral – A 1.8-mile-long, 24-inch-diameter pipeline extending from the Mainline in Beaumont, Jefferson County, Texas to an interconnection with the existing Exxon Mobil Corporation (ExxonMobil) Beaumont Refinery Complex natural gas supply system and potentially other industrial customers in the Beaumont-Port Arthur area (to be installed over an estimated 2-month period after installation of the Loop is complete);
- Meter stations and interconnection facilities to interconnect with up to 10 existing intrastate and interstate pipelines³ and the ExxonMobil Beaumont Refinery Complex; and
- Associated pipeline facilities, including pig launchers and receivers, and block valves.

The staff of the FERC prepared this Environmental Impact Statement (EIS) to assess the environmental impact associated with construction of the Golden Pass LNG import terminal and associated pipeline system (referred to as the Golden Pass LNG Terminal and Pipeline Project or Project) in Jefferson, Orange, and Newton Counties, Texas, and Calcasieu Parish, Louisiana.

1.1 PROJECT PURPOSE AND NEED

The primary purpose of the Golden Pass LNG Terminal and Pipeline Project is to provide an additional source of firm, long-term, and competitively priced natural gas to the Texas intrastate and interstate natural gas markets. Several government studies demonstrate an increasing demand and a need for additional supplies of natural gas (U.S. Department of Energy [DOE], Energy Information Administration, 2001a, 2001b, 2002, 2003, 2004). Increased imports of LNG have been viewed as a means of meeting the projected shortfalls in natural gas supplies as demand increases. Further, LNG marine transportation is recognized as a viable way of accessing "stranded" natural gas reserves in production areas throughout the world that are inaccessible by conventional pipelines, thereby increasing availability of existing worldwide supplies to the United States (U.S.).

In addition, because of its existing chemical processing industry and the growing demand for electricity, the natural gas market is substantial in the Gulf of Mexico region (defined by the DOE as including Texas, Louisiana, Oklahoma, Arkansas, Alabama, Mississippi, Kentucky, and Tennessee). Adequate, competitively priced, and reliable supplies of natural gas are necessary to maintain the existing industrial base and economic well being of the area. The Gulf of Mexico region is primarily supplied with natural

² A loop is a segment of pipeline that is usually installed adjacent to an existing pipeline and connected to it at both ends.

³ Currently, there are no formal agreements in place for interconnects between the Golden Pass pipeline system and other existing pipelines.

gas from sources within the region itself and the region produced approximately 5 trillion cubic feet (Tcf) per year of natural gas in 2002 (DOE, 2004). Demand in this region alone is expected to increase from approximately 6.4 Tcf per year in 2003 to about 9.3 Tcf by 2025. This is a demand increase of about 2.9 Tcf per year by 2025. Comparing the 2002 regional production of 5 Tcf to the 2003 regional demand of 6.4 Tcf illustrates the fact that gas demand in the Gulf of Mexico region must be met from sources outside the region under today's market conditions. This shortfall could be at least 4.3 Tcf by 2025. The Golden Pass LNG Terminal and Pipeline Project would add about 2.0 Bcf per day of natural gas into the region or about 730 Bcf per year. The Project would help meet this growing demand by providing a new supply source and by providing service to multiple existing interstate and intrastate pipelines that serve the regional and national natural gas market.

To fulfill this purpose and need for the Project, Golden Pass states that a potentially viable terminal site and associated pipeline system must have, at a minimum, the following specific attributes:

- Be technically and economically feasible and practicable;
- Provide an LNG site that is situated near existing or proposed Texas intrastate and interstate pipeline systems with downstream takeaway capacity greater than 2.0 Bcfd, and capable of providing natural gas to the ExxonMobil Beaumont Refinery complex;
- Provide access to a deepwater (≥ 40 -foot) channel for a berthing facility capable of accommodating LNG ships with capacities of 250,000 m³;
- Allow for the terminal and vaporization facilities of at least 1.0 Bcfd of natural gas to be placed in-service by 2008 and at least a total of 2.0 Bcfd of natural gas to be placed in-service by 2009/2010; and
- Provide Golden Pass with sufficient control and proprietary rights of operation over its site and interconnecting pipelines to ensure facility operation and pipeline availability for a 25-year Project life.

Golden Pass states that the Project that it would construct and operate would have these attributes. In addition to the proposed LNG site and design, the proposed pipeline route would have the potential to interconnect with 10 existing natural gas pipeline systems and the ExxonMobil's Beaumont Refinery. These pipeline systems include Natural Gas Pipeline Company of America (NGPL), Centana Gas Pipeline (Centana), Kinder Morgan Texas Pipeline (KM Texas), Kinder Morgan Tejas Pipeline (KM Tejas), AEP Texoma, Florida Gas Transmission (Florida Gas), HPL/Channel A/S Pipeline (Channel), Tennessee Gas Pipeline (Tennessee Gas), Texas Eastern Transmission LP (TETCO), and Transco.

The proposed interconnections between the Golden Pass pipeline and these 10 interstate and intrastate pipelines would diversify the transportation and market opportunities for shippers. Shippers might choose any or all of these delivery points depending on their needs and transportation contracts with both Golden Pass and the interconnecting pipeline. Also, while Golden Pass proposes installing metering facilities that could handle the gas volumes identified in table 1.1-1, deliveries at these locations would only occur if the interconnecting pipeline has available transportation capacity.

Golden Pass conducted an open season, beginning on November 29, 2004 and ending on January 27, 2005. As a result of that open season, Golden Pass LNG Trading Company, Inc. signed a precedent agreement with Golden Pass to ship 2,600,910 decatherms per day (2.6 Bcfd) over a 25-year period .

TABLE 1.1-1 Potential Delivery Capacity at Interconnections			
Potential Customer	County /Parish	Existing Pipeline Diameter (inches)	Total Delivery Capacity Based on Proposed Meter Size (MMcfd)
NGPL	Jefferson, TX	30, 30	900
Centana	Jefferson, TX	10	100
KM Texas	Jefferson, TX	20	200
KM Tejas	Jefferson, TX	20	500
Beaumont-Port Arthur	Jefferson, TX	24	300
AEP Texoma	Orange, TX	30	1,000
Florida Gas	Orange, TX	24	440
Channel	Orange, TX	30	500
Tennessee Gas	Calcasieu, LA	30	700
TETCO	Calcasieu, LA	30	750
Transco	Calcasieu, LA	30, 30, 42	1,000
TOTAL		--	6,390

1.2 PURPOSE AND SCOPE OF THIS STATEMENT

The FERC is the federal agency responsible for authorizing onshore LNG import facilities and for approval to construct and operate associated pipeline facilities. As such, the FERC is the lead federal agency for the preparation of this EIS in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] Part 1500-1508), and the FERC’s regulations implementing NEPA (18 CFR Part 380).

The U.S. Army Corps of Engineers, Galveston District (COE), U.S. Coast Guard (Coast Guard), National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NOAA Fisheries), and U.S. Fish and Wildlife Service (FWS) are cooperating agencies for this Project. A cooperating federal agency has jurisdiction by law or special expertise with respect to environmental impacts involved with the proposal and is involved in the NEPA analysis. The Texas Parks and Wildlife Department (TXPWD) and the Louisiana Department of Wildlife and Fisheries (LADWF) have also assisted us⁴ in the preparation of this EIS.

This document is the final EIS for the Project and includes responses to comments received on the draft EIS. The EIS considers the environmental issues, including our recommended mitigation measures, and will be used as an element of the Commission’s review of the Golden Pass applications to determine whether to authorize the Project. Final approval will only be granted if, after consideration of both environmental and non-environmental issues, the FERC finds that the proposed Project is in the public interest. The environmental impact assessment and mitigation development discussed herein will be important factors in this final determination.

Our principal purposes in preparing this EIS are to:

- Identify and assess potential impacts on the human environment that would result from the implementation of the proposed action;

⁴ “We,” “us,” and “our” refer to the environmental staff of the FERC’s Office of Energy Projects.

- Identify and assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the human environment;
- Identify and recommend specific mitigation measures to minimize environmental impacts; and
- Facilitate public involvement in identifying significant environmental impacts.

Our analysis in this EIS focuses on the facilities that are under the FERC’s jurisdiction (*i.e.*, the LNG terminal and new pipeline system as proposed by Golden Pass).

The topics addressed in this EIS include geology; soils and sediments; water use and quality; wetlands; vegetation; wildlife, fisheries, marine invertebrates, and essential fish habitat (EFH); threatened, endangered, and special-status species; land use, recreation, and visual resources; cultural resources; socioeconomics; air quality and noise; cumulative effects; reliability and safety; and alternatives. The EIS describes the affected environment as it currently exists, discusses the environmental consequences of the proposed Project, and compares the Project’s potential impact to that of alternatives. The EIS also presents our conclusions and recommended mitigation measures.

1.3 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

As the lead federal agency for the Golden Pass LNG Terminal and Pipeline Project, the FERC is required to comply with Section 7 of the Endangered Species Act (ESA) of 1973, the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), Section 106 of the National Historic Preservation Act (NHPA), and Section 307 of the Coastal Zone Management Act of 1972 (CZMA). At the federal level, required permits and approval authority outside of the FERC’s jurisdiction include compliance with the Clean Water Act (CWA), the Rivers and Harbors Act, the Clean Air Act (CAA), and Coast Guard regulations relating to LNG waterfront facilities. Each of these statutes has been taken into account in the preparation of this document. The major permits, approvals, and consultations required for the Golden Pass LNG Terminal and Pipeline Project are identified in table 1.3-1.

Golden Pass submitted a Letter of Intent to the Coast Guard on October 29, 2004, and its permit application to the COE on December 3, 2004. Also included in the COE permit application were the Texas state water quality certification for the Section 404 application and a statement of compliance with the Texas Coastal Management Program (CMP) in Texas. Golden Pass revised and resubmitted these applications in April 2005, to incorporate the COE verification of wetlands at the LNG terminal site and beneficial use of the dredged materials from the marine berth area. Golden Pass also submitted confirmation from the Louisiana Department of Natural Resources (LADNR) that the Project would not be located within the designated coastal zone in Louisiana.

Section 7 of the ESA, as amended, states that any project authorized, funded, or conducted by any federal agency (*e.g.*, FERC) should not “...jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined...to be critical...” (16 United States Code [USC] Section 1536(a)(2)(1988)). The FERC, or Golden Pass as a non-federal party, is required to consult with the FWS and NOAA Fisheries to determine whether any federally listed or proposed endangered or threatened species or their designated critical habitat occur in the vicinity of the proposed Project.

TABLE 1.3-1

Major Permits, Approvals, and Consultations

Agency	Permit/Approval/Consultations
Federal	
Federal Energy Regulatory Commission	NGA, Section 3 (LNG terminal) – Authorization NGA, Section 7(c) (pipeline) – Certificate of Public Convenience and Necessity
Advisory Council on Historic Preservation	NHPA, Section 106 – Comment on the Project and its effect on historic properties
U.S. Army Corps of Engineers, Galveston District	Rivers and Harbors Act, Section 10 – Permit CWA, Section 404 – Authorization
U.S. Department of Commerce National Oceanic and Atmospheric Administration, National Marine Fisheries Service	ESA, Section 7 – Threatened and endangered species consultation MSFCMA – EFH consultation Marine Mammal Protection Act – Consultation (LNG terminal)
U.S. Department of the Interior U.S. Fish and Wildlife Service, Regions 2 and 4	Section 7, ESA – Threatened and endangered species consultation Migratory Bird Treaty Act – Consultation Fish and Wildlife Coordination Act
U.S. Environmental Protection Agency, Region VI	CAA, Sections 171-192, New Source Review – Review for emissions that exceed the major source thresholds listed 40 CFR §52.21(b)(1)(i) (LNG terminal) CWA, Section 404 – Oversee issuance of the Section 404 permit CWA, Section 402 – National Pollutant Discharge Elimination System (NPDES) permit (Notice of Intent). Construction General Permit – Stormwater Pollution Prevention Plan.
U.S. Department of Homeland Security U.S. Coast Guard	33 CFR 127, Waterfront Facilities Handling LNG and Liquefied Hazardous Gas (LNG terminal) 33 CFR 127, Letter of Intent (LNG terminal) Permission to Establish Aids to Navigation (LNG terminal)
Texas	
Railroad Commission of Texas	CWA, Section 401 – Hydrostatic test water discharge (NPDES) permit; Section 401 Water Quality Certification, Texas Pollutant Discharge Elimination System (TPDES) Wastewater Discharge Operating Permit (copy of EPA application) (LNG terminal)
Texas Commission on Environmental Quality	CAA – Air Quality Pre-Construction Permit, Title V Operating Permit, Solid waste registration (LNG terminal) CWA - TPDES wastewater discharge permit, temporary water use permit (hydrostatic testing) (LNG terminal); Section 402 Water Quality Certification, TPDES construction storm water general permit, temporary water use permit (hydrostatic testing) (pipeline)
Texas Parks and Wildlife Department	ESA – Threatened and endangered species consultation Easement to cross J.D. Murphree Wildlife Management Area (pipeline)
Texas Historical Commission	NHPA, Section 106 – Review and comment on undertakings potentially affecting cultural resources
Texas Coastal Coordination Council	CZMA – Consistency determination with the Texas CMP.
Texas Department of Transportation	Road opening/access permit; pipeline road crossing permits (pipeline)

TABLE 1.3-1 (cont'd)	
Major Permits, Approvals, and Consultations	
Agency	Permit/Approval/Consultations
Texas General Land Office	Right-of-way on public lands
City of Port Arthur	Building permits, pipeline permit (LNG terminal)
City of Beaumont	Pipeline license agreement (pipeline)
Jefferson County	Pipeline permit
Orange County	Floodplain development permit (pipeline)
Newton County	Pipeline road crossing fee
Irrigation Districts	Canal crossing approval (pipeline)
Levee Districts	Letter of no objection (pipeline)
Louisiana	
Louisiana Department of Environmental Quality	CWA, Section 401 – Water Quality Certification, Louisiana Pollution Discharge Elimination System (LPDES) construction stormwater discharge general permit, hydrostatic discharge general permit (pipeline) Groundwater certifications for aboveground facilities (pipeline)
Louisiana Department of Wildlife and Fisheries	ESA – Threatened and endangered species consultation (pipeline) Easement through Sabine Island Wildlife Management Area
Louisiana Department of Culture, Recreation & Tourism, Office of Cultural Development, Division of Archaeology	NHPA, Section 106 – Review and comment on undertakings potentially affecting cultural resources (pipeline)
Louisiana Department of Transportation	Road opening/access permit, road crossing permits (pipeline)
Louisiana State Lands Office	Right-of-way on public lands (pipeline)
Calcasieu Parish Police Jury	Building permits and floodplain development permit (pipeline)
Irrigation Districts	Canal crossing approval (pipeline)
Levee Districts	Letter of no objection (pipeline)

If, upon review of existing data or data provided by the applicant, the FERC determines that these species or habitats may be affected by the proposed Project, the FERC is required to prepare a biological assessment (BA) to identify the nature and extent of adverse impact and to recommend measures that would avoid the habitat and/or species, or would reduce potential impact to acceptable levels. If, however, the FERC determines that no federally listed or proposed endangered or threatened species or their designated critical habitat would be affected by the proposed Project, no further action is necessary under the ESA. See section 4.7 of this EIS for the status of this review.

The MSFCMA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance EFH for those species regulated under a federal fisheries management plan. The MSFCMA requires federal agencies to consult with NOAA Fisheries on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH (MSFCMA §305(b)(2)). Although absolute criteria have not been established for conducting EFH consultations, NOAA Fisheries recommends consolidating EFH consultations with interagency coordination procedures required by other statutes, such as NEPA, the Fish and Wildlife Coordination Act, or the ESA (50 CFR 600.920(e)), to reduce duplication and improve efficiency. As part of the consultation process, the FERC has prepared an EFH assessment included in section 4.6.3 of this EIS.

Section 106 of the NHPA requires the FERC to take into account the effects of its undertakings on properties listed in or eligible for listing in the National Register of Historic Places (NRHP), including prehistoric or historic sites, districts, buildings, structures, objects, or properties of traditional religious or cultural importance to Indian Tribes, and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. The FERC has requested that Golden Pass, as a non-federal party, assist in meeting the FERC's obligation under Section 106 by preparing the necessary information and analyses as required by the ACHP regulations in 36 CFR 800. See section 4.10 of this EIS for the status of this review.

The CZMA calls for the "effective management, beneficial use, protection, and development" of the nation's coastal zone and promotes active state involvement in achieving those goals. As a means to reach those goals, the CZMA requires participating states to develop management programs that demonstrate how these states will meet their obligations and responsibilities in managing their coastal areas. In Texas, the Coastal Coordination Council administers the Texas CMP. The Commissioner of the General Land Office chairs the Council. Other members include the Commissioner (or member designated by the Commissioner) of the TXPWD, the Railroad Commission of Texas, and the Texas Commission on Environmental Quality (TXCEQ). The Railroad Commission of Texas states that it would be the certifying agency for the LNG facility for consistency with the CMP. In Louisiana, the LADNR administers the Coastal Zone Management Program. However, the LADNR has confirmed that the Project would not be located within the designated coastal zone in. Because Section 307 of the CZMA requires federal agency activities to be consistent to the maximum extent practicable with the enforceable policies of a management program, the FERC has requested that Golden Pass seek a determination of consistency with Texas' CMP. See section 4.8.5 of this EIS for additional discussion of the Texas CMP.

The Coast Guard exercises regulatory authority over LNG facilities which affect the safety and security of port areas and navigable waterways under Executive Order 10173, the Magnuson Act (50 USC Section 191), the Ports and Waterways Safety Act of 1972, as amended (33 USC Section 1221, *et seq.*) and the Maritime Transportation Security Act of 2002 (46 USC Section 701). The Coast Guard is responsible for matters related to navigation safety, vessel engineering and safety standards, and all matters pertaining to the safety of facilities or equipment located in or adjacent to navigable waters up to the last valve immediately before the receiving tanks. The Coast Guard also has authority for review of the LNG facility security plan, approval and compliance verification as provided in Title 33 CFR Part 105, and siting as it pertains to the management of vessel traffic in and around the LNG facility. See section 4.13.5 of this EIS for additional discussion of marine safety.

The FERC encourages cooperation between applicants and state and local authorities, but this does not mean that state and local agencies, through application of state and local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by the FERC. Any state or local permits issued with respect to jurisdictional facilities must be consistent with the conditions of any authorization issued by the FERC.⁵

1.4 PUBLIC REVIEW AND COMMENT

On November 19, 2003, Golden Pass filed a request with the FERC to use the NEPA Pre-filing Process. At that time, Golden Pass was in the preliminary design stage of the Project and no formal application had

⁵ 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).

been filed with the FERC. The request to use the NEPA Pre-filing Process was approved on December 5, 2003, and a pre-filing docket number (PF04-1) was established to place information filed by Golden Pass and related documents issued by the FERC into the public record. The NEPA Pre-filing process provided opportunities for interested stakeholders to become involved early in Project planning, facilitated interagency cooperation, and assisted in the identification of issues prior to Golden Pass filing its applications with the FERC.

On January 26, 2004, we issued a *Notice of Environmental Review and Scoping for the Golden Pass LNG Terminal and Pipeline Project and Request for Comments on Environmental Issues* (NOER). This notice was sent to 567 interested parties including federal, state, and local officials; agency representatives; conservation organizations; Native American tribes; local libraries and newspapers; residents within a 0.5 mile of the proposed LNG terminal; and property owners along the proposed pipeline routes. It also announced that the FERC staff was initiating its NEPA Pre-Filing review to allow interested stakeholders to be involved early in Project planning and to identify and resolve issues before the applications were filed with the FERC.

On September 20, 2004, after Golden Pass filed its applications, we issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Golden Pass LNG Terminal and Pipeline Project and Request for Comments on Environmental Issues and Notice of Public Scoping Meetings and Site Visit* (NOI). The NOI was sent to 586 interested parties including federal, state, and local officials; agency representatives; conservation organizations; local libraries and newspapers; residents within 0.5 mile of the proposed LNG terminal; and property owners along the proposed pipeline route.

In October 2004, we conducted public scoping meetings in Sabine Pass, Texas (October 5, 2004) and Starks, Louisiana (October 6, 2004) to provide an opportunity for the public to learn more about the Project and to provide comments on environmental issues to be addressed in the EIS. FERC staff also conducted a site visit, open to the public, of the LNG terminal site and pipeline route. A total of 53 people commented at the scoping meeting in Sabine Pass, Texas; none commented at the scoping meeting in Starks, Louisiana. Comments were generally supportive of the Project, with the exception of landowners on Pleasure Island who expressed concerns about the proximity of their residences to the LNG facility and the impact of the facility on their safety and viewshed. A transcript of these comments is part of the public record for the Golden Pass LNG Terminal and Pipeline Project.

Publication of the NOI opened the time period for written comments on the Project and established a closing date of October 20, 2004, for receiving comments, although we continued to review and accept comments after the close of the comment period. In total, 137 comment letters were received in response to the NOER and the NOI, or at the public meetings.

In addition to the public notice process discussed above, we conducted additional agency consultations to identify issues that should be addressed in the EIS. On May 18, 2004, we met with representatives of the FWS, COE, NOAA Fisheries, U.S. Department of Transportation (DOT), U.S. Environmental Protection Agency (EPA), Coast Guard, Railroad Commission of Texas, TXPWD, and Texas Coastal Coordination Council. Topics discussed included agency coordination for the review of the multiple LNG projects in Texas and Louisiana, the approach to the alternatives and cumulative impact analyses in the EIS, and specific concerns of the agencies that should be addressed in the EIS. On November 3 and 4, 2004, we attended a field review of the Sabine Island Wildlife Management Area (WMA) and potential nearby red-cockaded woodpecker (RCW) habitat with the COE, FWS, TXPWD, and LADWF.

On March 3, 2005, the FERC issued the draft EIS for the Project and filed it with the EPA. A formal notice was published in the Federal Register announcing that the draft EIS was available and had been mailed to individuals and organizations on the draft EIS mailing list prepared for the Project. In

accordance with the CEQ regulations implementing NEPA, the public was allowed approximately 45 days (or until April 19, 2005) to comment on the draft EIS in the form of written comments or at the public meeting. Public meetings to receive comments on the draft EIS were held on March 22, 2005 in Starks, Louisiana and on March 23, 2005, in Sabine Pass, Texas.

We received comment letters from 5 federal agencies, 3 state agencies, 14 individuals or organizations, and the applicant. A total of 31 people provided statements at the public meetings, one at the Starks, Louisiana meeting and 30 at the Sabine Pass, Texas meeting. Comments on the draft EIS received by May 13, 2005, and the FERC staff's responses to those comments are provided in appendix I of this document. Golden Pass submitted 23 filings to the Commission as comments on the draft EIS. These filings included minor modifications to the Project, supplemental information, and revisions to various documents/applications that are being reviewed by other federal and state agencies.. Vertical bars that appear in the margins of this final EIS mark all substantive changes in this final EIS. These changes were made both in response to agency and public comments received on the draft, EIS and new information that became available from Golden Pass after issuance of the draft EIS.

Issues identified during the public comment process are summarized in table 1.4-1.

TABLE 1.4-1 Issues Identified During the Public Scoping Process		
Issue	Specific Comments	EIS Section Where Comments are Addressed
General	Identify all utility lines associated with the Project.	1.5
Alternatives	Consideration of geographic alternatives, site alternatives, functional alternatives, project design alternatives, less environmentally damaging practical alternatives, offshore alternatives, and alternative routes for associated utility lines. Consideration of alternatives for specific areas, including the J. D. Murphree and Sabine Island WMAs. Golden Pass submitted filings as comments on the draft EIS. These filings included minor modifications to the Project, as well as revisions to various documents under review by other federal and state agencies. .	3.0
Water Use and Quality	Use a closed loop vaporization system. Consider beneficial use for any dredged soil materials from the facility site, such as for creating fishery habitat or to enhance eroded and degraded marsh habitats near the LNG facility (for example, in TXPWD owned and privately owned wetlands in the Salt Bayou Drainage both north and south of Keith Lake). Stormwater management plan should be included in the EIS that addresses avoiding export of excess nutrients, pollutants and sediments from the facility into adjacent wetland and open water habitats.	3.5, 4.3.3, 4.4
Wetlands	Consideration of minimization/avoidance of and compensation for impacts to wetlands. Include an analysis of proposed mitigation for impacts to wetlands and aquatic habitats. Include a functional assessment of impacted wetlands and a demonstration that proposed mitigation provides replacement of lost wetland functions. Include pre-construction and post-construction surveys and aerial photography of pipeline rights-of-way in wetlands to determine pre-project contours, elevations, vegetation types and vegetative cover. Consideration of minimizing workspace requirements in wetlands. Consideration of specific TXPWD recommendations for pre- and post-construction monitoring criteria and protocols in J.D. Murphree WMA. Consideration of preferred timing of construction through marsh habitats is between March and August. Consideration of revisions to the Aquatic Resources Mitigation Plan to include beneficial use of the dredged material in the J.D. Murphree WMA, mitigation for permanent wetland losses in Louisiana, and different mitigation ratios.	4.4

TABLE 1.4-1 (cont'd)		
Issues Identified During the Public Scoping Process		
Issue	Specific Comments	DEIS Section Where Comments are Addressed
Vegetation, Fish, and Wildlife	Include EIS sections to discuss impacts on and mitigation for EFH for postlarval, juvenile, and adult red drum; adult and subadult Spanish mackerel; and juvenile and subadult white and brown shrimp. Consideration of lighting at the terminal site that is shaded or directed to the facilities so as to minimize impacts on migratory species and nocturnal wildlife patterns. Consideration of meaningful mitigation for unavoidable impacts, including projects such as Keith Lake Fish Pass of the hydrological reconnection of the tidal marshes south of the Gulf Intracoastal Waterway to the freshwater dominated system north of the Gulf Intracoastal Waterway via siphons underneath the waterway. Characterize habitats so that an accurate evaluation of fish and wildlife impacts can be established.	4.5, 4.6.2, 4.6.3, 4.6.1.2
Threatened, Endangered, and Special-Status Species	Consideration of potential for impacts on listed species, including the brown pelican, gulf sturgeon, green sea turtle, Hawksbill sea turtle, Kemp's Ridley sea turtle, leatherback sea turtle, and loggerhead sea turtle. Conduct surveys for RCW in Louisiana.	4.7
Land Use, Recreation, and Visual Resources	Consideration of public health concerns from non-hazardous solid waste or other materials. Consideration of adverse impacts to residential areas and communities. Consideration of potential impacts to The Nature Conservancy's Persimmon Gully Preserve in Louisiana, and the Simon and Delaney and Bryan Farm wetland mitigation banks. Consideration of visual impacts of the LNG facility on nearby residences on Pleasure Island. Consideration of impacts on future development of property in Newton County, Texas.	4.8
Socioeconomics	Consideration of beneficial and long-term impacts associated with land use and influx of people into the area. Consideration of environmental justice in compliance with Executive Order 12898.	4.9
Air Quality and Noise	Consideration of potential health concerns associated with air quality, including use of dust control measures, potential releases of air toxins, and compliance with air quality standards.	4.11
Cumulative Impacts	Include a discussion of environmental impacts associated with the multiple proposed LNG facilities in the Sabine Lake area. Consideration of a discussion of cumulative impacts on coastal habitats and freshwater wetlands. Consideration of cumulative impacts of dredge material disposal area requirements for the three LNG terminals and the Sabine-Neches Waterway Improvement project.	4.12
Safety	Consideration of safety issues for nearby residences on Pleasure Island associated with the LNG ship traffic and LNG storage tanks.	4.13
Mitigation	Discuss mitigation in the EIS.	Various and 5.1

This final EIS was mailed to the agencies, individuals, and organizations on the mailing list included in appendix A, and was submitted to EPA for a formal notice of availability. In accordance with CEQ's regulations implementing NEPA, no agency decision on a proposed action may be made until 30 days after the EPA publishes a notice of availability of the final EIS. However, the CEQ regulations provide an exception to this rule when an agency decision is subject to a formal internal process that allows other agencies or the public to make their views known. In such cases, the agency decision may be made at the same time as the notice of the final EIS is published, allowing both periods to run concurrently. Should the Commission authorize the proposed Project, it would be subject to a 30-day rehearing period. Therefore, the Commission could issue its decision concurrently with the EPA's notice of availability.

1.5 NONJURISDICTIONAL FACILITIES

Under Section 3 of the NGA, the FERC considers all relevant factors bearing on the siting of LNG import facilities. Under Section 7 of the NGA, the FERC is required to consider, as part of a decision to certificate jurisdictional facilities, all facilities that are directly related to the Project where there is sufficient federal control and responsibility to warrant environmental analysis as part of this jurisdictional proceeding. The jurisdictional facilities for the Golden Pass LNG Terminal and Pipeline Project include the LNG terminal facilities, the waterline from SH 87 to the LNG terminal site, the natural gas pipeline system and associated facilities, the Beaumont Lateral, and the interconnect meter stations. These are discussed in detail in this EIS.

Occasionally, proposed projects have associated facilities that do not come under the jurisdiction of the Commission. Golden Pass identified the following potential nonjurisdictional facilities related to the proposed Project (see table 1.5-1):

- A 230 kilovolt (kV) powerline to provide 35 megawatts of electric power to the LNG facility would be constructed and operated by Entergy. Entergy is currently evaluating multiple alternative segments for two routes, one from its Port Acres Bulk Substation and one from its Sabine Substation. The first route for the powerline would be about 10 miles long, and would extend south-southeast from the Port Acres Bulk Substation, located near SH 73 in Port Arthur, to the LNG terminal site. The second route would provide additional and redundant capacity. The second route would be about 24 miles long and would extend from Sabine Substation, located north of the Neches River, south to the Golden Pass LNG facility.
- Ten pipeline laterals, ranging in diameter from 10 to 30 inches and in length from 50 to 4,400 feet, to connect the planned meter station interconnects on the Golden Pass Mainline to the existing interstate and intrastate pipeline systems. These connecting laterals would be constructed by the respective owner/operators.

TABLE 1.5-1 Potential Associated Nonjurisdictional Facilities				
Owner/ Operator	County, State	Potential Facility	Milepost	Approximate Length (miles / feet)
Powerline:				
Entergy	Jefferson, TX	230 kV powerline	LNG site	10.0 (52,800 feet)
Pipeline Laterals:				
NGPL (interstate)	Jefferson, TX	30-inch pipeline	1.2	0.04 (225 feet)
Centana (intrastate)	Jefferson, TX	10-inch pipeline	1.2	0.11 (600 feet)
KM Texas (intrastate)	Jefferson, TX	20-inch pipeline	32.6	0.01 (50 feet)
KM Tejas (intrastate)	Jefferson, TX	20-inch pipeline	34.6	0.01 (50 feet)
AEP Texoma (intrastate)	Orange, TX	30-inch pipeline	42.8	0.69 (3,650 feet)
Florida Gas (interstate)	Orange, TX	24-inch pipeline	44.0	0.83 (4,400 feet)
Channel (intrastate)	Orange, TX	30-inch pipeline	60.6	0.1 (525 feet)
Tennessee Gas (interstate)	Calcasieu, LA	30-inch pipeline	72.8	0.01 (50 feet)
TETCO (interstate)	Calcasieu, LA	30-inch pipeline	75.2	0.01 (50 feet)
Transco (interstate)	Calcasieu, LA	30-inch pipeline	77.8	0.05 (250 feet)

Under NEPA, the Commission has the responsibility to attempt to review infrastructure facilities that are associated with, and a necessary part of, a jurisdictional project. Our review indicates that none of these facilities are likely to be constructed if not for the action (*e.g.*, LNG terminal and pipeline system) proposed by Golden Pass.

Of the facilities identified above, the powerline would be necessary for the operation of the LNG facility to meet the LNG facility's electric power requirements. Construction of the interconnecting pipelines (or laterals) would depend on whether the pipeline companies enter into agreements with Golden Pass to accept delivery of natural gas from the Golden Pass pipeline system. Since the powerline and laterals would be constructed solely for the use (or as a direct result) of this Project, we have included such information as is available for them in appendix B of this EIS. However, we note that, because there are no agreements in place between Golden Pass and the operators of the pipelines at the potential interconnect sites, the exact location and length of the interconnecting laterals is speculative and may change.

All of these facilities would require some level of review and approval by appropriate federal and state agencies depending on the extent of the construction disturbance, the resources affected, and applicable federal and state regulations. For example, the powerline would be subject to review and approval by the Public Utility Commission of Texas, which would conduct an environmental review of the line and its route, including alternative routes. In addition to the Certificate of Convenience and Necessity, permits that may be required depending on the final route chosen include a COE permit, a stormwater permit, and various county and local approvals.

Based on our review of information provided by Golden Pass on the nonjurisdictional facilities discussed above, and our site review of the general location where these facilities would be located, we believe environmental impact associated with these nonjurisdictional facilities would be minimal. However, to ensure that potential issues are adequately addressed, **we recommend that:**

- **Golden Pass file the following information on nonjurisdictional facilities:**
 - a. **a map showing the final location of all nonjurisdictional facilities, including the Entergy powerline and associated pipeline laterals identified on table 1.5-2 of this EIS;**
 - b. **documentation of consultations with the appropriate agencies and the status of federal, state, or local permits or approvals required for their construction; and**
 - c. **status, and copies of agency clearances (or copies of any surveys and reports prepared) for wetlands, threatened and endangered species, and cultural resources.**

Golden Pass should defer obtaining service from or providing service to any nonjurisdictional facility until this information has been filed with the Secretary of the Commission (Secretary).