

INTRODUCTION

SECTION 1

1.0 INTRODUCTION

On December 7, 2012, Cameron LNG, LLC (Cameron LNG) filed an application with the Federal Energy Regulatory Commission (Commission or FERC) pursuant to Section 3(a) of the Natural Gas Act (NGA) and Part 153 of the Commission's regulations. Cameron LNG requests authorization to site, construct, and operate liquefaction and export facilities adjacent to its existing liquefied natural gas (LNG) terminal in Cameron and Calcasieu Parishes, Louisiana. The Cameron LNG Liquefaction Project (referred to in this Environmental Impact Statement [EIS] as the Terminal Expansion) would allow Cameron LNG to liquefy domestic natural gas supplies for the export of approximately 12 million metric tons per year (mtpy) of LNG.

On December 14, 2012, Cameron Interstate Pipeline, LLC (Cameron Interstate) filed an application with the FERC pursuant to Section 7(c) of the NGA and Part 153 of the Commission's regulations requesting authorization to site, construct, operate, and maintain a new pipeline in Cameron, Calcasieu, and Beauregard Parishes, Louisiana. The Cameron Pipeline Expansion Project (referred to in this EIS as the Pipeline Expansion) would add bi-directional flow (north/south) capability to the existing Cameron Interstate Pipeline allowing the pipeline to transport natural gas from various interstate pipeline interconnections to the Cameron LNG Terminal for export, as well as sending out regassified LNG from the terminal to the same pipeline interconnections.

Cameron LNG and Cameron Interstate (collectively Cameron) are wholly owned subsidiaries of Sempra Energy. Collectively, Cameron's actions and facilities are referred to in this EIS as the Cameron Liquefaction Project (Project). As part of the Commission's consideration of these applications, we¹ prepared this EIS to assess the potential environmental impacts resulting from construction and operation of the proposed Project in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA).

The existing Cameron LNG Terminal is approximately 2 miles north of the City of Hackberry, Louisiana, on the west side of the Calcasieu Ship Channel. Currently, the Cameron LNG Terminal receives LNG by marine vessel shipment (LNG carriers) and is authorized to export previously imported foreign-sourced LNG. The Terminal Expansion would allow an increase in LNG storage capacity by 160,000 cubic meters (m³), for a total LNG storage capacity of 640,000 m³ at the expanded terminal, and the export of domestic natural gas in the form of LNG from the terminal. Cameron LNG is not requesting changes to the annual number of LNG carrier transits to the existing berths or changes to the size of carriers that would transport the LNG.

In addition to liquefying natural gas and exporting LNG, the Cameron LNG Terminal would continue to have the capability to regasify (vaporize) imported LNG. Although the design of the facility would allow concurrent liquefaction, regasification, and transfer of LNG to and from ships concurrently, market conditions would make that an unrealistic scenario. In addition, Cameron LNG's commercial agreements preclude simultaneous regasification and liquefaction.

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

As a result, at any point in time Cameron LNG would operate the expanded terminal exclusively as a liquefaction/export facility or exclusively as an import/regasification facility.

If Cameron LNG receives FERC authorization and all other permits, authorizations, and approvals for the proposed Terminal Expansion, it anticipates conducting construction and requesting in-service in three phases. Cameron LNG anticipates an initial in-service date to liquefy natural gas (first liquefaction train) in the summer of 2017 for export of up to 4 mtpy of LNG. Cameron LNG expects to place the second liquefaction train in service in early 2018 and the third liquefaction train in summer 2018. As a result, full-service export from all three liquefaction trains is expected to be up to 12 mtpy in 2018. The Terminal Expansion would include the following key facilities:

- three liquefaction trains, each capable of producing 4 mtpy of LNG for export;
- a 160,000-m³ full containment LNG storage tank;
- refrigerant make-up and condensate product storage tanks;
- a truck loading/unloading area;
- a work dock to transport large pieces of equipment and construction materials to the Terminal Expansion site by sea;
- utilities and associated systems; and
- minor modifications to the existing Cameron LNG Terminal facilities.

Currently, the existing terminal only receives natural gas by LNG carriers. The proposed Pipeline Expansion would provide bi-directional flow along the Cameron Interstate Pipeline system to/from the expanded terminal from five interstate pipeline interconnections described below. The Pipeline Expansion would extend northward from the existing interconnection with Florida Gas Transmission (FGT) to a new interconnection with Trunkline Gas Pipeline (Trunkline).

If Cameron Interstate receives a Certificate of Public Convenience and Necessity (Certificate) from the FERC and all other permits, authorizations, and approvals for the proposed Pipeline Expansion, Cameron Interstate anticipates it would begin construction in 2015 and be in service in 2016. Construction would consist of the following key facilities:

- about 21 miles of 42-inch-diameter pipeline between its existing interconnection with FGT and the proposed new interconnection with Trunkline;
- a new 56,820-horsepower compressor station (Holbrook Compressor Station) consisting of 12 natural gas-driven compressor units, associated buildings, and a backup power generator at milepost (MP) 8.4;
- one new interconnection with Trunkline at the existing LA Storage interconnection facility;
- modifications to existing interconnections and metering facilities with Transcontinental Gas Pipeline Corporation (Transco), Texas Eastern

Transmission Company (TETCO), FGT, and Tennessee Gas Pipeline (TGP) systems, and the Cameron LNG Terminal; and

- associated pipeline facilities, including metering units, control buildings, pig receivers and launchers², and valves.

Under Section 3 of the NGA, the FERC considers as part of its decision to authorize natural gas facilities, all factors bearing on the public interest. Specifically, regarding whether to authorize natural gas facilities used for importation or exportation, the FERC shall authorize the proposal unless it finds that the proposed facilities will not be consistent with the public interest.

Under Section 7 of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate to construct and operate them. The Commission bases its decisions on technical competence, financing, rates, market demand, gas supply, environmental impact, long-term feasibility, and other issues concerning a proposed project.

1.1 PROJECT PURPOSE AND NEED

Cameron's stated Project purpose is to transport and liquefy domestic natural gas into LNG for export, and deliver competitively-priced LNG to foreign markets. Other specific Project objectives are as follows:

- enable bi-directional flow of natural gas along the Cameron Interstate Pipeline system and allow natural gas to be received from five pipeline interconnections;
- allow natural gas to be received by pipeline at the expanded LNG terminal; treated, liquefied, and stored; and loaded from the LNG storage tanks into vessels berthed at the terminal's existing marine facility;
- preserve the import and re-gasification capabilities of the Cameron LNG Terminal; and
- preserve export capability of foreign-sourced LNG at the Cameron LNG Terminal.

Cameron LNG entered into commercial development agreements with three companies for the proposed Terminal Expansion. These parties agreed to share in the development costs of the expansion and executed long-term tolling capacity agreements with Cameron LNG. Under these agreements, Cameron LNG would not take ownership of the natural gas feedstock or LNG product but would only provide services for natural gas pre-treatment, vaporization, LNG storage, and marine services, including loading of LNG carriers prior to export by its customers.

Cameron Interstate conducted a non-binding open season from November 1 through November 30, 2012, to determine the level of interest from domestic natural gas shippers to supply natural gas for transport by the proposed Pipeline Expansion to the Terminal Expansion. As a result, Cameron Interstate received confidential expressions of interest for all of the proposed incremental transportation capacity of the Pipeline Expansion.

² A pipeline "pig" is a device to clean or inspect the pipeline. A pig launcher/receiver is an aboveground facility where pigs are inserted or retrieved from the pipeline.

1.2 PURPOSE AND SCOPE OF THIS STATEMENT

The principal purposes in preparing an EIS are to:

- identify and assess potential impacts on the human environment that would result from implementation of the proposed action;
- identify and assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the human environment;
- facilitate public involvement in identifying significant environmental impacts; and
- identify and recommend specific mitigation measures to avoid or minimize environmental impacts.

This EIS focuses on the facilities that are under the FERC's jurisdiction (that is, the proposed Terminal Expansion and Pipeline Expansion facilities). The topics addressed in this EIS include geology; soils; water use and quality; wetlands; vegetation; wildlife; fisheries and essential fish habitat (EFH); threatened, endangered, and special status species; land use, recreation, and visual resources; socioeconomic; cultural resources; air quality; noise; reliability and safety; cumulative impacts; and alternatives. This EIS describes the affected environment as it currently exists, discusses the potential environmental consequences of the proposed Project, and compares the Project's potential impact to that of alternatives. This EIS also presents our conclusions and recommended mitigation measures.

The Energy Policy Act of 2005 (EPAct 2005) provides that the FERC shall act as the lead agency for coordinating all applicable authorizations related to jurisdictional natural gas facilities and for purposes of complying with NEPA. The FERC, as the "lead federal agency", is responsible for preparation of this EIS. This effort was undertaken with the participation and assistance of the U.S. Army Corps of Engineers (COE), U.S. Coast Guard (Coast Guard), U.S. Department of Energy (DOE), and U.S. Department of Transportation (DOT) as "cooperating agencies" under NEPA. Cooperating agencies have jurisdiction by law or special expertise with respect to environmental impacts involved with a proposal. The roles of the FERC, COE, Coast Guard, DOE, and DOT in the Project review process are described below. The EIS provides a basis for coordinated federal decision making in a single document, avoiding duplication among federal agencies in the NEPA environmental review processes. In addition to the lead and cooperating agencies, other federal, state, and local agencies may use this EIS in approving or issuing permits for all or part of the proposed Project. Federal, state, and local permits, approvals, and consultations for the proposed Project are discussed in section 1.5.

1.2.1 Federal Energy Regulatory Commission

Based on its authority under the NGA, the FERC is the lead agency for preparation of this EIS in compliance with the requirements of NEPA, the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (Title 40 of the Code of Federal Regulations [CFR], Parts 1500-1508 [40 CFR 1500-1508]), and FERC regulations implementing NEPA (18 CFR 380).

As the lead federal agency for the Cameron Liquefaction Project, the FERC is required to comply with Section 7 of the Endangered Species Act (ESA), as amended, 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 (CZMA). Each of these statutes has been taken into account in the preparation of this EIS. The FERC will use this document to consider the environmental impacts that could result if it issues an authorization to Cameron LNG under Section 3(a) of the NGA and a Certificate to Cameron Interstate under Section 7(c) of the NGA.

1.2.2 U.S. Army Corps of Engineers

The COE has jurisdictional authority pursuant to Section 404 of the Clean Water Act (CWA) (Title 33 of the United States Code [USC], Section 1344 [33 USC 1344]), which governs the discharge of dredged or fill material into waters of the United States, and Section 10 of the Rivers and Harbors Act (33 USC 403), which regulates any work or structures that potentially affect the navigable capacity of a waterbody. Because the COE would need to evaluate and approve several aspects of the Project and must comply with the requirements of NEPA before issuing permits under the above statutes, it has elected to participate as a cooperating agency in the preparation of this EIS. The COE would adopt the EIS in compliance with 40 CFR 1506.3 if, after an independent review of the document, it concludes that the EIS satisfies the COE's comments and suggestions. The Project occurs within the New Orleans District of the COE Mississippi Valley Division. Staff from this COE district participated in the NEPA review and will evaluate COE authorizations, as applicable.

The primary decisions to be addressed by the COE include:

- issuance of a Joint Coastal Use Permit (CUP) with the Louisiana Department of Natural Resources (LDNR), Coastal Management Division for wetland impacts associated with construction of the Terminal Expansion;
- issuance of a Section 404 Permit for wetland impacts associated with construction of the Pipeline Expansion; and
- issuance of a Section 10 Permit for construction activities within navigable waters of the United States.

This EIS contains information needed by the COE to reach decisions on these issues. Through the coordination of this document, the COE will obtain the views of the public and natural resource agencies prior to reaching its decisions on the Project.

As an element of its review, the COE must consider whether a proposed project avoids, minimizes, and compensates for impacts on existing aquatic resources, including wetlands, to strive to achieve a goal of no overall net loss of values and functions. Based on its participation as a cooperating agency and its consideration of the final EIS (including responses to public comments), the COE would issue a Record of Decision to formally document its decision on the proposed action, including a section 404(b)(1) analysis and required environmental mitigation commitments.

1.2.3 U.S. Coast Guard

The Coast Guard is the federal agency responsible for determining the suitability of waterways for LNG marine traffic. The Coast Guard exercises regulatory authority over LNG

facilities that affect the safety and security of port areas and navigable waterways under Executive Order 10173; the Magnuson Act (50 USC 191); the Ports and Waterways Safety Act of 1972, as amended (33 USC 1221, et seq.), and the Maritime Transportation Security Act of 2002 (46 USC 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 in or adjacent to navigable waters up to the last valve immediately before the receiving tanks. The Coast Guard also has authority for LNG facility security plan reviews, approval and compliance verification as provided in 33 CFR 105, and siting as it pertains to the management of vessel traffic in and around LNG facilities to a point 12 nautical miles seaward from the coastline (to the territorial seas).

As required by its regulations, the Coast Guard is responsible for issuing a Letter of Recommendation (LOR) as to the suitability of the waterway for LNG marine traffic following a Waterway Suitability Assessment (WSA). In a letter dated March 16, 2012, the Coast Guard stated it would not require revisions to the current WSA³ for the Cameron LNG Terminal nor would another LOR be required for the Cameron LNG Terminal because no additional LNG carrier traffic or routes are requested for the Terminal Expansion. However, the Coast Guard would require Cameron LNG to provide applicable amendments to its Operations Manual, Emergency Manual, and Facility Security Plan for the Terminal Expansion.

1.2.4 U.S. Department of Energy

The DOE, Office of Fossil Energy must meet its obligation under Section 3 of the NGA to authorize the import and export of natural gas, including LNG, unless it finds that the import or export is not consistent with the public interest. Cameron LNG filed applications with the Office of Fossil Energy (FE Docket Nos. 11-145-LNG and 11-162-LNG) on November 10, 2011 and December 21, 2011, seeking authorization to export up to 12 mtpy of domestically produced LNG (the equivalent of 620 billion cubic feet per year of natural gas) for a 20-year period, commencing the earlier of either the date of first export or 7 years from the date of issuance of the requested authorization. Cameron LNG seeks to export LNG from the expanded Cameron LNG Terminal to any country (1) with which the United States does not have a free trade agreement requiring the national treatment for trade in natural gas and LNG; (2) that has, or in the future develops, the capacity to import LNG; and (3) with which trade is not prohibited by United States law or policy.

On January 17, 2012, the DOE issued an order granting authorization to Cameron LNG to export LNG by vessel from the Cameron LNG Terminal to any country which has or in the future develops the capacity to import LNG via ocean-going carrier and with which the United States has, or in the future enters into, a free trade agreement requiring national treatment for trade in natural gas. Section 3(c) of the NGA, as amended by section 201 of the Energy Policy Act of 1992 (Public Law 102-486), requires that applications to authorize the import and export of natural gas, including LNG, from and to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas be deemed consistent with the public interest and granted without modification or delay. The DOE has not yet granted Cameron LNG export authority to countries without a free trade agreement. In accordance with

³ Accepted by the Coast Guard in a letter on April 19, 2006.

40 CFR 1506.3, after an independent review of the EIS, the DOE may adopt it prior to issuing a Record of Decision on Cameron LNG's application for authority to export LNG.

1.2.5 U.S. Department of Transportation

The DOT has prescribed the minimum federal safety standards for LNG facilities in compliance with 49 USC 60101. Those standards are codified in 49 CFR Part 193 and apply to the siting, design, construction, operation, maintenance, and security of LNG facilities. The National Fire Protection Association (NFPA) Standard 59A, "Standard for the Production, Storage, and Handling of Liquefied Natural Gas," is incorporated into these requirements by reference, with regulatory preemption in the event of conflict. In accordance with the 1985 Memorandum of Understanding on LNG facilities and the 2004 Interagency Agreement on the safety and security review of waterfront import/export LNG facilities, the DOT participates as a cooperating agency and assists in assessing any mitigation measures that may become conditions of approval for any project. DOT staff reviewed our analysis and provided comments on our conclusions regarding compliance with Part 193 regulations.

1.3 PUBLIC REVIEW AND COMMENT

On April 30, 2012, Cameron filed a request with the FERC to use our pre-filing review process. At that time Cameron was in the preliminary design stage of the Project and no formal applications had been filed with the FERC. The request to use our pre-filing review process was approved on May 9, 2012. Pre-filing Docket Nos. PF12-13-000 and PF12-12-000 were established for the Terminal Expansion and Pipeline Expansion Projects, respectively, to place information filed by Cameron LNG and Cameron Interstate and related documents issued by the FERC into the public record. The pre-filing review process provides opportunities for interested stakeholders to become involved early in project planning, facilitates interagency cooperation, and assists in the identification and resolution of issues prior to a formal application being filed with the FERC.

Cameron held Public Open Houses in Sulphur and Hackberry, Louisiana on June 26, 2012. The FERC staff participated in those meetings to describe the FERC process and provide those attending with information on how to file comments with the FERC. In addition, on June 25 and 26, 2012, staff visited the existing wetland mitigation and restoration areas, the existing Cameron LNG Terminal, the proposed Terminal Expansion site, and the proposed pipeline route. After the open house meetings, we received comments from Mr. Charlie Atherton in regard to safety at the existing Cameron LNG Terminal.

On August 6, 2012, the FERC issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Cameron Pipeline Expansion Project and Cameron LNG Liquefaction Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting* (NOI). This notice was sent to about 300 interested parties including federal, state, and local officials; agency representatives; conservation organizations; Native American tribes; local libraries and newspapers in the Project area; and property owners in the vicinity of planned Project facilities. Publication of the NOI established a 30-day public comment period for the submission of comments, concerns, and issues related to the environmental aspects of the proposed Project.

On August 21, 2012, we conducted a public scoping meeting in Sulphur, Louisiana, to provide an opportunity for the public to learn more about the Project and provide oral comments⁴ on environmental issues to be addressed in the EIS. A total of 10 people presented oral comments at the scoping meeting.⁵ All 10 commenters expressed support for Cameron and the Project, primarily regarding Cameron's current reputation and the expected increase in jobs.

In total, three letters from the federal agencies (DOE, U.S. Environmental Protection Agency [EPA], and U.S. Fish and Wildlife Service [FWS]) were received in response to the NOI. After the end of the NOI comment period, the U.S. Department of Defense (DOD) Siting Clearinghouse provided a letter stating no opposition to the Project; the U.S. National Park Service provided a statement of no comment; and the Coushatta Tribe of Louisiana acknowledged receipt and the opportunity to review the Project. The Commission also received a letter from the Sierra Club and Gulf Restoration Network after the NOI comment period, which included comments on wetlands, alternatives, and gas sources.

On October 3, 2012, we held a joint interagency meeting for the Project and Trunkline's Lake Charles Liquefaction Project and met with representatives of the COE, Coast Guard, Louisiana Department of Environmental Quality (LDEQ), LDNR, Louisiana Department of Wildlife and Fisheries (LDWF), National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), FWS, and Cameron and Trunkline representatives to discuss coordination of agency review, permit requirements and status, and each agency's interest in participating in our environmental review as a cooperating agency. On January 17, 2013, we conducted another agency meeting and site visit with the same agencies at the Cameron LNG Terminal to discuss impacts on EFH, wetlands, migratory birds, and threatened and endangered species.

Issues identified after the open houses and during and after the public comment process are summarized in table 1.3-1 along with a listing of the EIS sections that address the comments. Issues identified that are not considered environmental considerations or are outside the scope of the EIS process are summarized in table 1.3-2, and are not addressed further in this EIS.

⁴ Transcripts of the comments are part of the public record for the Terminal Expansion (PF12-13-000) and Pipeline Expansion (PF12-12-000) and are available on the FERC website at <http://ferc.gov/docs-filing/elibrary.asp>.

⁵ Two written comments read at the scoping meeting were also received.

TABLE 1.3-1 Issues Identified and Comments Received during the Public Scoping Process for the Cameron Liquefaction Project	
Issue/Specific Comment	EIS Section Addressing Comment
General	
Purpose and need	1.1
Alternatives	
Alternatives analysis criteria	3.0
Range of alternatives considered	3.0
Water Resources	
Impacts on water quality from dredging, construction of in-water facilities, and ship transits	4.3
Drainage pattern and floodplain identification	4.3.1
Impacts on surface water quality from discharges and stormwater pollution	4.3.2
Impacts on aquatic environment from contaminated sediments during construction and operation	4.3.2
Navigable waterway permitting	4.3.2
Construction procedures across contaminated waterbodies	4.3.2
Wetlands	
Impacts on forested wetlands	4.4
Wetland construction and mitigation procedures	4.4
Vegetation	
Impacts on critically imperiled vegetation species	4.5.1
Construction and maintenance impacts on vegetation and restoration techniques	4.5.1
Fish and Wildlife Resources	
Migratory bird conservation efforts	4.6.2
Impacts on Essential Fish Habitat (EFH)	4.6.4
Threatened, Endangered, and Other Special Status Species	
Impacts on federally and state-listed threatened and endangered species and suitable habitat	4.7
Jeopardy to endangered species and destruction or adverse modification of critical habitat	4.7
Socioeconomics	
Impact on minority and low-income populations	4.9
Impact on communities in the vicinity	4.9

TABLE 1.3-1 Issues Identified and Comments Received during the Public Scoping Process for the Cameron Liquefaction Project – Continued	
Issue/Specific Comment	EIS Section Addressing Comment
Cultural Resources	
NHPA Section 106 consultation and analysis	4.10
Consultation with tribal governments	4.10.3
Impacts on tribal, cultural, or other treaty resources and mitigation efforts	4.10.3
Air Quality and Noise	
Emissions from the Terminal Expansion and marine vessels and mitigation measures	4.11.1
Global greenhouse gas emissions	4.11.1
Impacts on local and global air quality and noise from the construction and operation of the Terminal Expansion and Pipeline Expansion	4.11.2
Reliability and Safety	
Navigation safety	Previously addressed ⁶
Dock firefighting capability	Previously addressed ⁶
Cumulative Impacts	
Cumulative impacts of existing, proposed, and reasonably foreseeable future projects	4.13
Global greenhouse gas emissions	4.13.2

⁶ Navigation safety and dock firefighting capability were previously addressed in the 2003 EIS for the existing Cameron LNG Terminal (FERC Docket No. CP02-374), the 2006 Environmental Assessment for Cameron LNG Expansion Project (Docket No. CP06-422), and the 2010 Environmental Assessment for the Cameron LNG Export Project (Docket No. CP10-496), and Cameron LNG is not proposing changes to the existing Cameron LNG Terminal marine systems or an increase in the currently authorized number of LNG carriers.

TABLE 1.3-2 Issues Identified and Comments Received that are Outside the Scope of the EIS Process	
Issue/Specific Comment	
Impacts of natural gas exploration and production of gas transported to the proposed Project and associated job loss or gain ^a	
Other LNG export proposals pending before DOE and the FERC beyond our alternatives analysis	
Delay a decision on the application until comments are received on DOE/FE's economic study on impacts of LNG exports	
Consider nationwide and global impacts on domestic gas price increases, changes in domestic power production, and effects of gas price increases on the United States economy	
Impose monitoring conditions and specific monitoring terms and thresholds for (1) regional and national economic dislocations and disruptions caused by natural gas extraction, and (2) national increases in gas and electricity prices and resulting shifts to more polluting fuels	
Insurance requirements for marine vessel disasters	
^a The development of natural gas in shale plays by hydraulic fracturing is not the subject of this EIS nor is the issue directly related to the proposed Project. Production and gathering activities, and the pipelines and facilities used for these activities, are not regulated by FERC, but are overseen by the affected region's state and local agencies with jurisdiction over the management and extraction of the shale gas resource. Determining the well and gathering line locations and their environmental impact is not feasible as the market and gas availability at any given time would determine the source of the natural gas. Therefore, it is outside of the scope of this EIS.	

1.4 NON-JURISDICTIONAL FACILITIES

Under Section 7 of the NGA, the FERC is required to consider, as part of a decision to authorize jurisdictional facilities, all facilities that are directly related to a proposed project where there is sufficient federal control and responsibility to warrant environmental analysis as part of the NEPA environmental review for the proposed Project. Some proposed projects have associated facilities that do not come under the jurisdiction of the Commission. These “non-jurisdictional” facilities may be integral to the need for the proposed facilities, or they may be merely associated as minor components of the jurisdictional facilities that would be constructed and operated as a result of authorization of the proposed facilities.

Four non-jurisdictional actions were identified in association with the proposed Project: a 12-mile-long electrical transmission line to the Terminal Expansion site and an onsite switchyard; an offsite, 4-mile-long condensate piping system; tanker truck shipping of condensate; and a 3.5-mile-long electrical distribution line to the proposed Holbrook Compressor Station site. These facilities are addressed below and are also addressed in our cumulative impacts analysis in section 4.13 of this EIS.

The Project would produce and store stabilized condensate as a by-product of the liquefaction process at the Cameron LNG Terminal. Cameron stated it would transport the produced condensate from the Cameron LNG Terminal using either tanker trucks or via a third-

party pipeline. We have assessed both transportation options as non-jurisdictional facilities in this EIS.

1.4.1 Entergy Electric Transmission Line

To provide electrical power to the Terminal Expansion, Entergy Gulf States Louisiana, LLC (Entergy) would build an approximately 12-mile-long double-circuit 230 kilovolt (kV) electric transmission line in Calcasieu and Cameron Parishes as well as a new switchyard on the Terminal Expansion site (figure 1.4-1). Entergy would construct the transmission line for the sole use of the proposed Terminal Expansion. The transmission line would extend southward from a tie-in to Entergy's existing 230-kV Line 428 transmission line in Calcasieu Parish, cross the Gulf Intracoastal Waterway, run eastward along a route near the southern shore of the waterway to Louisiana State Highway 27 (LA-27), then southward, paralleling LA-27 to the existing Cameron LNG Terminal (see figure 1.4-1). Entergy would purchase a 150-foot-wide easement for the transmission line. Each of the two 230-kV circuits would be installed on separate poles but within the same 150-foot-wide right-of-way. A new Entergy switchyard would replace an existing switchyard that is currently in the northwest corner of the Cameron LNG Terminal. To obtain its permit under Section 404 of the CWA, Entergy prepared an environmental assessment (EA) and alternative route analysis for the COE, including route alternatives, for this proposed transmission line and switchyard (Entergy EA 2013).⁷

The Entergy EA states that the proposed easement is primarily within open pastures and herbaceous coastal marsh. However, some forested areas and shrub species may be cleared within the immediate area of power poles for temporary workspace during construction activities. Entergy must apply for and comply with all applicable federal and state permits, including a joint CUP with the LDNR and COE. Compensatory mitigation may be required by the LDNR and COE for permanent impacts on jurisdictional wetlands. We reviewed the Entergy EA and correspondence from the FWS and determined no impacts would occur on threatened or endangered species. SHPO correspondence has not yet been received stating if surveys are warranted. The COE is the lead federal agency for this non-jurisdictional electrical transmission line and would be responsible for ensuring that all federal consultations and authorizations are completed.

1.4.2 Condensate Pipeline

The 4-mile-long, 6-inch-diameter condensate pipeline would extend from the expanded terminal to an existing Targa Resource Partners LP (Targa) natural gas liquids (NGL) storage facility (figure 1.4-2). It is likely that Targa would construct, own, and operate the pipeline; however, because we are not aware of specific plans for construction of the pipeline by Targa, the condensate pipeline is referred to as the "third-party condensate pipeline" in this EIS.

The planned route of the third-party condensate pipeline is west and southwest of the Terminal Expansion site, where approximately 75 percent of the area is shallow open water and 25 percent is broken marsh wetland, and extends in a generally west-southwest to north-northeast

⁷ Provided as part of the public record for Docket No. CP13-25-000 on the FERC website at <http://ferc.gov/docs-filing/elibrary.asp>; Appendix D.1 in Accession No. 20130429-5029(28345798).

direction. Construction of this pipeline would temporarily impact about 23 acres of marsh wetlands, which we would expect to reestablish within one growing season. The marsh areas would not be maintained by mowing and the impacts due to establishment of a permanent right-of-way would be negligible. Cameron LNG's desktop environmental analysis for construction and operation of the third-party condensate pipeline determined no impacts would occur on threatened and endangered species or cultural resources. Furthermore, the third-party company must apply for and comply with all COE permits and mitigation requirements for impacts on jurisdictional marsh wetlands and open water.

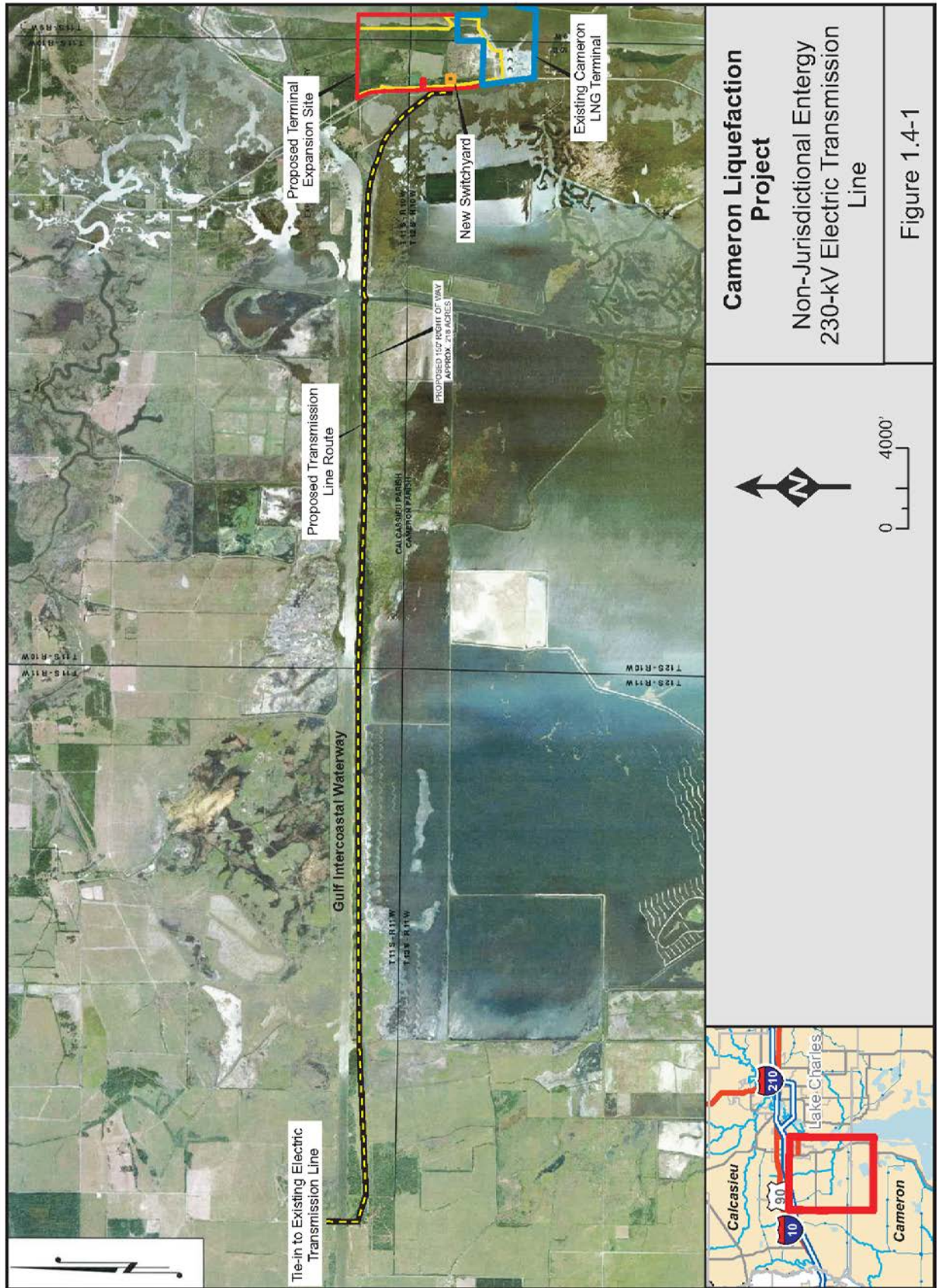
1.4.3 Truck Loading/Unloading

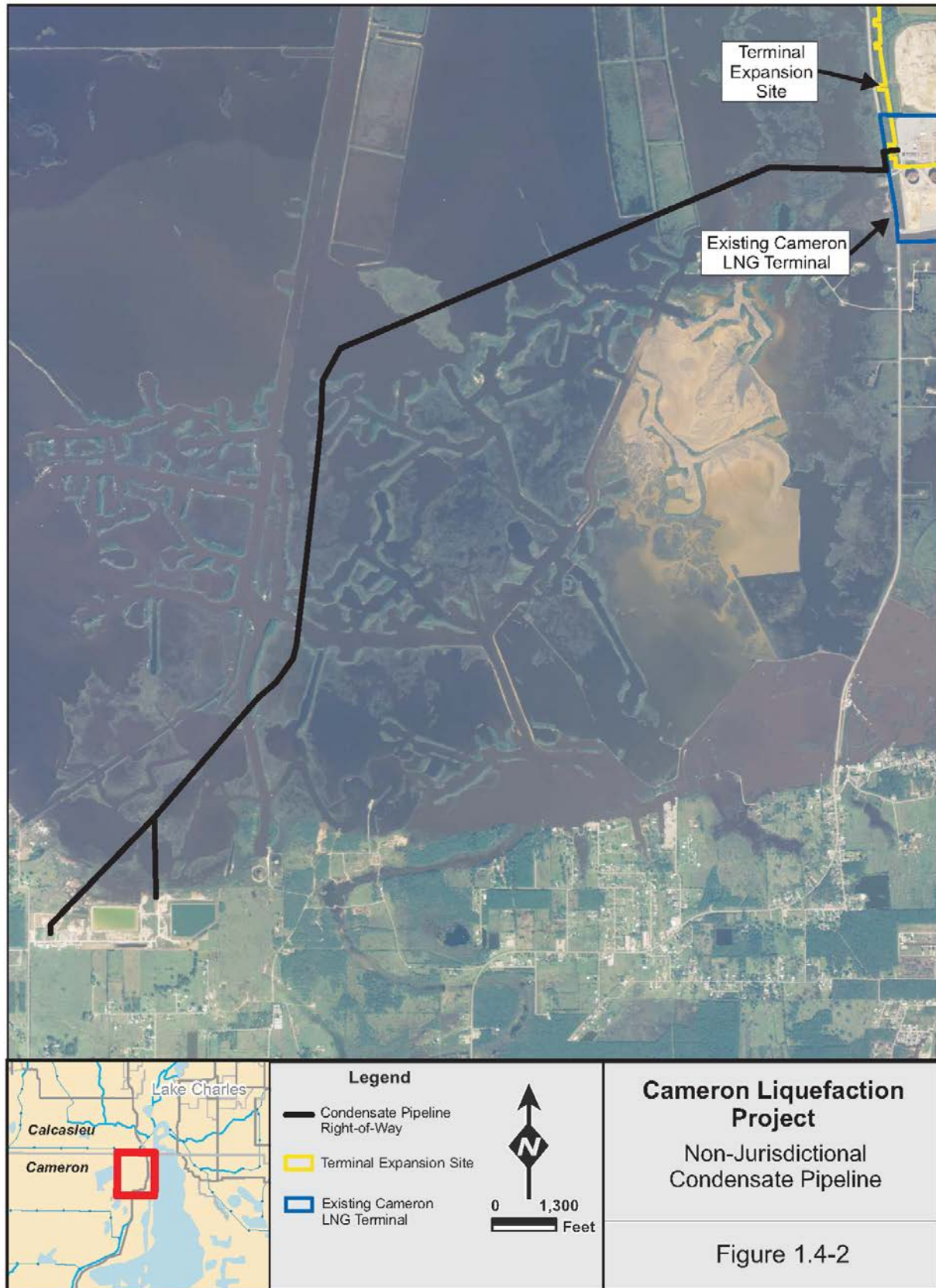
The truck loading/unloading facility would serve to unload make-up refrigerant trucked to the Terminal Expansion during operation and would also be used to store and load condensate product into tanker trucks for delivery into the market place. Cameron LNG anticipates using both the condensate pipeline and the truck loading/unloading facility during operation of the Terminal Expansion. Construction and operation of the truck loading/unloading facility at the Terminal Expansion is jurisdictional and is analyzed throughout this EIS. However, the loaded tanker trucks would be non-jurisdictional once they leave the Cameron LNG Terminal. Tanker trucks carrying condensate from the Terminal Expansion would use the same paved public road routes from Interstate 10 (I-10) as the trucks delivering make-up refrigerant to the Terminal Expansion. The DOT would require tanker trucks to comply with its requirements for the transportation of hazardous materials. The distance from the Cameron LNG Terminal to Interstate 10 is less than 30 miles, and we believe the truck estimated traffic of 5 trucks per day would not have any significant impacts on roadway traffic. No other impacts are expected as a result of shipping condensate from the Terminal Expansion.

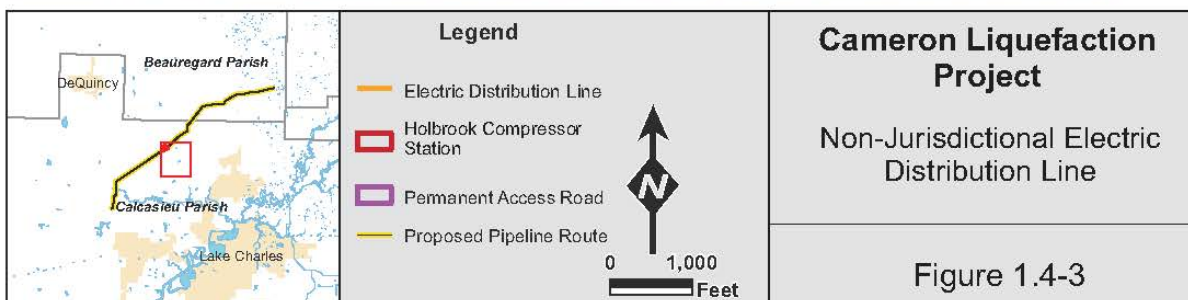
1.4.4 Beauregard Electric Distribution Line

To provide electrical power to the proposed Holbrook Compressor Station, Beauregard Electric would build an approximately 3.5-mile-long electric distribution line from an existing 230-kV electric transmission line (figure 1.4-3). Beauregard Electric would construct the distribution line for the sole use of the Holbrook Compressor Station. The electrical power line and power poles (both new and replacement) would start at a tie-in with the existing Beauregard Electric transmission line that is southeast of the Holbrook Compressor Station, and would extend west along Dunn Ferry Road, then north and northwest along Holbrook Park Road until crossing the pipeline right-of-way. From there the distribution line would extend to the northeast, adjacent to Cameron Interstate's right-of-way and into the Holbrook Compressor Station (figure 1.4-3). Temporary disturbance during construction is expected to be less than 2 acres. Beauregard Electric may maintain minor increases in the width of the road easements by mowing, although no trees are expected to be removed. Beauregard Electric must apply for and comply with all applicable federal and state permits, including COE Section 404 permitting. We performed a desktop environmental review of the construction and operation of the new distribution line and determined no impacts would occur on threatened or endangered species.

Available environmental data further characterizing the impacts of the non-jurisdictional facilities is provided in our cumulative impacts analysis (section 4.13).







1.5 PERMITS, APPROVALS, AND REGULATORY REVIEWS

As federal agencies, the FERC and COE are required to comply with a number of regulatory statutes including, but not limited to NEPA, Section 7 of the ESA, the MSFCMA, the Clean Air Act (CAA), CWA, the Rivers and Harbors Act, Section 106 of the NHPA, and Section 307 of the CZMA. Each of these statutes has been taken into account in the preparation of this EIS. The major permits, approvals, and consultations for the Cameron Liquefaction Project are identified in table 1.5-1.

Section 7 of the ESA states that any project authorized, funded, or conducted by any federal agency 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 USC 1536(a)(2)(1988)). The FERC is required 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 and conduct consultations with the FWS and/or NMFS, if necessary. If, upon review of existing data or data provided by Cameron, the FERC determines that these species or habitats may be affected by the 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. Section 4.7 provides information on 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 NMFS 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, NMFS 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 this consultation process, the FERC prepared an EFH assessment, which is provided in section 4.6.3.

Section 106 of the NHPA requires that the FERC take into account the effects of its undertakings on properties listed, 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, and to afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. Cameron, as a non-federal party, is assisting the FERC in meeting its obligations under Section 106 by preparing the necessary information, analyses, and recommendations under ACHP regulations in 36 CFR 800. Section 4.10 of this EIS provides information on the status of this review.

TABLE 1.5-1			
Major Permits, Approvals, and Consultations for the Proposed Cameron Liquefaction Project			
Agency	Permit/Approval/Consultation	Status	
		Terminal Expansion	Pipeline Expansion
Federal			
Federal Aviation Administration	Notification of Proposed Construction Possibly Affecting Navigable Air Space	Ongoing review: notification filed September 13, 2012; response received October 23, 2012. Process anticipated to be completed in 2014	Not applicable
Federal Energy Regulatory Commission	Authorization under Section 3(a) of the NGA	Ongoing review: application filed December 7, 2012	Not applicable
	Certification under Section 7(c) of the NGA	Not applicable	Ongoing review: application filed December 14, 2012
National Oceanic and Atmospheric Administration, National Marine Fisheries Service	Section 7 of ESA Consultation	Informal consultation ongoing: correspondence received October 3, 2012 [and January 25, 2013]	Not applicable
	MSFCMA EFH Consultation		
	Marine Mammal Protection Act Consultation		
U.S. Army Corps of Engineers	Section 404 Permit (CWA)	Ongoing review: final application filed October 31, 2012	Ongoing review: application filed August 24, 2012
	Section 10 Permit (Rivers and Harbors Act)	Ongoing review: final application filed October 31, 2012	Ongoing review: application filed August 24, 2012
U.S. Coast Guard	Amended Letter of Recommendation	Completed March 16, 2012	Not applicable
U.S. Department of Energy	Application for Long-Term, Multi-Contract Authorization to Export Natural Gas to Free Trade Agreement Countries	Authorization granted January 17, 2012 (DOE/FE Order No. 3059)	Not applicable
	Application for Long Term, Multi-Contract Authorization to Export Natural Gas to Non-Free Trade Agreement Countries	Ongoing review: application filed December 21, 2011	Not applicable
U.S. Environmental Protection Agency	Spill Prevention, Containment and Cleanup Plan (CWA, 33 U.S.C.§1321(j)) and 40 CFR Part 112)	Current Facility SPCC Plan would be modified and updated in 2016 prior to initiation of operation	SPCC Plan would be prepared prior to initiation of operation of the compressor station
U.S. Fish and Wildlife Service	Section 7 of ESA Consultation	Informal consultation ongoing:correspondence received October, 9, 2012 and February 11, 2013	Concurrence received March 11, 2013
	Migratory Bird Treaty Act		

TABLE 1.5-1 Major Permits, Approvals, and Consultations for the Proposed Cameron Liquefaction Project – Continued			
Agency	Permit/Approval/Consultation	Status	
		Terminal Expansion	Pipeline Expansion
State			
Louisiana Department of Environmental Quality (LDEQ)-Air Quality Division	Modification of Title V and Prevention of Significant Deterioration (PSD) Permit for the Cameron LNG Terminal	Title V Permit (0560-00184-V5) and Draft PSD Permit (PSD-LA-766) issued October 1, 2013	Not applicable
	New Title V and PSD Permit for the Holbrook Compressor Station	Not applicable	Ongoing review: application filed October 16, 2012; public notice on Title V and PDS Permit issued October 18, 2013
LDEQ-Water Quality Division	Hydrostatic Test Water Discharge General Permit LAG670000	Anticipate filing application and receiving permit in first quarter of 2014	Anticipate filing application in 2015 prior to initiation of construction
	Industrial Discharge Permit	Ongoing review: public notice of Draft Louisiana Pollution Discharge Elimination System Permit (LA0123455) issued October 10, 2013	Anticipate filing application in 2016 prior to initiation of operation
	Water Quality Certification (WQC)	Received Water Quality Certification (WQC 020809-08) May 2, 2013	Received Water Quality Certification (WQC 121219-02) on June 8, 2013
Louisiana Department of Natural Resources Coastal Management Division	Coastal Use Permit (CUP), Joint Permit with COE (Separate Coastal Use Permit to be issued for Mitigation Area)	CUP P20121194 with approved mitigation plan issued August 6, 2013	Not applicable
	Modification of Existing Maintenance Dredge Placement Coastal Use Permit	Ongoing review: application filed September 6, 2013	Not applicable
	Application for Approval to Withdraw Water for Hydrostatic Testing	Not applicable	Anticipate filing application in 2015 prior to initiation of construction
Louisiana Department of Transportation	Road and Utility Crossing Permit	Not applicable	Anticipate filing application in 2015 prior to initiation of construction
Louisiana Department of Wildlife and Fisheries	Threatened and Endangered Species Consultation	Concurrence received September 25, 2012	Consultation letter received October 24, 2012
	Wild and Scenic Rivers Permit	Not applicable	Received Hickory Branch Permit (SRP #864) August 30, 2013; received Beckwith Creek Permit (SRP #863) September 16, 2013

TABLE 1.5-1 Major Permits, Approvals, and Consultations for the Proposed Cameron Liquefaction Project – Continued			
Agency	Permit/Approval/Consultation	Status	
		Terminal Expansion	Pipeline Expansion
Louisiana State Historic Preservation Office	Section 106 Consultation	Concurrence received September 24, 2012 and December 5, 2012 Mitigation area concurrence received April 24, 2013	Concurrence received on September 24, 2012 and December 5, 2012
Native American Tribes	Consultation	Consultation letters sent July 20, 2012 and August 1, 2012 Follow-up letters sent October 31, 2013 Received concurrence from the Jena Band of Choctaw Indians April 11, 2013	Consultation letters sent July 20, 2012 and August 1, 2012; follow-up letters sent October 31, 2012. Received concurrence from the Jena Band of Choctaw Indians April 11, 2013
Local – Parish			
Beauregard Parish Police Jury	Building Permit	Not applicable	Would be obtained in 2015 prior to initiation of construction
	Letter of No Objection	Not applicable	Received April 30, 2013
	Road Crossing Permit	Not applicable	Would be obtained in 2015 prior to initiation of construction
Calcasieu Parish Police Jury	Building Permit	Would be obtained prior to initiation of construction	Would be obtained in 2015 prior to initiation of construction
	Letter of No Objection	Received Letter of No Objection April 11, 2013	Received Letter of No Objection April 11, 2013
	Road Crossing Permit	Not applicable	Would be obtained in 2015 prior to initiation of construction
Cameron Parish Police Jury	Building Permit	Would be obtained 1 st Quarter 2014 prior to initiation of construction	Would be obtained in 2015 prior to initiation of construction
	Letter of No Objection	Received Letter of No Objection March 19, 2013	Received Letter of No Objection March 19, 2013
	Road Crossing Permit	Not applicable	Would be obtained in 2015 prior to initiation of construction

Cameron must comply with Sections 401 and 404 of the CWA. Water quality certification (Section 401) has been delegated to the state agencies, with review by the EPA. Water used for hydrostatic testing that is point-source discharged into waterbodies would require a National Pollutant Discharge Elimination System (NPDES) permit (Section 402) issued by the LDEQ. The COE has responsibility for determining compliance with all regulatory requirements associated with Section 404 of the CWA. The EPA also independently reviews Section 404 applications for wetland dredge-and-fill applications for the COE and has Section 404(c) veto power for wetland permits issued by the COE. The Section 404 permitting process regulates the discharge of dredged and fill material associated with the construction of pipelines across streams and in wetlands. Before an individual Section 404 permit can be issued, the CWA requires completion of a Section 404(b)(1) guideline analysis. The FERC, in the NEPA review represented by this EIS, has analyzed all technical issues required for the Section 404(b)(1) guideline analyses, including analysis of natural resources and cultural resources that would be affected by the Project, as well as analyses of alternatives. The results of our analysis of alternatives are provided in section 3.0, and a summary of wetland impacts are provided in section 4.4 of this EIS.

In addition to CWA responsibilities, the COE has jurisdiction over Section 10 permits, which would be required for all construction activities in navigable waterways under the Rivers and Harbors Act of 1899. Waterbody crossing methods and impacts are summarized in section 4.3 of this EIS.

EPAct 2005 and Section 3 of the NGA require us to consult with the DOD to determine if there would be any impacts associated with the Project on military training or activities on any military installations. The FERC initiated consultation with a letter to DOD on September 18, 2012. The DOD responded on October, 24, 2012, concluding the Project would have minimal impact on the military operations conducted in this area and would not oppose construction of the Project.

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 those states will meet their obligations and responsibilities in managing their coastal areas. In Louisiana, the LDNR administers the Coastal Zone Management Program (CZMP) and would conduct a consistency determination concurrent with Cameron LNG’s filling of an application for a conditional use permit. The Pipeline Expansion is not within the CZMP. CZMP is discussed further in section 4.8.6.

The CAA was enacted by Congress to protect the health and welfare of the public from the adverse effects of air pollution. The CAA is the basic federal statute governing air pollution. Federal and state air quality regulations established as a result of the CAA include, but are not limited to, Title V operating permit requirements and Prevention of Significant Deterioration (PSD) Review. The EPA is the federal agency responsible for regulating stationary sources of air pollutant emissions; however, the federal permitting process has been delegated to LDEQ in Louisiana. Air quality impacts that could occur as a result of construction and operation of the Project are evaluated in section 4.11.1 of this EIS.

Cameron is responsible for all permits and approvals required to implement the Cameron Liquefaction Project, regardless of whether they appear in table 1.5-1. However, any state or local permits issued with respect to jurisdictional facilities must be consistent with the conditions of any authorization the Commission may issue. Although the FERC encourages cooperation between applicants and state and local authorities, 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.⁸

⁸ 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).