

Licensing Status of California LNG Proposals

*Presented to the
West Coast Regional Coastal Management
Meeting*

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Bay Conservation and Development Commission
San Francisco

Pat Perez, Manager
Special Projects Office
California Energy Commission



Why the Need for LNG?

- CA imports 87% of its natural gas supply
- CA is located at the end of the interstate pipelines
- U.S. natural gas supplies not keeping up with demand
- LNG would diversify CA's supply sources and could hedge against supply and price problems in the rest of the country
- The State's Energy Action Plan, adopted by the CEC and CPUC, recognizes the need for additional natural gas supplies from LNG terminals on the West Coast



LNG Vessel
Photo courtesy of CH-IV International, <http://ch-iv.com>

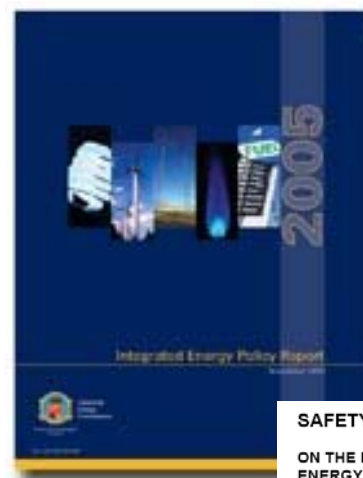


Cove Point Import Terminal, Maryland
Photo courtesy of Dominion © 2003, <http://www.dom.com>



Energy Commission's Role

- State's primary energy planning agency (Integrated Energy Policy Report)
- No legal permitting authority over LNG facilities
- Organize and facilitate LNG Interagency Working Group
- Governor-designated state agency for consulting with FERC and preparing Safety Advisory Report for proposed Port of Long Beach LNG Import Project
- Prepare comments on NEPA/CEQA documents for LNG projects



**SAFETY ADVISORY REPORT
ON THE PROPOSED SOUND
ENERGY SOLUTIONS LIQUEFIED
NATURAL GAS TERMINAL AT THE
PORT OF LONG BEACH,
CALIFORNIA**

*Prepared by the Staff of the
California Energy Commission*
D.D. Olevis, Executive Director

STAFF PAPER

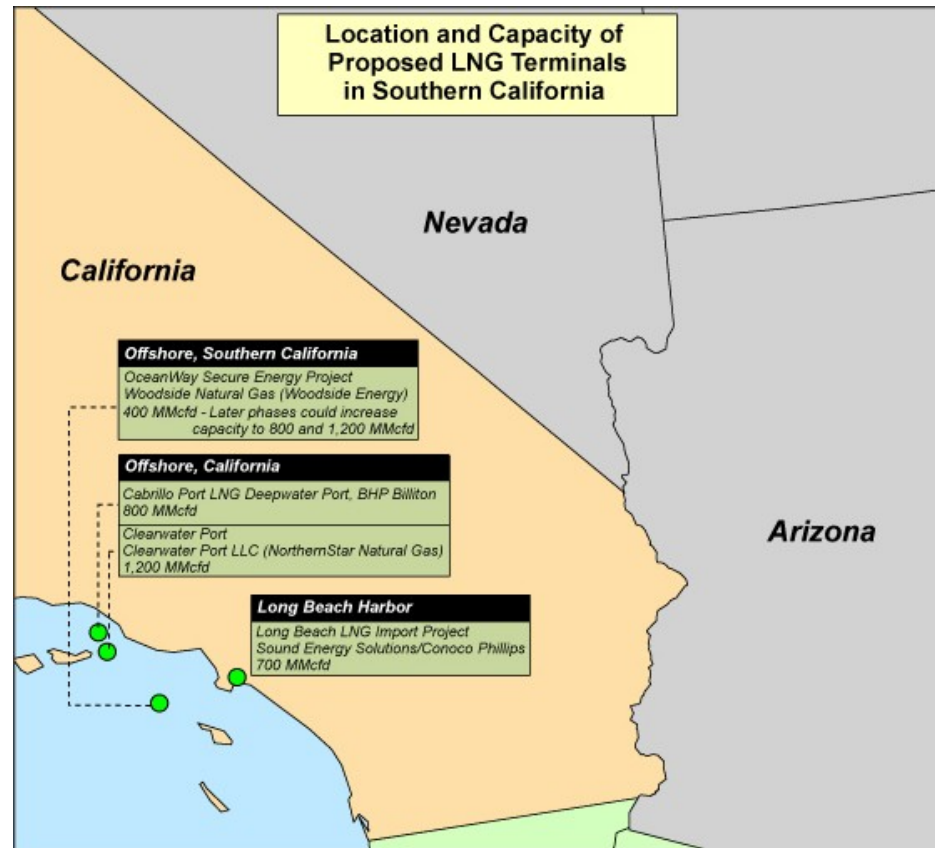


Arnold
Schwarzenegger,
Governor
September 7, 2005
PUBLICATION #
CEC-003-2005-033



California LNG Proposals

- Long Beach LNG Import Project (onshore)
- Cabrillo Port LNG Deepwater Port (offshore)
- Clearwater Port (offshore)
- OceanWay Secure Energy Project (offshore)



Long Beach LNG Import Project

- Proposed by Sound Energy Solutions (a wholly owned subsidiary of Mitsubishi Corporation) – 50/50 partnership with ConocoPhillips
- Located in Port of Long Beach, Pier T; 25-acre site
- 700 million cubic feet per day (MMcfd) average
- Two, 160,000-cubic meter, full-containment storage tanks
- Four shell and tube heat vaporizers (closed-loop, freshwater system)
- Natural Gas Liquids (ethane) Recovery System
- 150,000 gallons per day of LNG vehicle fuel



Computer simulation of Long Beach LNG Import Project (October 2005 Draft EIS/EIR)



Long Beach LNG Import Project (cont.)

- Key Issues:
 - Public Safety (accidental or terrorist-induced LNG releases)
 - Air Quality
- Licensing timetable:
 - Draft EIS/EIR published October 2005 by FERC and Port of Long Beach. Thousands of comments received.
 - Publication of Final EIS/EIR is uncertain.
 - The Board of Harbor Commissioners have said that “further substantial time and resources will be required in order to finalize an appropriate and legally defensible EIS/EIR” and they “will not divert additional staff resources to the LNG project without a clear understanding that the City is prepared to support” the project. [Source: December 4, 2006 letter to City of Long Beach Mayor and Council]
 - Long Beach Mayor Bob Foster opposes project. [December 7, 2006 letter to SES]
 - Long Beach Oil & Gas Department says the value of SES’s financial offer to City “is not nearly sufficient to recommend to the City Council that negotiations continue forward.” [December 12, 2006 letter from Director Garner to City Manager Miller]
 - Harbor Commission votes to reject project and discontinue negotiations [January 22, 2007]



Cabrillo Port LNG Deepwater Port

- Proposed by BHP Billiton LNG International Inc.
- Floating Storage and Regasification Unit (FSRU)
- Located approx. 14 miles off the coast of Ventura & Los Angeles Counties. Interconnect with SoCalGas system at Ormond Beach Generating Station via undersea pipeline.
- 800 MMcfd average
- Three, 90,800 cubic meter storage tanks
- Eight submerged combustion vaporizers (SCV) (closed-loop, freshwater system)
- Closed-loop equipment cooling system (no seawater use under normal operations)



Images from March 2006 Revised DEIR



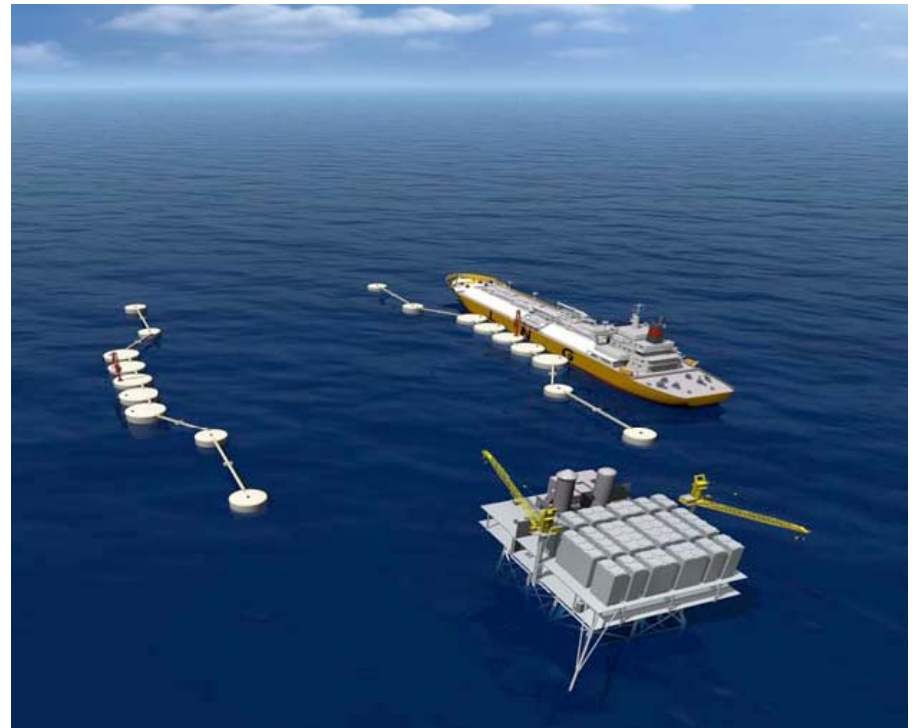
Cabrillo Port LNG Deepwater Port (cont.)

- Key Issues:
 - Air Quality - Ventura County air district opposes U.S. EPA draft air permit – onshore New Source Review Rules apply (best available control technology and emissions offsets required)
 - Marine Resources - seawater discharge temperature and impingement and entrainment of marine organisms
- Licensing timetable:
 - DEIS/EIR published by U.S. Coast Guard and State Lands Commission in October 2004. 2800 comments filed.
 - Revised DEIR published by State Lands Commission in March 2006. 1400 comments filed
 - Final EIS/EIR anticipated to be released first quarter 2007
 - Coastal Commission hearing to decide consistency with California Coastal Management Program – projected for April 2007
 - U.S. Maritime Administration and Coast Guard can hold hearing anytime within the 15 days after publication of Final EIS/EIR. Following the hearing the Governor has 45 days to approve, approve with conditions, or veto the project, or take no action (approve by default)



Clearwater Port

- Clearwater Port LLC (subsidiary of NorthernStar Natural Gas)
- Convert existing oil drilling platform (Platform Grace) to an LNG receiving and regasification terminal
- Located 12.6 miles offshore of Oxnard. Interconnect with SoCalGas system at Mandalay Power Station via an undersea pipeline.
- 1.2 billion cubic feet per day (Bcfd) average
- No onsite storage
- Ambient air vaporizers (heat exchangers) – less fuel use and lower air emissions than SCV technology



Source: PowerPoint Presentation by NorthernStar to LNG Interagency Working Group (August 31, 2006)



Clearwater Port (cont.)

- Key Issues: Unknown at this time. Draft EIS/EIR possibly published late Summer 2007
- Licensing timeframe: Unknown
 - Updated Deepwater Port (DWP) Application filed with U.S. Coast Guard and State Lands Commission on June 30, 2006. Application has not been certified as complete.
 - Once application deemed complete, the license review process, including a decision, must be completed within 356 days. Although, the “clock” may be suspended due to outstanding information needs or at the request of the applicant.
 - Governor will have 45 days from the final federal hearing to approve, approve with conditions, or veto the project, or take no action (approved by default)



OceanWay Secure Energy Project

- Woodside Natural Gas (subsidiary of Woodside Energy)
- Underwater buoy system located 22 miles off coast at Los Angeles
- 400 MMcfd average (later phases could increase capacity to 800 MMcfd and 1.2 Bcfd)
- LNG regasified onboard specially-designed tankers
- Ambient air used to regasify LNG (no seawater used for regasification)
- No gas storage
- Gas delivered to undersea pipeline that would interconnect with SoCalGas infrastructure near Los Angeles International Airport



OceanWay Secure Energy Project (cont.)

- Key Issues: Unknown at this time. No environmental documents available.
- Licensing timeframe: Unknown.
 - Applications for Deepwater Port Permit and pipeline franchise filed with U.S. Coast Guard and City of Los Angeles on August 17, 2006. The DWP Application has not been certified as complete
 - Once application is deemed complete, the license review process, including a decision, must be completed within 356 days. Although, the “clock” may be suspended due to outstanding information needs or at the request of the applicant.
 - Governor will have 45 days from the final federal hearing to approve, approve with conditions, or veto the project, or take no action (approved by default).



Concluding Remarks

- Key decisions on the proposed offshore Cabrillo Port LNG Deepwater Port and proposed onshore Long Beach LNG Import Project will likely occur by summer 2007.
- The market will ultimately determine how many LNG import terminals will be built along CA's coast.
- The CEC will continue to study the need for natural gas supplies and LNG terminals as part of our work on the *2007 Integrated Energy Policy Report*.
- The CEC will continue to work cooperatively with the California Coastal Commission, CPUC, State Lands Commission, and LNG Interagency Working Group on LNG issues.



For More Information on LNG

Visit the Energy Commission's website at:

<http://www.energy.ca.gov/lng/index.html>

