

Long Beach LNG Import Terminal, POLB's Role in the Approval Process

By
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It has now been three and one half years since the environmental work began on the proposed SES Import Terminal and two years since this presentation; and despite how much things have changed, they still remain the same. The process of permitting an LNG terminal is still a confusing mix of local, state and federal regulations that vary by project, location, and lead agency status. This presentation deals with some of the Port of Long Beach's permitting experiences. Welcome to the San Pedro Bay port complex - the fifth largest port complex in the world and the largest port complex in the nation. To the west is the Port of Los Angeles and to the east is the Port of Long Beach. The Port of Long Beach is comprised of approximately 3,000 acres of land and approximately 3,500 acres of water divided into 10 Harbor Planning Districts.

The Port's lands, both submerged and dry are held in trust by the City of Long Beach for the State, in accordance with the Tidelands Trust Act. The Trust allows the City to use all tidelands and submerged lands within the City's Harbor District as a port, with the provision that the money generated in the tidelands stays in the tidelands. The Port is administered by a Board of Harbor Commissioners appointed by the mayor. The Port is a landlord port – the land is rented out to private companies who use it to operate marine terminals, although the Port usually builds those terminals. The Port is also, in accordance with Chapter 8 of the California Coastal Act, responsible for administering the Coastal Act within the Harbor District and must evaluate the project through the eyes of both the Trust and the Coastal Act. In fact, the Port is usually in the unusual position of being the land owner, the public agency (as a department of the City of Long Beach), the Coastal Act permitting agency, and often as the project proponent for its own projects within the Harbor District. In addition, the Port acts as the state lead under the California Environmental Quality Act or CEQA

A little over two years ago a company called Sound Energy Solutions, or SES, approached the Port looking for property on which to site an LNG import terminal. The Port had what appeared to them to be an ideal site. The site is located in a section of the Port, known as Pier T; that had previously been home to a naval shipyard. That site has since been developed into a 375-acre container terminal which is directly north and northwest of the proposed site. To the west and south of the site is the Bay, and on the east is a lumber terminal. Further east and across Pier T is the BP deepwater crude oil berth.

SES proposes to build a \$400 million facility that would supply up to 800 million standard cubic feet per day of natural gas to local transmission and distribution systems and a substantial amount of LNG to the regional vehicle fuel market.

The facility would include a pile-supported, concrete wharf and unloading facility with the capability of berthing and unloading one ship at a time, two 160,000 cubic meter capacity, double-walled storage tanks with pumps and piping, a tertiary containment and security wall, a fueling station for local LNG deliveries, hazard detection, control, and prevention systems, and a 2.3-mile-long, 36-inch-diameter natural gas pipeline to connect to the Southern California Gas Company pipeline network, and a 4.6-mile-long, 10-inch-diameter pipeline to transport vaporized ethane, a by-product of LNG, to a refinery owned and operated by SES's partner in the proposed project, ConocoPhillips.

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One of the Port's first steps was to meet with the Federal Energy Regulatory Commission, or FERC, back in Washington. They were the federal lead under the National Environmental Policy Act or NEPA and would be preparing the Environmental Impact Statement or EIS portion for the project. In addition to FERC and the Port, SES would also need permits or permission from the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the California Coastal Commission. The Coast Guard was responsible for conducting a Waterway Suitability Assessment on the project that includes information such as physical location and layout, vessel characteristics and frequency of shipments, other marine traffic on the waterway, depth of water, natural hazards, and distance to the channel. The Coast Guard would also review the facilities operations manual and emergency response plan. The Army Corps of Engineers would issue Clean Water Act permits under Section 404 b(1) and Section 10 for the wharf construction and dredging operations.

The Port is used to preparing joint NEPA/CEQA documents with two other federal agencies; the Army Corps of Engineers and the Federal Highways Administration. But FERC was a new experience, with a whole new set of regulations and acronyms to learn, and a very different approach to NEPA than the Port's usual federal leads. FERC's authority comes from the Natural Gas Act and it is responsible for authorizing the construction, operation, and licensing of interstate natural gas pipelines. It also authorizes the construction and siting of facilities for the import or export of natural gas, which is where the SES project comes in.

FERC had worked in California only twice before; both times on inland pipeline projects and both times with the California State Lands Commission as the state lead agency. FERC's experience in California was very limited and they had never worked on a project involving the California Coastal Act, so they also had a whole new set of regulations and acronyms to learn.

The Port, on the other hand, is very familiar with both CEQA and the Coastal Act. CEQA is very much like NEPA in all but a few areas and so it was decided that a joint EIS in accordance with NEPA and an Environment Impact Report or EIR in accordance with CEQA would be prepared. CEQA says the lead agency is either the one that will carry out the project, or the one that has responsibility for approving the project, or the one that will act first. For the LNG project, as for most projects within the Harbor District, the Port is all three, a department of the City of Long Beach, the permitting agency, and in this case the contractor for constructing the wharf.

The Coastal Act is a key element of the Port's role in the project and the main difference between the Port's requirements and FERC's. One of the Coastal Act's goals is to maintain California's ports, which are powerful economic engines for the State and the Nation. Under Chapter 8 of the Act, the Port was required to prepare a Port Master Plan, which is very similar to a Local Coastal Plan. Once the Coastal Commission certified the Port's Master Plan it was given the authority to act essentially as an arm of the Coastal Commission and to issue Coastal Development Permits for projects that were considered in the Port Master Plan. Long Beach's Port Master Plan also establishes the goals, objectives, and land uses for each of 10 Harbor Planning Districts. SES' proposed project would fall in the Terminal Island Planning District. One of the objectives for this district is to pursue development of Port facilities, and its permitted uses include primary Port facilities, Port-related facilities, hazardous cargo facilities, and oil production.

Occasionally the Port will need to amend its Port Master Plan. Certain types of development and new land creation for example, require amendments to the Port's Master Plan. In this case although the Terminal Island Planning District includes hazardous cargo facilities as an approved use, because LNG is not specifically listed, the Port and the Coastal Commission

agreed that we would amend the Port's Master Plan to include that commodity. In addition to complying with CEQA and the Coastal Act, SES would need a lease with the Port in order to occupy the land.

The SES project is not the only one proposed here in California – there are three other projects currently in the making – Crystal Energy's Clear Water Port, BHP Billiton's Cabrillo Port, and Woodside Natural Gas' Ocean Way. Crystal Energy proposes to convert an existing oil platform into an LNG receiving and regasification terminal. The platform is located in the Santa Barbara Channel about 13 miles offshore and west of the City of Oxnard. The Crystal Energy facility would not store LNG; the natural gas sendout capacity would average 800 million standard cubic feet per day, with a peak capacity of 1.2 billion cubic feet per day.

BHP Billiton proposes to construct a floating storage and regasification unit located about 21 miles offshore of Port Hueneme and the City of Oxnard. The facility would have an LNG storage capacity of about 273,000 cubic meters. The natural gas sendout capacity would be similar to Crystal Energy's at 800 million standard cubic feet per day with a peak of 1.5 billion cubic feet.

Woodside is proposing to place two delivery buoys more than 20 miles offshore from Los Angeles International Airport with dual undersea pipelines to deliver the gas to shore. Like the Crystal and BHP projects, Woodside is proposing is to bring in up to 1.2 billion cubic feet per day.

The major difference between Crystal Energy, BHP, and Woodside are BHP's storage tanks.

Because they fall outside of California waters, Crystal, BHP, and Woodside all fall under the Deep Water Port act and therefore under the auspices of the Coast Guard and the California State Lands Commission. Crystal anticipates starting their EIS/EIR shortly. BHP's revised EIS/EIR received 12,000 comments during the recent public review period and it will likely take some time for them to prepare responses. Woodside has just submitted a permit application to the Coast Guard.

The proposed SES project is obviously different, however, in being an on-shore terminal. That has definite advantages but also definite disadvantages. Part of the Port's task as lead agency under CEQA and the Coastal Act is to describe the balance between the advantages and the disadvantages.

The following are some of the project's advantages: the Port of Long Beach is considered a deep-water port, meaning that most of the channels, basins, and berths are already deep enough to accommodate larger ships (although the LNG berth has a few bumps that would need to be removed, but that would entail only a small amount of dredging); the Port is an industrial setting; whose permitted uses already include land uses such as primary Port facilities and hazardous cargo facilities; and the project would be able to supply LNG for vehicle fuel. Currently, LNG has to be trucked in to the Long Beach area from sources hundreds of miles away. The proposed project would include a truck fueling station that would ensure a steady, local supply of LNG thus promoting clean fuel uses for marine terminal equipment, garbage trucks, buses, and so forth. No other project currently being proposed in California has a truck fueling station.

This site is very close to the existing SoCal Gas Company pipeline system; approximately two miles away, which means that natural gas, could be economically and reliably supplied to local power plants and gas utilities.

An on-shore facility in an existing port would have security advantages as well. The Coast Guard has a large base in the San Pedro Bay port complex and their mission is to enforce the laws of the United States on the sea, to provide security for our coasts, and to respond to environmental issues, such as hazardous material spills. The local Coast Guard group has been developing safety requirements for LNG transports on the water, including maintaining moving safety zones, pre-arrival scenarios, and regular boarding and inspections. The Port of Long Beach has its own security force, called the Harbor Patrol. They, along with the Department of Homeland Security, the City of Long Beach Police Department, and the terminal operators, are responsible for the day-to-day landside security for all facilities being operated in the Port.

That's not to say that there aren't disadvantages to the Long Beach site. There could be short-term impacts to navigation because vessel traffic in the Port complex would have to accommodate the required Coast Guard moving safety zones around the LNG ships, and there could be no two-way traffic while an LNG ship is in the main channel of the Harbor.

But the big issue is the risk that an onshore LNG plant poses, at least in the eyes of the public. The facility is approximately 1½ half miles from downtown Long Beach and there are residences as close as 1½ to 2 miles from the facility. The public is deeply concerned that a catastrophic event could occur at the facility. This is where the major difference between the Port's and FERC's requirements occurs. FERC is required to do a siting study based on credible versus incredible scenarios. The Port, however, has a different mandate; both CEQA and the Coastal Act require that a hazards analysis be based on reasonably foreseeable, but conservative scenarios, whether or not they are considered to be credible.

The Port's hazards analysis looked at the probability of each of the defined scenarios actually happening. The last disadvantage is the potential for the facility to be a terrorist target. Terrorist attacks are in a lot of people's minds, so the Port included them in the scenarios which were evaluated. As an aside, although the Port as a whole could be a target because things such as dirty bombs could be smuggled in containers, it does not appear that the LNG facility would make a particularly good target, given its robust construction and the presence of nearby refineries, petroleum product storage tanks, amusement parks, and of course, downtown Los Angeles. Nevertheless, the risk of terrorist acts, as well as pure accidents and failures, were evaluated as accurately as possible given that the proposed location is in an area famous for its earthquakes.

As you can see, the Port of Long Beach circumstances in California's current LNG import terminal permitting race are unique and challenging as it is in the position of assessing the SES project on behalf of the State as trustee and as CEQA representatives, on behalf of the Coastal Commission as the permitting agency, and most importantly on behalf of the Citizens of Long Beach.