



# CITY OF OXNARD

## MEMORANDUM

July 13, 1977

*Selecting Select Consultant*

**To:** City Manager

**From:** Assistant Planning Director

**SUBJECT:** Preferred Design Concept for LNG Terminal Facility,  
Special Use Permit No. 610

Special Use Permit No. 610, for an LNG degasification terminal and docking facility, features above ground tanks; an over-water trestle approximately 6,500' in length; and a parallel docking facility at the end of the trestle. The addenda to the environmental impact report for SUP 610 proposes alternative design concepts. Listed below are those design concepts which should be reviewed by the City Council. It is recommended that the City Council indicate its preference for each of the design concepts for communication to the Planning Commission and applicant.

The alternative design concepts are discussed in detail in the EIR and their advantages (and disadvantages) are discussed in various locations in both the addenda and the draft report.

### I. TANK DESIGN

1. Above ground tanks as proposed by the applicant.
2. In-ground tanks as constructed by Tokyo Gas Company.
3. Sunken Silo design as proposed by SES.

*M. May T K*  
Planning Department recommends the Sunken Silo alternative which offers safety advantages over the above ground tanks and avoids frost heave problems of the in-ground tanks.

### II. DIKE DESIGN

1. High dike 2' thick as proposed for the above ground tank by Western LNG.

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- M K T
- 2. High dike approximately 10' thick for the above ground tank.
  - 3. Dike buried with the tanks in the Sunken Silo concept.
  - 4. The earth berm for the in-ground tank as designed by the Tokyo Gas Company.

The Planning Department recommends the in-ground dike with the Sunken Silo concept.

### III. TRESTLE DESIGN

- K open
- 1. The above water trestle.
  - 2. Undersea cryogenic pipeline.
  - 3. Undersea tunnel as proposed by SES.

only 5%

Mi Max T

The Planning Department recommends the undersea tunnel as proposed by SES.

### IV. DOCKING FACILITY

max 10% deflection

- 1. Parallel dock at the end of the trestle as proposed by the applicant.
- 2. A raised platform docking facility at the end of a cryogenic pipeline or tunnel.
- 3. A monobuoy at the end of a cryogenic pipeline or tunnel.

Mi K T

The Planning Department recommends the raised platform facility or monobuoy.

### V. SEISMIC DESIGN

- 1. The design for 0.33g (maximum horizontal acceleration of one-third the force of gravity) as proposed by Western LNG.
- 2. Design for 0.5g (maximum horizontal ground acceleration) as recommended by the FPC.
- 3. Design in accordance with the requirements for the San Onofre Nuclear Generating Station.

Mi Max K T higher

The Planning Department recommends the seismic design standard of 0.5g (maximum horizontal acceleration) as recommended by the FPC.

Miller .79 reduction in size of tanks

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## VI. RISK MANAGEMENT SYSTEM AND PLAN

A risk management system would focus on construction and operation details including: type of steel to be used in tank design, x-ray inspection of all welding, fire flow requirements, fire suppression and equipment, disaster and evacuation plans, employee training programs, operational criteria, and surveillance systems.

## VII. SHIP TRAFFIC CONTROL SYSTEM

The City Council has discussed requiring an effective ship traffic control system. The applicant should develop a ship traffic control system as a component of the SUP for submission to appropriate regulatory agencies. Such a system should include a shore based radar and ship-to-shore radio telephone communication system. The system should also include regulations and requirements for docking and unloading precautions including requirements for pilots on foreign flag ships and regulations concerning docking during adverse weather conditions.

## VIII. LIABILITY

The applicant proposes to provide \$50,000,000 in liability insurance for each accident. In addition to liability insurance furnished by the applicant, operation of the project should not be commenced until there is adequate "no fault" insurance provided by the state or federal government. The applicant and subsidiaries shall be held liable for any and all accidents occurring from an LNG ship, the trestle or on shore facility.

The Planning Commission continued the Public Hearing on the Special Use Permit until September 8, 1977 in contemplation that a consultant would be hired. If the City Council believes that the Public Hearing should be heard sooner than September 8, 1977, then it is recommended that the Planning Department readvertise the hearing for the latter part of August.

*Joe Hunter*

Joe Hunter  
Assistant Planning Director

JH:rg

hold harmless

Consultant necessary examination of