

1.0 INTRODUCTION

On January 26, 2004, Sound Energy Solutions (SES) filed an application with the Federal Energy Regulatory Commission (Commission or FERC) under section 3 of the Natural Gas Act (NGA) and Part 153 of the Commission's regulations. The application was assigned FERC Docket No. CP04-58-000 and noticed in the Federal Register on February 2, 2004. SES seeks authorization from the FERC to site, construct, and operate a liquefied natural gas (LNG) receiving terminal and associated facilities in the Port of Long Beach (POLB or Port) in Long Beach, California as a place of entry for the importation of LNG. SES submitted an application to the POLB for a Harbor Development Permit on July 25, 2003, seeking approval for a development project within the Port. The application was designated POLB Application No. HDP 03-079.

LNG is natural gas that has been cooled to a temperature of about -260 degrees Fahrenheit (°F) so that it becomes a liquid. Because LNG is more compact than the gaseous equivalent, it can be transported long distances across oceans using specially designed ships. The LNG would be unloaded from the ships, stored in tanks at the terminal, and then re-gasified (vaporized) and transported through a natural gas sendout pipeline to Southern California Gas Company's (SoCal Gas) existing Line 765. Natural gas is a mixture of hydrocarbon compounds, principally methane. It also contains small amounts of heavier hydrocarbons, such as propane, ethane (C₂), and butane, which have a higher heating value than methane. A portion of these components may need to be removed from the LNG that would be stored on the terminal site in order for the natural gas to meet the British thermal units (Btu) and gas quality specifications of SoCal Gas as well as the specifications for LNG vehicle fuel established by the California Air Resources Board (CARB). The components that are removed are called natural gas liquids (NGL). SES' application included a proposal to store NGL on the LNG terminal site in two storage tanks before distribution offsite via pipeline and/or trailer truck.

On September 8, 2004, SES filed an amendment to its original application with the FERC in Docket No. CP04-58-003¹ seeking authorization to construct, own, and operate the natural gas sendout pipeline and associated facilities that would connect the LNG terminal to the SoCal Gas delivery point. On October 6, 2004, SES filed a modified proposal for the management of NGL that involved the transportation of the NGL via two pipelines from the LNG terminal site to an existing refinery and assorted modifications at the refinery to accommodate the NGL. This proposal eliminated on-site storage of the NGL, six NGL trailer truck loading bays, and approximately 140 trailer truck trips per day in the POLB to transport the NGL to market. Subsequently, on December 1, 2004, SES filed a supplement to its modified proposal to manage NGL that stated that SES would accept only lean LNG [i.e., LNG containing fewer heavy (non-methane) hydrocarbons than regular LNG] from its suppliers. Because lean LNG would produce fewer NGL, SES eliminated one of the pipelines and the additional facilities at the refinery that had been proposed in its October 2004 filing.

The environmental staffs of the FERC and the POLB (Agency Staffs) have jointly prepared this draft environmental impact statement/environmental impact report (EIS/EIR) to assess the environmental impacts associated with the construction and operation of the facilities proposed by SES in accordance with the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

¹ Docket Nos. CP04-58-001 and CP04-58-002 were assigned to the FERC's May 12, 2004 Order Granting Rehearing for Further Consideration and August 5, 2004 Order Clarifying Prior Order, respectively.

SES' proposal, referred to as the Long Beach LNG Import Project, would involve the construction and operation of LNG terminal facilities consisting of a ship berth and unloading facility, two LNG storage tanks, vaporization and vapor handling systems, an NGL recovery system, an LNG trailer truck loading facility, 2.3 miles of 36-inch-diameter pipeline, one pig² launcher and receiver, a meter station, an odorization system, and various other facility components. Some of the activities associated with the project would be conducted by the POLB and would require the POLB to obtain a Harbor Development Permit.

Additional facilities associated with the project include 4.6 miles of 10-inch-diameter pipeline to transport vaporized C₂ from the LNG terminal to ConocoPhillips' existing Los Angeles Refinery Carson Plant (LARC), a meter station, one pig launcher and receiver, and approximately 0.8 mile of 66 kilovolt (kV) electric distribution lines and a new substation to connect the LNG terminal to two of Southern California Edison's (SCE) existing substation taps.

The C₂ pipeline, meter station, and pig launcher and receiver would be constructed, owned, and operated by ConocoPhillips. The electric distribution lines and substation would be constructed, owned, and operated by SCE. These intrastate facilities would be under the jurisdiction of the California Public Utilities Commission (CPUC), not the FERC and the POLB. Although these facilities do not come under the FERC's or the POLB's jurisdiction, they are evaluated in this EIS/EIR because they are integral parts of the proposed project. The CPUC is participating in the EIS/EIR process as a responsible agency (see section 1.2.6).

The proposed LNG terminal and associated facilities are described in detail in section 2.0.

1.1 PROJECT PURPOSE AND NEED

SES proposes to bring LNG from a variety of Asian and other foreign sources to provide a new, stable source of natural gas to serve the needs of southern California, particularly the Los Angeles Basin (LA Basin). Exporting countries of LNG include Algeria, Australia, Brunei, Indonesia, Malaysia, Nigeria, Oman, Qatar, Trinidad, and United Arab Emirates. In 2003, LNG imports to the United States came from Trinidad (72 percent), Nigeria (12 percent), Algeria (10 percent), Qatar (3 percent), Oman (2 percent), and Malaysia (1 percent). SES has indicated that the LNG for the proposed terminal would likely be imported from six plants in the Pacific (located in Brunei, Indonesia, Malaysia, and Australia) and four plants in the Middle East (located in Oman, United Arab Emirates, and Qatar). Several of these foreign sources would represent a new supply to the United States because natural gas has not been imported from these locations in the past.

The three stated objectives of SES' proposal are to:

- provide up to 1 billion cubic feet per day (Bscfd) of natural gas to southern California;
- supply up to 150,000 gallons per day (gpd) of LNG vehicle fuel; and
- provide storage of up to 320,000 cubic meters of imported LNG to reduce fluctuations in the local supply.

Each of these objectives is described in more detail below.

² A pig is an internal tool used to clean and dry a pipeline and/or to inspect it for damage or corrosion.

A primary objective of the Long Beach LNG Import Project is to provide the facilities needed to deliver up to 1 Bscfd of natural gas to local transmission and distribution systems. According to SES, the introduction of large volumes of natural gas directly into the LA Basin and southern California markets would reduce price volatility and ease gas supply concerns by enhancing the diversity and security of natural gas supplies for the state.

In September 2004, the CPUC acted to increase the availability of natural gas supplies in California. As part of its action, the CPUC voted to promote increases in California's LNG supply by designating three receipt points for access to imported LNG and ordering utilities to interconnect with LNG facilities when they are built. One of the designated receipt points is the Salt Works Station near the POLB. The Salt Works Station would be the end point of the proposed natural gas pipeline associated with the Long Beach LNG Import Terminal. The other two receipt points are Otay Mesa near San Diego and Center Road Station near Oxnard. Both of these locations are near other proposed LNG facilities in southern California and Mexico (see section 3.2.2.2).

The California Energy Commission (CEC) estimates that demand growth for all uses of natural gas will be approximately 1 percent per year from 2003 to 2013 (Gopal, 2003; Marks, 2004). According to the CEC, although increases in efficiency and use of renewable energy sources are expected to moderate future demand, they are offset by population and business growth.

The ability of California consumers to pay for natural gas is also of state-wide concern. Even though prices have moderated since the peaks of the recent energy crisis in the state (which resulted in part from short- and mid-term imbalances in natural gas supply and demand), the price Californians currently pay for natural gas is nearly double the price consumers paid in the 1990s (Bakker et al., 2003). For example, a California residential gas customer in 1999 paid an average of \$6.62 per thousand cubic feet, but in July 2004 that customer paid \$10.14 per thousand cubic feet [Energy Information Administration (EIA), 2004]. Any action that can reduce prices will have a significant impact on the total amount spent by consumers because the California gas market is the second largest in the U.S. If prices are reduced by \$0.50 per million British thermal unit (MMBtu), then California consumers will save over \$1 billion per year.

Additional interstate pipeline capacity has recently been increased, including the Kern River 2003 Expansion Project, which has increased access to the Rocky Mountain supply basin [FERC and the California State Lands Commission (CSLC), 2002]. The North Baja Pipeline Project also has increased the natural gas supply to California significantly (FERC and CSLC, 2000). However, California, the second largest natural gas consumer in the nation, is expected to use 2.4 trillion cubic feet of natural gas by 2013, which is an increase of about 9 percent from the 2.2 trillion cubic feet used in 2003.

Currently, imports from out of state represent approximately 87 percent of supply and are anticipated to rise to 88 percent by 2013, meaning that additional external supplies will be needed to keep up with demand. This need is compounded by California's position at the western end of an American and Canadian pipeline network, exposing it to supply/demand imbalances that occur in other regions of the United States. California must compete for declining domestic gas supplies and interstate pipeline capacity with neighboring states, including Nevada and Arizona, whose gas demand is growing faster due to many gas-fired generators (Marks, 2004).

Although the CEC estimates that domestic and Canadian sources could fulfill projected California natural gas demand through 2013, it has strongly recommended that the state pursue other measures to secure supplies, noting public and private sector concern about declines in domestic and Canadian gas field production (Marks, 2004). Additionally, the ability of these sources to supply California would

depend on pipeline capacity improvements in the Rocky Mountain Basin as well as on industry success in finding and extracting new sources (Bakker et al., 2003).

Given the short- and mid-term demand for natural gas and the need to reduce potential supply interruptions, the CEC has identified the need for California to develop new natural gas infrastructure to access a diversity of fuel supply sources and to remove constraints on the delivery of natural gas. In addition to efficiency programs and use of renewable power sources, the CEC has identified LNG receiving terminals on the Pacific Coast as a potential future source, enabling California gas markets to access supplies from producing basins throughout the Pacific and Indian Oceans (e.g., Indonesia, Australia, Russia, South America, and Alaska).

An LNG receiving terminal sized to provide 1 Bscfd of natural gas could supply nearly 16 percent of the average daily need for natural gas in the state (Marks, 2004).

Another objective of the Long Beach LNG Import Project is to provide an abundant, stable source of LNG for distribution to LNG fueling stations throughout southern California to fuel LNG-powered vehicles. SES estimates that up to 150,000 gpd of LNG would be made available to this market by the proposed project. Use of LNG for medium- and heavy-duty vehicles is growing rapidly in California for several reasons. First, LNG is traditionally less expensive than diesel fuel. Second, there is a potential for air quality benefits because natural gas-powered vehicles have lower nitrogen oxides (NO_x) and carbon dioxide (CO₂) emissions than diesel-powered vehicles. LNG can be stored on board heavy duty vehicles with natural gas-fueled engines. The proposed project would make an alternative cleaner burning fuel, LNG, more available to the fleets of vehicles and equipment operated by public agencies, transit districts, municipalities, and industries. Furthermore, the use of LNG as a replacement for diesel fuel helps to reduce California's petroleum dependence, which is a state requirement under AB2076 (Chapter 936, Statutes of 2000).

Nearly all of the LNG currently used for vehicle fuel in California is trucked in from Arizona (86,000 gpd) and delivered to LNG fueling stations where it is dispensed into individual vehicles as fuel. Another LNG plant exists northwest of Sacramento, California but it does not typically supply substantial quantities of LNG vehicle fuel. Four out-of-state plants in Wyoming, Kansas, and Colorado have occasionally supplied LNG to California. The substantial trucking distance to California from out-of-state sources does not make this a cost effective or energy efficient option.

A third objective of the Long Beach LNG Import Project is to address fluctuating energy supply and demand. Because the project allows for up to 320,000 cubic meters of imported LNG to be stored and then vaporized for delivery as needed into the southern California market or to be used as LNG vehicle fuel, it can reduce the effects of fluctuating energy supply and demand. The storage component of the project would enhance the reliability of supply and be consistent with the goal of the State of California Energy Action Plan II, which is to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies, including reserves, are achieved and provided (CEC, 2005c).

1.2 USES AND SCOPE OF THIS EIS/EIR

The principal reasons for preparing an EIS/EIR are to:

- identify and assess the potential direct, indirect, and cumulative impacts on the natural and human environment that would result from the implementation of the proposed project;

- describe and evaluate reasonable alternatives to the proposed project, or to the location of the project, that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant adverse effects of the project on the environment;
- identify and recommend specific mitigation measures, as necessary, to avoid or minimize significant environmental effects; and
- encourage and facilitate involvement by the public and interested agencies in the environmental review process.

The topics addressed in this EIS/EIR include geology (including hazards and mineral and paleontological resources); soils and sediments; water resources; biological resources; land use, recreation, and visual resources; socioeconomics (including population, housing, public services, and utilities and service systems); transportation; cultural resources; air quality; noise; reliability and safety; cumulative impacts; growth-inducing impacts; and alternatives. The EIS/EIR 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/EIR also presents recommended mitigation measures.

The FERC and the POLB are the lead agencies for the preparation of this EIS/EIR. The U.S. Army Corps of Engineers (ACOE) and the U.S. Coast Guard (Coast Guard) within the U.S. Department of Homeland Security are federal cooperating agencies. A cooperating 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 Pipeline and Hazardous Materials Safety Administration (PHMSA) within the U.S. Department of Transportation (DOT) is participating in the NEPA analysis under the terms of an interagency agreement between the PHMSA, the FERC, and the Coast Guard. The purpose of the interagency agreement is to ensure that these three agencies work in a coordinated manner to address land and marine safety and security issues at waterfront LNG facilities, including the terminal facilities and vessel operations. The specific roles of these agencies are described below. Several state and local agencies are also participating in the project review as responsible and trustee agencies as discussed in section 1.2.6. The federal, state, and local permits, approvals, and consultations required for the project are listed in section 1.5.

1.2.1 Federal Energy Regulatory Commission

The FERC is the federal agency responsible for authorizing the site for onshore LNG import facilities. As such, the FERC is the lead federal agency for the preparation of this EIS/EIR in compliance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA [Title 40 Code of Federal Regulations (CFR) Parts 1500-1508], and the FERC's regulations implementing NEPA (Title 18 CFR Part 380).

As the lead federal agency for the Long Beach LNG Import Project, the FERC is required to comply with section 7 of the Endangered Species Act of 1973 (ESA), the Magnuson-Stevens Fishery Conservation and Management Act (MSA), section 106 of the National Historic Preservation Act (NHPA), and section 307 of the Coastal Zone Management Act of 1972 (CZMA). Each of these statutes has been taken into account in the preparation of this EIS/EIR. The FERC will use the document to consider the environmental impact that could result if it issues SES an Order Granting Authorization under section 3 of the NGA.

In conjunction with the NEPA review, the FERC conducts a cryogenic design review of the proposed facilities. The cryogenic design review involves analyzing the engineering design and safety concepts as well as the projected operational reliability of the proposed facilities. A summary of that review, including the FERC's recommendations, is included in this EIS/EIR. The FERC will also consider other non-environmental issues in its review of SES' application. Final federal authorization will be granted only if the FERC finds that the proposed project is in the public interest. The safety, security, and environmental impact assessments and mitigation development discussed herein are important factors in this final determination.

1.2.2 City of Long Beach

The Board of Harbor Commissioners (BHC) has authority over the City's Harbor District, commonly known as the POLB or Port. The City of Long Beach owns the land within the Harbor District in trust for the people of the State of California. SES would have to obtain a lease from the City of Long Beach to build and operate the project. The POLB is the lead agency in California for preparing the EIS/EIR, complying with the CEQA (Public Resources Code section 21000 et seq.), and following the guidelines for the implementation of the CEQA (California Code of Regulations Title 14, section 15000 et seq.). As part of its responsibilities, the POLB would provide the EIS/EIR to the California State Clearinghouse for it to coordinate the review of the document by state and local responsible and trustee agencies (see section 1.2.6).

The BHC will use the EIS/EIR to determine the project's consistency with the certified Port Master Plan (PMP) and the California Coastal Act of 1976 (CCA) (see section 1.4) as well as to consider the environmental impact that could result if it issues Harbor Development Permits for the project.

When the EIS/EIR is completed, the BHC must determine whether it can certify that:

- the final EIS/EIR has been completed in compliance with the CEQA;
- the final EIS/EIR was presented to the BHC in a public meeting and that the BHC reviewed and considered the information contained in the final EIS/EIR; and
- the final EIS/EIR reflects the BHC's independent judgment and analysis [CEQA Guidelines section 15090(a)].

If the BHC approves the project, it must adopt a resolution containing findings of fact for each significant environmental impact identified in the EIS/EIR. These findings must either state that:

- the project has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact;
- changes to the project are within another agency's jurisdiction and have been or should be adopted; or
- specific considerations make mitigation measures or alternatives infeasible.

If any of the impacts identified in the EIS/EIR cannot be reduced to a level that is less than significant, the BHC must issue a Statement of Overriding Considerations for approval of the project if specific social, economic, or other factors justify a project's unavoidable adverse environmental effects. If the BHC decides to approve a project for which an EIS/EIR has been prepared and the project has been determined to be consistent with the certified PMP and the CCA, the BHC would issue a Notice of

Determination and could issue Harbor Development Permits for construction and operation of the project. Under Public Resources Code section 21151(c), the Long Beach City Council has appellate jurisdiction over any CEQA determination made by the BHC. Additional discussion of the determination of consistency with the PMP and the CCA and the California Coastal Commission's (CCC) role in the process is presented in section 1.4.

1.2.3 U.S. Army Corps of Engineers

The ACOE has jurisdictional authority pursuant to section 404 of the Clean Water Act (CWA) [33 United States Code (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. Some specific elements of the project within the ACOE's jurisdiction include dredging, reinforcement of the shoreline structures, and construction of the ship berth and unloading facility within the waters of the United States. The ACOE also has jurisdiction over the placement of the natural gas and C₂ pipelines beneath the Cerritos Channel and the placement of the C₂ pipeline over the Dominguez Channel. Because the ACOE must comply with the requirements of NEPA before issuing permits under sections 404 and 10, it has elected to act as a cooperating agency with the FERC and the POLB in preparing this EIS/EIR. The ACOE would adopt the EIS/EIR per Title 40 CFR Part 1506.3 if, after an independent review of the document, it concludes that its comments and suggestions have been satisfied.

As an element of its review, the ACOE must consider whether a proposed project represents the least environmentally damaging practicable alternative pursuant to the CWA section 404(b)(1) guidelines. The term practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Although this document addresses impacts on aquatic resources and navigation associated with the proposed action as they relate to sections 404 and 10, it does not serve as a public notice for any ACOE permits. The POLB will request such permits, and public notice will be issued by the ACOE when an application is received. A draft of the section 404(b)(1) alternatives analysis may be included as an appendix of the final EIS/EIR for public review. The ACOE's Record of Decision (ROD) resulting from consideration of the EIS/EIR would formally document its decision on the proposed action, including any required environmental mitigation commitments.

1.2.4 U.S. Coast Guard

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 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 LNG facility security plan review, 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.

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. The process of preparing the LOR begins when an applicant submits a Letter of Intent (LOI) to the local Captain of the Port.

On June 14, 2005, the Coast Guard issued a *Navigation and Vessel Inspection Circular – Guidance on Assessing the Suitability of a Waterway for Liquefied Natural Gas (LNG) Marine Traffic* (NVIC). The purpose of this NVIC is to provide Coast Guard Captains of the Port/Federal Maritime Security Coordinators, members of the LNG industry, and port stakeholders with guidance on assessing the suitability of a waterway for LNG marine traffic that takes into account conventional navigation safety/waterway management issues contemplated by the existing LOI/LOR process, but in addition, will also take completely into account maritime security implications.

The Coast Guard has elected to act as a cooperating agency in the preparation of this EIS/EIR and assisted the FERC and the POLB with preparation of the marine safety and security sections (see sections 4.11.7 and 4.11.8, respectively). The Coast Guard plans to adopt the EIS/EIR if it adequately covers the impacts associated with issuance of the LOR.

1.2.5 Pipeline and Hazardous Materials Safety Administration

The PHMSA has authority to promulgate and enforce safety regulations and standards for the transportation and storage of LNG in or affecting interstate or foreign commerce under the pipeline safety laws (49 USC Chapter 601). This authority extends to the siting, design, installation, construction, initial inspection, initial testing, and operation and maintenance of LNG facilities. The PHMSA's operation and maintenance responsibilities include fire prevention and security planning for LNG facilities under Title 49 CFR Part 193. The PHMSA carries out these responsibilities through its Office of Pipeline Safety (OPS), which inspects and enforces compliance with the regulations through a broad range of administrative and judicial actions.

1.2.6 Responsible and Trustee Agencies

Under CEQA, the POLB is responsible for providing the EIS/EIR to the California State Clearinghouse for it to coordinate the review of the document with state and local responsible and trustee agencies. A responsible agency is an agency other than the lead agency that has a legal responsibility for also carrying out or approving a project. A responsible agency must actively participate in the lead agency's CEQA review process, review the EIS/EIR, and use the document when making a decision on the project. A trustee agency has jurisdiction over certain resources held in trust for the people of California but does not have a legal authority over approving or carrying out the project. Responsible and trustee agencies for the Long Beach LNG Import Project include the CCC, the California Department of Conservation-Division of Oil, Gas, & Geothermal Resources (DOGGR), the California Department of Fish and Game (CDFG), the California Department of Transportation (CalTrans), the CPUC, the CSLC, and the South Coast Air Quality Management District (SCAQMD).

The CCC is responsible for implementing the CCA and determining consistency with the CZMA. The CCC also approves and certifies amendments to PMPs. The DOGGR supervises the drilling, maintenance, and abandonment of oil, gas, and geothermal wells and conducts Construction Site Reviews to ensure that activities do not affect oil production in the project area. The CDFG is consulted to identify any known state-listed threatened, endangered, or sensitive species potentially affected by the project. Authorization to encroach along and within state highways and rights-of-way is issued by CalTrans as well as approval of Traffic Management Plans. The CPUC's responsibilities include issuing a Certificate for construction and operation of intrastate pipeline and powerline facilities. The CSLC has jurisdiction over state-owned tide and submerged lands granted in trust to the City of Long Beach that would be affected by the project. The SCAQMD has the responsibility of issuing authorization to build, install, alter, replace, or operate equipment that emits or controls the emission of air contaminants.

Many of these responsible and trustee agencies are members of the LNG Permitting Interagency Working Group (LNG Working Group), which was organized by the CEC. The LNG Working Group consists of California agencies potentially involved in permitting or approving proposed LNG facilities in the state. The LNG Working Group meets periodically to develop and disseminate information and technical expertise on LNG issues, identify key issues of concern to the state, understand each group member's roles and concerns regarding the construction and operation of LNG facilities in California, and coordinate review of California LNG facility proposals. One of the goals of the LNG Working Group is to foster early and extensive cooperation among federal and state agencies to ensure a thorough review of all proposed LNG facilities.

The POLB is a member of the LNG Working Group and is actively participating and coordinating analysis of the proposed project with the other members of the group. The other members of the group include the Coast Guard, the CARB, the CCC, the CEC, the CPUC, the CDFG, the CCC, the California Department of Conservation, the California Department of General Services, the San Francisco Bay Conservation and Development Commission, the CSLC, the Governor's Office of Planning and Research, and the Port of Humboldt Bay.

1.3 PUBLIC REVIEW AND COMMENT

On June 30, 2003, SES filed a request with the FERC to implement the Commission's Pre-Filing Process for the Long Beach LNG Import Project. At that time, SES was in the preliminary design stage of the project and no formal application had been filed with the FERC. On July 11, 2003, the FERC granted SES' request and established a pre-filing docket number (PF03-6-000) to place information filed by SES and related documents issued by the FERC into the public record. The purpose of the Pre-Filing Process is to encourage the early involvement of interested stakeholders, facilitate interagency cooperation, and identify and resolve issues before an application is filed with the FERC. After receipt of SES' Harbor Development Permit application on July 25, 2003, the POLB agreed to conduct its CEQA review of the project in conjunction with the Commission's Pre-Filing Process.

As part of the Pre-Filing Process, the FERC and the POLB worked with SES to develop a public outreach plan for issue identification and stakeholder participation. As part of the outreach plan, SES met with local associations, neighborhood groups, and other non-governmental organizations to inform them about the project and address issues and concerns. In coordination with the FERC and the POLB, SES also consulted with key federal and state agencies to identify their issues and concerns.

On September 4, 2003, SES sponsored two public workshops in the Long Beach area. The purpose of the workshops was to inform agencies and the general public about LNG and the proposed project and to provide them an opportunity to ask questions and express their concerns. The FERC and the POLB participated in these workshops and provided information on the joint environmental review process. Invitations to the public workshops were sent to federal, state, and local agencies; elected officials; environmental groups; affected landowners; and tenants of the POLB. Notices of the public workshops were published in the local newspapers. Approximately 70 individuals attended the workshops. The questions and concerns raised by the public at the workshop are addressed in this EIS/EIR.

On September 22, 2003, the FERC and the POLB issued a *Notice of Intent to Prepare a Joint Environmental Impact Statement and Notice of Preparation of a Joint Environmental Impact Report, Application Summary Report for SES' Proposed Long Beach LNG Import Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting (NOI/NOP)*. The NOI/NOP was noticed in the Federal Register on September 22, 2003 as well and briefly described the project and the joint environmental review process. The NOI/NOP also invited written comments on the environmental issues

to be addressed in the EIS/EIR and announced a joint NEPA/CEQA public scoping meeting to be held in Long Beach on October 9, 2003. The NOI/NOP was mailed to 412 interested parties, including federal, state, and local agencies; elected officials; environmental and public interest groups; Native American tribes; affected landowners; POLB tenants; and local libraries and newspapers. Announcements of the public scoping meeting were published in the local newspapers. The comment period on the NOI/NOP closed on October 30, 2003.

On November 10, 2003, the POLB issued a Supplemental Notice of Preparation and Initial Study (Supplemental NOP) for the project, which provided more specific details regarding the proposed project facilities. The Supplemental NOP provided project information that was not available when the initial NOI/NOP was issued, listed the project's potential environmental effects, and invited additional written comments on the environmental issues to be addressed in the EIS/EIR. The Supplemental NOP was sent via certified mail to 439 interested parties, including the same parties who were mailed the initial NOI/NOP and additional parties who submitted comments in response to the NOI/NOP. The comment period on the Supplemental NOP closed on December 12, 2003.

On November 3, 2004, the POLB issued a second Supplemental NOP for the project. The second Supplemental NOP provided information on SES' October 2004 modified proposal to manage NGL at the LNG terminal site and invited written comments on the scope of the analysis of the modified NGL facilities that should be included in the EIS/EIR. The second Supplemental NOP was sent via certified mail to 925 interested parties, including the same parties who were mailed the previous notices, additional parties who submitted comments in response to the notices, and landowners affected by the modified proposal. The comment period on the second Supplemental NOP closed on December 6, 2004. Prior to the close of the comment period, SES submitted a revision to the modified proposal to manage NGL at the site that eliminated several of the facilities announced in the second Supplemental NOP. Because the revised proposal eliminated facilities that were presented in the second Supplemental NOP and did not add new facilities, another notice was not issued.

A transcript of the public scoping meeting and all written comments are part of the public record for the Long Beach LNG Import Project and are available for viewing on the FERC Internet website (<http://www.ferc.gov>).³ Table 1.3-1 summarizes the environmental issues that were identified during the scoping process described above and indicates the section of the EIS/EIR in which each issue is addressed.

Some issues that were raised during the scoping process are not environmental issues or are outside the FERC's and the BHC's jurisdiction. These issues include the worldwide corporate record of the applicant, imposition of a tax on the project to provide funds in the event of an emergency, legal liability for losses due to LNG spills, assessment of environmental impacts on the sources of the natural gas withdrawals in foreign countries, and economic issues (e.g., general natural gas/LNG demand and supply issues, pricing, contracts, insurance liabilities and limits, etc.). These issues are not within the scope of this EIS/EIR (CEQA Guidelines section 15131).

³ Using the "eLibrary" link, select "General Search" from the eLibrary menu and enter the docket number excluding the last three digits in the "Docket Number" field (i.e., PF03-06 and CP04-58). Be sure to select an appropriate date range.

TABLE 1.3-1

Issues Identified and Comments Received During the Public Scoping Process for the Long Beach LNG Import Project

Issue/Specific Comment	EIS/EIR Section Addressing Comment
GENERAL	
Beneficial impact of the project because of the competition it would provide in the supply of natural gas	1.1
Need for an LNG terminal	1.1
Identification of agencies responsible for making energy regulatory and planning decisions and the Liquefied Natural Gas (LNG) Permitting Interagency Working Group	1.2
Accessibility of project information and discussion of environmental impact statement/environmental impact report process and timeline	1.3
Consistency with regional and local plans	1.4
Discussion of proposed connections to California's intrastate gas transmission system and electric grid	2.1.2
Description of significant environmental impacts when making LNG siting decisions	4.0
PROJECT DESCRIPTION	
Description of LNG terminal facilities, including the ship berth and unloading facility, LNG storage tanks, vaporization and vapor handling systems, and natural gas liquids recovery system	2.1.1
Temporary extra workspace requirements (e.g., barges)	2.2
Potential for future changes to the design and operation of the facilities	2.8
GEOLOGY	
Evaluation of plugged and abandoned wells within or in close proximity to the project boundaries; procedures to follow if damage to plugged and abandoned wells or discovery of unrecorded wells occurs	4.1.3
Description of design standards of the LNG storage tanks that would ensure their integrity during geological events (e.g., ground rupture, seismic shaking, mass wasting and slope instability, liquefaction, subsidence, expansion or collapse of soil structures, and tsunamis)	4.1.4
SOILS AND SEDIMENTS	
Measures to avoid, reduce, or eliminate any potential site erosion and potential impacts from hazardous materials spills and cleanup measures; erosion/sediment control plan; identification of any known or potentially contaminated sites and evaluation of whether the conditions pose a threat to human health or the environment; implementation of appropriate health and safety procedures	4.2.2, 4.5.4
Potential for dredged materials to contain contaminated sediments; disposal of contaminated sediments	4.2.3
WATER RESOURCES	
Description of proposed water sources for construction and operation activities, intake/discharge requirements, and potential impacts on water resources	4.3.2, 4.3.3
Potential impacts on water resources from construction debris, spills of hazardous materials, and storm water runoff	4.3.2, 4.3.3
Description of dredging activities; identification of fill/borrow sources and disposal sites; potential for turbidity or siltation from shoreline erosion; impacts on marine resources and/or water quality	4.3.3, 4.4.3
BIOLOGICAL RESOURCES	
Potential impacts on terrestrial and marine resources; impacts associated with the import of exotic species in ballast water of LNG ships	4.4.2, 4.4.3
Impacts on fishing activities and on sport and commercial species	4.4.3, 4.5.5
Impacts on rare, threatened, or endangered species, including the California least tern (<i>Sterna antillarum browni</i>) and the California brown pelican (<i>Pelecanus occidentalis californicus</i>)	4.4.4
LAND USE, RECREATION, AND VISUAL RESOURCES	
Impacts on existing and planned uses and sensitive receptors (e.g., schools, residences) within 1 mile of the project site	4.5.2, 4.5.3
Impacts on recreation areas and recreational activities in San Pedro Bay	4.5.5
Impacts on visual resources	4.5.6
SOCIOECONOMICS	
Number of construction and permanent workers expected; project schedule and peak labor force; number of workers and skill levels to be drawn from the Long Beach/Los Angeles area	4.6.3
Impacts on emergency response services in communities affected by the project and fire training programs specific to LNG	4.6.5, 4.11.9
Impacts on existing utilities during construction	4.6.6

TABLE 1.3-1 (cont'd)

Issues Identified and Comments Received During the Public Scoping Process for the Long Beach LNG Import Project	
Issue/Specific Comment	EIS/EIR Section Addressing Comment
Economic impact of a closure of the POLB due to disruption of the LNG terminal	4.6.3
Expected capital cost and tax revenue distribution	4.6.8
Identification of environmental justice population; use of the vapor cloud exclusion zone boundaries to identify environmental justice communities	4.6.9
TRANSPORTATION	
Impacts on land transportation and traffic; completion of a traffic study	4.7.2
Description of the project's impacts on existing and planned tanker and other marine traffic in the Port of Long Beach (POLB); impacts associated with the exclusion zone enforced by the U.S. Coast Guard (Coast Guard)	4.7.3, 4.11.7
Issues regarding proximity to the Long Beach airport	4.7.4
CULTURAL RESOURCES	
Impacts on historic POLB facilities, cultural resources during pipeline construction, and indigenous peoples' lands	4.8.3, 4.8.5
AIR QUALITY	
Location of and impacts on sensitive receptors	4.9.2, 4.9.4, 4.9.5, 4.9.7
Description of applicable air quality regulations	4.9.3
Potential impacts on air quality associated with construction emissions and odors; impacts associated with criteria pollutant emissions during operation of the project, including from marine vessels, vaporization equipment, and on-road vehicles; mitigation of air quality impacts during construction and operation of the project	4.9.4, 4.9.5
Analysis of toxic air contaminant emissions associated with the project on human health	4.9.7
Beneficial impact of the project on the air pollution problem in California; description of the fleets that would use the LNG; comparison of vehicle emission levels from diesel fuel versus LNG; discussion of recent emission studies regarding benefits of LNG fuel use in vehicles	4.9.8
NOISE	
Description of major noise sources of the project and an estimate of the project's noise levels during construction and operation; noise impacts on sensitive receptors, including vessel residents in the Cerritos Channel	4.10.4
RELIABILITY AND SAFETY	
Identification of the international, federal, state, and local agencies that govern the design and operation of the proposed LNG terminal and the LNG tankers that would offload at the terminal and each agency's regulations to prevent and protect against hazardous spills or releases; identification of agencies responsible for safety inspections; discussion of required operation procedures and plans	2.1.2, 4.11.2, 4.11.5, 4.11.7, 4.11.9
History and description of LNG safety record	4.11
Advisability of building an LNG terminal near a downtown area	4.11.5, 4.11.10
Discussion of proposed LNG terminal design measures to reduce the potential for safety hazards; emergency response procedures; coordination with the Coast Guard to address marine safety issues and the enforcement of a security zone around the LNG ships and facilities	4.11.5, 4.11.6, 4.11.7
Discussion of terrorism and security issues	4.11.8
Pipeline reliability and safety	4.11.12
CUMULATIVE IMPACTS	
Cumulative impacts on traffic levels, ocean resources, fossil fuels, and downstream natural gas pipeline infrastructure	4.12
ALTERNATIVES	
Alternatives analysis to identify the least environmentally damaging, practicable alternative that meets the overall project objective (level of analysis commensurate with level of impact)	3.0
Consideration of a no action alternative and the use of alternative energy sources	3.1
Consideration of system alternatives	3.2
Potential onshore and offshore alternative locations and designs for the LNG terminal	3.2.2, 3.3
Alternative to the proposed ship berth location	3.3.3
Evaluation of reduced dredge/fill alternatives, dredge disposal alternatives, and alternative dredging methods	3.5
Consideration of alternative vaporizer designs	3.6

This draft EIS/EIR was filed with the U.S. Environmental Protection Agency (EPA), submitted to the California State Clearinghouse, and mailed to federal, state, and local agencies; elected officials; environmental and public interest groups; Native American tribes; affected landowners; POLB tenants; intervenors⁴ in the FERC's proceeding; local libraries and newspapers; and other interested parties (i.e., miscellaneous individuals who provided scoping comments or asked to be on the mailing list). A formal notice indicating that the draft EIS/EIR is available for review and comment was published in the Federal Register, posted in the Los Angeles County Clerk's office in California, and sent to the remaining individuals on the mailing list. The distribution list for the draft EIS/EIR and formal notice is in Appendix A. The public has at least 45 days after the date of publication in the Federal Register to review and comment on the draft EIS/EIR both in the form of written comments and at public meetings to be held in Long Beach. All comments received on the draft EIS/EIR related to environmental issues will be addressed in the final EIS/EIR.

1.4 CONSISTENCY WITH THE COASTAL ZONE MANAGEMENT ACT, THE CALIFORNIA COASTAL ACT, THE POLB PORT MASTER PLAN, AND OTHER REGIONAL AND LOCAL PLANS AND POLICIES

1.4.1 Coastal Zone Management Act

In 1972, Congress passed the CZMA to “preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation’s coastal zone for this and succeeding generations” and to “encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone” [16 USC 1452, section 303 (1) and (2)].

Section 307 (c)(3)(A) of the CZMA states that “any applicant for a required federal license or permit to conduct an activity, in or outside the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide a certification that the proposed activity complies with the enforceable policies of the state’s approved program and that such activity will be conducted in a manner consistent with the program.” In order to participate in the coastal zone management program, a state is required to prepare a program management plan for approval by the National Oceanic and Atmospheric Administration, Office of Coast and Ocean Resource Management (OCORM). Once the OCORM has approved a plan and its enforceable program policies, a state program gains “federal consistency” jurisdiction. This means that any federal action (e.g., a project requiring federally issued licenses or permits) that takes place within a state’s coastal zone must be found to be consistent with state coastal policies before the federal action can take place.

The Long Beach LNG Import Project is subject to a federal Coastal Zone Consistency Review because it would involve activities within the coastal zone of California, which extends from 3 miles at sea to an inland boundary that varies from a few blocks in urban areas to several miles in less developed areas. The facilities associated with the Long Beach LNG Import Project are located within the South Coast Area, which includes coastal areas in Los Angeles and Orange Counties. California has a federally approved Coastal Management Program, which includes the CCA. The program was approved by the OCORM in 1977 and gave the CCC the authority to conduct federal consistency reviews for projects in California’s coastal zone with the exception of projects in San Francisco Bay. The CCA excludes the San

⁴ Intervenors are official parties to the proceeding and have the right to receive copies of case-related Commission documents and filings by other intervenors. Likewise, each intervenor must provide 14 copies of its filings to the Secretary of the Commission and must send a copy of its filings to all other intervenors. Only intervenors have the right to seek rehearing of the Commission’s decision.

Francisco Bay, which has its own coastal management program administered by the San Francisco Bay Conservation and Development Commission.

1.4.2 California Coastal Act of 1976

The CCA includes specific polices that address various issues, such as terrestrial and marine habitat protection, landform alteration, industrial uses, water quality, and ports. The policies of the CCA represent the statutory standards applied to planning and regulatory decisions made by the CCC and local governments (CCC, 2003a). Implementation of the CCA is accomplished primarily through the preparation of local coastal programs, which are required to be completed by each of the 15 counties and 59 cities located in whole or in part in the coastal zone (CCC, 2003a). Chapter 8 of the CCA recognizes the California ports, including the POLB, as primary economic and coastal resources and as essential elements of the national maritime industry. However, each port was required to prepare a PMP for approval by the CCC that outlines how the port will comply with the general policies of the CCA. The POLB has a CCC-certified PMP that addresses environmental, recreational, economic, and cargo-related concerns of the Port and surrounding regions (see section 1.4.3). Amendments to certified PMPs only become effective after approval by the CCC. To certify a PMP amendment, the CCC must find the amendment consistent with the policies of Chapters 3 and 8 of the CCA.

Chapter 3 of the CCA lists the six coastal resources planning and management polices that are used to evaluate a proposed project's consistency with the CCA:

- maximizing access to California's coast;
- protecting water-oriented recreational activities;
- maintaining, enhancing, and restoring California's marine environment;
- protecting sensitive habitats and agricultural uses;
- minimizing environmental and aesthetic impacts of new development; and
- locating coastal-dependent industrial facilities within existing sites whenever possible.

1.4.3 POLB Port Master Plan

The purpose of the PMP is to provide long-range planning goals and objectives for developing policies involving current and future POLB activities within the Port in compliance with the goals of the CCA. The CCC certified the POLB's PMP in October 1978, subject to submission of a Risk Management Plan (RMP) for assessing hazardous risks. Since that time, there have been 18 amendments to the PMP that have been submitted to and approved by the CCC. Projects that are approved pursuant to Chapter 8 of the CCA are deemed to be consistent with the CCA under Public Resources Code section 30719.

The POLB has been divided into 10 harbor planning districts, which are geographical areas established to serve functional purposes by consolidating similar land and water uses, maximizing efficient use of POLB facilities, and separating hazardous cargo from other areas of the POLB (see figure 1.4.3-1). The goals for each district serve as guidelines for long-term development within each district. To be consistent with the PMP, a project must conform to the goals of the district within which it is located. The project facilities would be located within two districts of the POLB, the Northwest Harbor Planning District 3 and Terminal Island Planning District 4.

Non-Internet Public

DRAFT ENVIRONMENTAL IMPACT
STATEMENT/ENVIRONMENTAL IMPACT REPORT
FOR THE
LONG BEACH LNG IMPORT PROJECT

Docket No. CP04-58-000, et al.

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Figure 1.4.3-1

Public access for the above information is available only
through the Public Reference Room, or by e-mail at
public.referenceroom@ferc.gov

The LNG terminal facilities, the first 0.9 mile of the natural gas and C₂ pipelines, and the electric distribution facilities would be located within the Terminal Island Planning District 4. Current uses include the privately owned Long Beach Generating Station; the Southeast Resource Recovery Facility (SERRF); a container terminal on Pier T and another proposed on Pier S; and lumber, scrap, and oil terminals. Permitted uses within this district include primary port facilities, hazardous cargo facilities, port-related uses, navigation, ancillary port facilities, federal uses, oil production, and utilities. Primary port facilities are those facilities that are primarily dependent on access to water frontage, such as shipping/unloading facilities. Hazardous cargo facilities are defined as “operations and terminals engaged in the loading/unloading, storage and transfer of crude oil and refined petroleum products and chemicals with a National Fire Protection Association (NFPA) rating of 2 or greater” (POLB, 1999).

The next approximately 0.7 mile of the natural gas and C₂ pipelines would be located within the Northwest Harbor Planning District 3. The current use in this district is the container terminal on Pier A. Permitted uses are oil production, primary POLB facilities, utilities, and ancillary POLB activities.

The remaining 0.7 mile of the natural gas pipeline and the next 2.1 miles of the C₂ pipeline, including the 0.7 mile located along the remaining route associated with the natural gas pipeline, would be located within the boundaries of the City of Los Angeles. The remaining 0.9 mile of the C₂ pipeline would be located within the boundaries of the City of Carson (see section 1.4.5).

The pipelines and electric distribution facilities are considered utilities, which are permitted uses within both the Terminal Island Planning District 4 and the Northwest Harbor Planning District 3. The LNG terminal generally conforms to the overall goals of the current PMP; however, an LNG facility is not an expressly identified “hazardous cargo facility” as permitted within Terminal Island Planning District 4. As a result, an amendment to the PMP would be necessary to accommodate the LNG facility. The POLB has submitted a draft PMP amendment to the CCC in conjunction with submittal of this draft EIS/EIR. An announcement that the draft PMP amendment is available for public review was sent to the environmental mailing list along with the draft EIS/EIR and included in a formal notice published in the Federal Register and posted in the Los Angeles County’s office. The public meetings to receive comments on the draft EIS/EIR (see section 1.3) will also be hearings on the draft PMP amendment.

The final PMP amendment will be presented to the BHC for consideration of adoption when the final EIS/EIR is presented for certification (see section 1.2.2). If the BHC adopts the PMP amendment and certifies the final EIS/EIR, the PMP amendment will be submitted to the CCC for review and certification. The CCC must act within 90 days of receipt of the PMP amendment.

If the CCC approves and certifies the PMP amendment, the project would be considered consistent with the CCA and, therefore, the CZMA. A more detailed discussion of how the project conforms to the PMP and CCA policies is presented in section 5.0.

1.4.4 Energy Policy Act of 2005

The Energy Policy Act of 2005, enacted on August 8, 2005, is designed to encourage energy efficiency and conservation, promote alternative and renewable energy sources, reduce dependence on foreign sources of energy, increase domestic production, modernize the electricity grid, and encourage the expansion of nuclear energy. Among the infrastructure-related provisions of the act, section 311(d) addresses state and local safety concerns regarding proposed LNG export or import terminals. The section provides that the Governor of a state in which an LNG terminal is proposed to be located may designate a state agency to consult with the FERC regarding the proposal. Accordingly, the Governor of the State of California designated the CEC for such purposes.

Section 311(d) provides that the designated state agency may furnish the FERC with an advisory report on its safety considerations with respect to a proposed LNG terminal. In addition, section 311(d) stipulates that the FERC shall review and respond specifically to the issues raised by the state in its advisory report before issuing an Order authorizing an LNG terminal.

On September 7, 2005, the CEC submitted to the FERC a Safety Advisory Report on the proposed Long Beach LNG Import Project. At the time of the printing of this draft EIS/EIR, the report is under review. After completing its review, the FERC will respond specifically to the issues raised by the CEC.

1.4.5 Other Regional and Local Plans and Policies

Southern California Association of Governments Regional Plans

The Southern California Association of Governments (SCAG) is a metropolitan planning organization for the six-county southern California region (i.e., Ventura, Los Angeles, Orange, San Bernardino, Riverside, and Imperial Counties). The SCAG was established under California Government Code 6502 et seq. and is designated a Council of Governments, a Regional Transportation Planning Agency, and a Metropolitan Planning Organization.

The SCAG's responsibilities include development of solutions to the region's common problems including transportation management, growth, land use, housing, air quality, waste management, and other regional issues. The SCAG also acts as an information clearinghouse and provides counties and cities with data on demographics, forecasting, mapping, and other regional statistics. The SCAG has developed a Regional Comprehensive Plan and Guide (RCPG) and a Regional Transportation Plan (RTP). These plans include individual plans that address specific issues such as growth management, regional housing needs, regional mobility, water quality, and air quality.

In a letter dated October 20, 2003, the SCAG outlined several policies of its RCPG and RTP that apply to the Long Beach LNG Import Project. A summary of these policies and the project's consistency with these policies is presented in table 1.4.5-1.

Air Quality Management Plan

The EPA, under the provisions of the Clean Air Act (CAA), requires each state that has not attained National Ambient Air Quality Standards (NAAQS) to prepare a separate local plan detailing how such standards will be met in each local area. These plans are prepared by local agencies designated by the governor of each state and incorporated into a State Implementation Plan (SIP). The Lewis Air Quality Act of 1976 established the four-county SCAQMD and charged it with the preparation of an Air Quality Management Plan (AQMP). The AQMP is reviewed every 3 years and revised as necessary. The latest revision was adopted by the SCAQMD in August 2003, but has yet to be approved by the EPA; the last version with EPA approval is the 1997/1999 AQMP. The proposed project would comply with all applicable air regulations. Additional information on air quality in the area and impacts associated with the Long Beach LNG Import Project is presented in section 4.9.

TABLE 1.4.5-1

**Consistency of the Long Beach LNG Import Project with the Policies of the
Southern California Association of Governments'
Regional Comprehensive Plan and Guide and Regional Transportation Plan**

Policy Group/ Policy No.	Policy Description	Project Consistent (Yes/No)	Comments
Consistency with Regional Comprehensive Plan and Guide (RCPG) Policies			
3.03	The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by the Southern California Association of Governments (SCAG) to implement the region's growth policies.	Yes	The project facilities could be in service by early 2010 and would be privately financed. The project would not significantly affect regional growth because of the relatively small operational workforce. Of the 60 full-time employees required for operation of the facilities, only 6 would be obtained from outside the project area (see section 4.6.2).
Growth Management Chapter (GMC) Policies Related to the RCPG Goal to Improve the Regional Standard of Living			
3.05	Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.	Yes	The project would be located in a previously developed, industrial area within and adjacent to the Port of Long Beach (POLB) and would require the construction of minimal new infrastructure (see sections 2.1 and 4.5.2.1).
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	Yes	The project would require the construction of minimal new infrastructure (see section 2.1) and would not interfere with local jurisdictions' efforts to provide public services (see section 4.6.5). In addition, the project would provide a new source of tax revenues in the area (see section 4.6.8).
3.10	Support the local jurisdiction's actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	Yes	Sound Energy Solutions (SES) is in the process of working with the applicable local agencies to obtain the permits, approvals, and consultations necessary for the construction and operation of the Long Beach LNG Import Project (see section 1.5).
GMC Policies Related to the RCPG Goal to Improve the Regional Quality of Life			
3.18	Encourage planned development in locations least likely to cause environmental impact.	Yes	The project would be located in a previously developed, industrial area within and adjacent to the POLB. Several alternative locations were also analyzed (see section 3.0).
3.20	Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.	Yes	The project would be located in a previously developed, industrial area within and adjacent to the POLB and would not affect wetlands, groundwater recharge areas, woodlands, production lands, or land containing unique and endangered plants and animals (see sections 4.3.2, 4.3.4, 4.4.2, and 4.4.4).
3.21	Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	Yes	The project would not affect any known recorded cultural resources or archaeological sites. SES has developed an Unanticipated Discovery Plan that would be followed in the event that sites are found during construction (see section 4.8.4).
3.22	Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	Yes	The project would not be located in an area with steep slopes or high fire or flood hazards. SES has designed the project facilities to withstand seismic hazards, including tsunamis (see section 4.1.4).

TABLE 1.4.5-1 (cont'd)

**Consistency of the Long Beach LNG Import Project with the Policies of the
Southern California Association of Governments'
Regional Comprehensive Plan and Guide and Regional Transportation Plan**

Policy Group/ Policy No.	Policy Description	Project Consistent (Yes/No)	Comments
3.23	Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	Yes	Impacts on noise levels associated with construction and operation of the proposed facilities would be less than significant (see section 4.10). The project would have minimal impact on biological and ecological resources (see section 4.4). SES has designed the LNG storage tanks to withstand a Richter magnitude M7.9 earthquake on the Palos Verde and Newport-Inglewood faults and a magnitude M6.6 earthquake on the THUMS-HB fault (see section 4.1.4). SES is working with local emergency groups to develop an Emergency Response Plan (see sections 4.6.5 and 4.11).
GMC Policies Related to the RCPG Goal to Provide Social, Political, and Cultural Equity			
3.27	Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.	Yes	The project would not interfere with efforts to develop sustainable communities or to provide public services because it would be located in a previously developed, industrial area within and adjacent to the POLB. The project would, however, provide a new source of tax revenues to the area (see section 4.6.8).
Air Quality Chapter Core Actions			
5.07	Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community-based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.	Yes	Table 1.5-1 lists the major federal, state, and local permits, approvals, and consultations identified for the construction and operation of the Long Beach LNG Import Project. The requirements of all of these permits would be complied with. Measures to reduce impacts on the air quality of the region are discussed in section 4.9.
5.11	Through the environmental document review process, ensure that plans at all levels of government (regional air basin, county, subregional and local) consider air quality, land use, transportation, and economic relationships to ensure consistency and minimize conflicts.	Yes	This environmental impact statement/environmental impact report for the Long Beach LNG Import Project will be used by several agencies at various levels of government to determine their respective actions on the project (see section 1.2). Section 1.4 presents an overview of applicable plans and policies and the project's consistency with those plans and policies.
Water Quality Chapter Recommendations and Policy Options			
11.07	Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	Yes	To the extent practicable, SES would minimize reliance on imported water and wastewater discharges (see sections 4.3.3 and 4.6.6).

Water Quality Control Plan – Los Angeles River Basin

The Water Quality Control Plan for the Los Angeles River Basin (Region 4) (Basin Plan) was adopted by the Regional Water Quality Control Board (RWQCB), Los Angeles Region, in 1978 and updated in 1994 (RWQCB, 1994). The Basin Plan designates beneficial uses of the basin's water resources and describes water quality objectives, implementation plans, and surveillance programs to protect or restore designated beneficial uses. The beneficial uses of water resources in the POLB would not be adversely affected by construction and operation of the Long Beach LNG Import Project (see section 4.3.3).

Los Angeles County Congestion Management Program

The Congestion Management Program (CMP) for Los Angeles County was adopted by the Metropolitan Transportation Authority (MTA) in 1992 and is updated biannually. The CMP was developed in conformance with Proposition 111, the Gas Tax Initiative, approved by California voters in 1990. The 1993 program update includes an element called the Countywide Deficiency Plan that establishes a partnership between the 88 cities in Los Angeles County and the MTA. Each jurisdiction is responsible for annually monitoring building permit activity and then deciding how to offset the potential effects of that development by choosing from a series of transportation mitigation strategies. The CMP also includes a series of monitoring programs that measure the level of service (LOS) on critical transportation systems, including major intersections, freeways, and major transit routes. Since 1994, jurisdictions have been required to track new development activity and report it to the MTA. All development activity in the POLB must be included in the City of Long Beach development activity report.

The CMP includes a backbone highway system called the CMP system, which includes all state highways and other major arterial routes as decided by the cities in conjunction with the MTA. A total of 160 intersections are included in the highway system for periodic monitoring of service levels. Projects are evaluated with respect to the closest arterial and freeway monitoring stations to determine their potential effects on regional highways. Additional information on traffic in the area and impacts associated with the Long Beach LNG Import Project is presented in section 4.7.2.

City of Long Beach General Plan

The LNG terminal site, the electric distribution facilities, and the first 1.6 miles of the natural gas and C₂ pipelines would be located within the boundaries of the City of Long Beach. This area is included in the City of Long Beach General Plan (General Plan). In the General Plan, the Long Beach Harbor area falls within Land Use District No. 12. This district is composed of existing freeways, the Long Beach Harbor, and the Long Beach Airport. The General Plan assumes that the water and land use designations within the harbor area are formulated separately and adopted by due process as the Specific Plan of the Long Beach Harbor (also known as the PMP as amended). The General Plan provides for delegation of responsibilities for planning within the legal boundaries of the POLB to the BHC. A discussion of the project's consistency with the PMP is provided in section 1.4.3.

City of Long Beach Municipal Code

The Long Beach Municipal Code establishes the zoning within the POLB as IP – Port-Related Industrial District (IP District) and PD – Planned Development District (PD District). The IP District is characterized by Port-related or water-dependent uses. All new uses in the IP District must be consistent with the PMP. The PD District (or Queensway Bay Planning District) includes portions of the eastern side of the POLB and was created in 1987 to provide a flexible planning mechanism for the phased

recreation-commercial development of the Queen Mary Hotel and adjacent shorelands. The facilities associated with the Long Beach LNG Import Project would be located solely within the IP District and would be consistent with the industrial, water-dependent uses of the district; however, an amendment to the PMP would be necessary to accommodate the LNG facility (see section 1.4.3).

The Long Beach Municipal Code also sets limits for exterior noise levels based on receiving land use districts. The project facilities would be located in an industrial land use district (District 4) associated with the POLB. The Long Beach LNG Import Project would be in compliance with the City of Long Beach noise ordinance (see section 4.10).

The General Plan of the City of Los Angeles

The northernmost 0.7 mile of the natural gas pipeline and 2.1 miles of the C₂ pipeline associated with the Long Beach LNG Import Project would be located within the boundaries of the City of Los Angeles. The General Plan of the City of Los Angeles (2002) is a “comprehensive long-range declaration of purposes, policies, and programs for the development of the City of Los Angeles” and comprises 11 elements that apply citywide. The Land Use Element is divided into 35 local area plans known as Community Plans, the Port of Los Angeles (POLA) Port Master Plan, and the Los Angeles World Airport Plan. The pipelines would be located within the Wilmington-Harbor City Community Plan of the City of Los Angeles, and would be on land that is currently used for industrial purposes. Because the majority of the pipeline route would be located adjacent to or within existing utility rights-of-way, no conflicts with planned uses are anticipated. However, the POLA has indicated that it is currently investigating the feasibility of developing an Intermodal Container Transfer Facility (ICTF) on a portion of the property that would be crossed by the proposed C₂ pipeline. The POLA also stated that any pipeline constructed within an ICTF would need to be designed to handle railroad loads. SES would need to acquire the necessary right-of-way permits from the POLA in order to cross this property and those permits would specify construction standards. Overall, the pipelines would be consistent with the General Plan of the City of Los Angeles and the surrounding industrial uses.

City of Los Angeles Municipal Code

The applicable zoning ordinances for the area around the northernmost 0.7 mile of the natural gas pipeline and 2.1 miles of the C₂ pipeline are detailed in the City of Los Angeles Municipal Code (1989). Chapter 1, Articles 2 and 3 provide specific planning and zoning information for the city. The proposed pipelines would cross land that is zoned M3 or Heavy Industrial and, therefore, would be consistent with the City of Los Angeles Municipal Code and the surrounding industrial uses.

The General Plan of the City of Carson

The northernmost 0.9 mile of the C₂ pipeline would be located within the boundaries of the City of Carson. The current General Plan for the City of Carson was adopted in 1971 and updated in the early 1980s. The city is currently in the process of updating the General Plan. The current General Plan consists of four units, each containing multiple elements and two elements not included within a unit. The Land Use Element is included in Unit 1 and identifies land use designations and the uses permitted for each land use category. The C₂ pipeline would be located within an area where the land use designation is classified as heavy industrial. Industrial areas are intended to accommodate the manufacturing, processing, warehousing, and distribution functions of the community. As a result, the pipeline would be consistent with the General Plan of the City of Carson and the surrounding industrial uses.

City of Carson Zoning Ordinance

According to the City of Carson, the Zoning Ordinance is the most important implementing tool for the General Plan. The ordinance text and zoning map provide permitted land uses and development standards for each category of land use, consistent with the land use designations contained in the General Plan. The proposed C₂ pipeline would cross land that is zoned MH or Manufacturing, Heavy and, therefore, would be consistent with the City of Carson Zoning Ordinance and the surrounding industrial uses.

POLB Facilities Master Plan

The POLB's Facilities Master Plan (FMP) describes growth strategies for the POLB through 2020. The FMP focuses on potential development projects and general patterns of land use within the POLB. It incorporates long-term cargo forecasts and capacity estimates. The FMP explores a wide range of development and landfill options and addresses both cargo and non-cargo land uses.

The FMP presents forecasts of the types and amounts of cargo expected to move through the POLB in 2020. These forecasts are based on economic forecasts of United States trade with the rest of the world. The FMP identifies existing cargo handling capacities and determines the additional capacity needed to handle the anticipated future cargo volumes.

The FMP identifies the construction of a new, deep-water, liquid bulk terminal facility on Pier T to service larger vessels as a near-term project that would help meet the needs anticipated in the FMP. Liquid bulk is defined as liquid cargo shipped without a package or container, such as crude petroleum, refined petroleum, and chemicals. Although LNG is not specifically identified, it would generally fit into the category of a liquid bulk chemical; however, an amendment to the PMP would be necessary to accommodate the LNG facility (see section 1.4.3).

1.5 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

Table 1.5-1 lists the major federal, state, and local permits, approvals, and consultations identified for the construction and operation of the Long Beach LNG Import Project. The responsibilities of the FERC, the POLB, the ACOE, the Coast Guard, and the PHMSA in relation to these permits, approvals, and consultations are described in the applicable sections of this EIS/EIR. All permits and approvals required for the Long Beach LNG Import Project would need to be obtained, regardless of whether they appear in this table.

TABLE 1.5-1

Major Permits, Approvals, and Consultations for the Long Beach LNG Import Project

Agency	Permit/Approval/Consultation	Agency Action
FEDERAL		
Advisory Council on Historic Preservation	Section 106 Consultation, National Historic Preservation Act (NHPA)	Has the opportunity to comment on the undertaking.
Federal Energy Regulatory Commission	Authorization under section 3 of the Natural Gas Act (NGA)	Consider issuance of Approval of Place of Import and Authorization of Siting, Construction, and Operation of LNG Terminal Facilities.
U.S. Department of the Army Corps of Engineers (ACOE) Los Angeles District	Section 10, Rivers and Harbors Act	Consider issuance of permit for placement of structures or work in, or affecting, navigable waters of the United States.
	Section 404, Clean Water Act (CWA)	Consider issuance of permit for the placement of dredge or fill material into all waters of the United States, including wetlands.
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries)	Section 7, Endangered Species Act	Opportunity to consult regarding impact on federally listed or proposed threatened and endangered species and their habitat.
	Magnuson-Stevens Fishery Conservation and Management Act	Conduct review and oversight of essential fish habitat.
U.S. Department of Energy	Authorization under section 3 of the NGA	Consider issuance of authorization to import natural gas.
U.S. Department of the Interior Fish and Wildlife Service	Section 7, Endangered Species Act	Opportunity to consult regarding impact on federally listed or proposed threatened and endangered species and their habitat.
	Migratory Bird Treaty Act	Review the proposed project for consistency with Executive Order 13186 (January 2001).
	Fish and Wildlife Coordination Act	Provide comments to prevent loss of and damage to wildlife resources.
U.S. Department of Homeland Security Coast Guard	Facility Security Plan	Review and consider approval of the Facility Security Plan.
	Letter of Intent	After the operator submits its Letter of Intent, the Captain of the Port determines the suitability of the waterway for issuance of a Letter of Recommendation to the operator.
	LNG Vessel Operation and Emergency Contingency Plan	Review and consider approval of the LNG Vessel Operation and Emergency Contingency Plan.
	Operations Manual and Emergency Manual	Review and consider approval of a plan to deal with the transfer operations and emergency response.

TABLE 1.5-1 (cont'd)

Major Permits, Approvals, and Consultations for the Long Beach LNG Import Project

Agency	Permit/Approval/Consultation	Agency Action
	Permission to Establish Aids to Navigation	Captain of the Port issues permission to establish any navigational aids (buoys or day beacons) associated with the LNG unloading facility.
	Spill Prevention and Spill Response Plan	Review and consider approval of a plan for responding to spills from LNG ships.
	Waterway Suitability Assessment	Validate and consider approval of a report assessing the suitability of the waterway for LNG marine traffic.
U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration	LNG Facilities Petition for Approval	Consider issuance of approval that the new LNG facility meets standards governing siting, design, installation, personnel qualifications, and training.
Federal Aviation Administration	Notification of Proposed Construction Possibly Affecting Navigable Air Space	Review notification of construction activities and/or permanent structures within 3 miles that may have an impact on navigable air space.
STATE		
California Coastal Commission	Federal Coastal Zone Management Act (CZMA) and California Coastal Act of 1976 (CCA) Consistency Determination	Consider issuance of determination of consistency with the CZMA and the CCA.
	Approval of amendment to the certified Port Master Plan (PMP)	Consider approval of the PMP amendment.
California Department of Fish and Game	State-Listed Threatened and Endangered Species Consultation (California Endangered Species Act)	Identify any known state-listed threatened and endangered species.
California Department of Transportation	Encroachment and Crossing Permits	Consider issuance of authorization to encroach along and within state highways and rights-of-way.
	Traffic Management Plan (TMP)	Consider issuance of approval of TMPs for state highways and freeway encroachments.
California Environmental Protection Agency	Regional Water Quality Control Board, Los Angeles Region	
	Section 401, CWA, Water Quality Certification or California Water Code Waste Discharge Requirements Permit	Consider issuance of certification or permit for activities related to dredge and fill materials.
	General National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Consider issuance of authorization to discharge hydrostatic test water.
State Water Resources Control Board	NPDES General Permit for Storm Water Discharges Associated with Construction Activity	Consider issuance of authorization to discharge storm water associated with construction activities.
California Public Utilities Commission	Certificate of Public Convenience and Necessity (Certificate)	Consider issuance of Certificate for construction and operation of the intrastate pipeline and powerline facilities.

TABLE 1.5-1 (cont'd)

Major Permits, Approvals, and Consultations for the Long Beach LNG Import Project

Agency	Permit/Approval/Consultation	Agency Action
California Department of Conservation-Division of Oil, Gas, & Geothermal Resources	Construction Site Review	Review the project site and provide a list of control measures that must be incorporated into the construction plans to protect active production wells, as well as management techniques for dealing with abandoned wells.
California State Historic Preservation Office	Consultation under section 106 of the NHPA	Review and comment on activities potentially affecting cultural resources.
Native American Heritage Commission	Consultation to obtain comments on the project and its effect on Sacred Lands.	Review of Sacred Lands file/consultation.
LOCAL		
City of Long Beach Engineering/Public Works Department	Encroachment Permit	Consider issuance of authorization for encroachment/crossing on city streets.
Harbor Department	Project Approval	Consider certification of the environmental impact report prepared in accordance with the California Environmental Quality Act.
	Harbor Development Permit	Consider issuance of approval for development within Long Beach Harbor District.
Planning and Building Department	Building Permit	Consider issuance of authorization to construct structures and buildings within Long Beach Harbor District.
City of Los Angeles Engineering/Public Works Department	Encroachment Permit	Consider issuance of authorization for encroachment/crossing on city streets.
County of Los Angeles		
Health Hazardous Materials Division	Hazardous Materials Business Plan	Review plan for storage and management of hazardous wastes.
Port of Los Angeles Engineering/Public Works Department	Encroachment Permit	Issue authorization for encroachment/crossing on Port of Los Angeles streets.
South Coast Air Quality Management District (SCAQMD)	Permit to Construct/Permit to Operate (Title V, Clean Air Act, Rule 201, 203, SCAQMD Rules)	Consider issuance of written authorization to build, install, alter, replace, or operate equipment that emits or controls the emission of air contaminants.