MINUTE ITEM
This Calendar Item No. C55 was approved as Minute Item No. 55 by the California State Lands Commission by a vote of 3 to 0 at its 12/7/95 meeting.

CALENDAR ITEM
C55

A: 35, 37, 41, 53, 54, 67, 70, 73, 74, 78

S: 18, 19, 23, 27, 28, 35, 38, 39, 40

12/07/95
W9409.53
Eskijian
Gregory
Meier

CONSIDER AUTHORIZING STAFF TO APPLY FOR FUNDS FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FOR USE IN DEVELOPING OFFSHORE STRUCTURAL STANDARDS IN CONNECTION WITH TSUNAMI CURRENT AND INUNDATION IN SOUTHERN CALIFORNIA AND TO EXPEND SUCH FUNDS AS MAY BE RECEIVED.

APPLICANT:
The State Lands Commission

PROPOSAL:
The Staff of the State Lands Commission proposes to submit an application for funds from the Hazard Mitigation Grant Program managed by the Federal Emergency Management Agency (FEMA). If granted, the funds would be used for preparation of hydrodynamic analyses to determine what areas along Southern California's coast may be inundated by a tsunami induced by an offshore earthquake. The information developed would in turn be used to develop structural regulations for oil production and transportation facilities offshore and along the shoreline.

STATUTORY AND OTHER REFERENCES:
A. 42 U.S.C. Section 5170c
B. 44 CFR Part 206, Subpart N
C. Public Resources Code Section : Div. 7.8

AB 884:
N/A

OTHER PERTINENT INFORMATION:
California's coast faces a substantial threat of severe inundation from tsunamis cause by offshore seismic events. The devastation of Crescent City in 1964 was caused by an earthquake over two thousand miles away in the Aleutian Islands. In the last three years, seven tsunamis have occurred in various parts of the world, many of them generated by earthquakes on nearby strike-slip faults

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similar to those found in and offshore of Southern California. Although most of these events were in sparsely populated areas, approximately 3000 lives were lost. Information recently learned from the Northridge Earthquake and new data about nearby offshore faults has further highlighted the State's vulnerability.

The concern is exacerbated by the presence of numerous oil production and transportation facilities along the coast. In the event of a tsunami, inundation and high velocity currents may cause these facilities to fail, resulting in the release of large quantities of oil and hazardous substances into marine waters.

More information is needed for the State to perform an adequate evaluation of the risks involved and to develop appropriate countermeasures. Currently, the State does not have any structural regulations or design criteria for evaluating the ability of marine terminals and offshore oil structures and artificial islands to withstand tsunami forces. Also, no detailed coastal inundation information is available for planning purposes.

The Commission has a direct interest in this matter because of its responsibilities for regulating all marine facilities on lands leased from the Commission and all marine terminals throughout the State. Under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act, the Commission is required to ensure its regulations of these facilities provide the best achievable protection of public health and safety and of the environment.

The University of Southern California's School of Engineering (USCSE) has presented a proposal which appears to Staff to be the most appropriate means of obtaining needed information. USCSE would develop information to indicate what areas along the port and urban areas of Southern California's coastline would be inundated and what would be the maximum current velocities experienced. This information would be derived from modeling scenario earthquakes along various offshore faults. The resulting information would be used to establish structural regulations and design criteria for retrofitting or building structures under the Commission's regulatory and leasing programs. The results could also be used for regulatory and planning activities by other State and local governmental entities.

The USCSE proposal would entail approximately $403,000 in estimated expenditures. Staff would apply for approximately $302,000 from the Hazard Mitigation Grant Program, managed by the Federal Emergency Management Agency (FEMA) and administered by the California Office of Emergency

Services (OES). These agencies are authorized to grant up to 75% of program costs to address these kinds of problems. The University of Southern California would contribute the remaining 25% of program costs.

While the studies under this proposal would be directed toward Southern California, the information, methodology and structural regulations would also be applicable in assessing and mitigating tsunami threats along the entire coast of the State.

IT IS RECOMMENDED THAT THE COMMISSION:

1. AUTHORIZE AND DIRECT STAFF TO PREPARE AND SUBMIT ANY AND ALL APPLICATIONS AND DOCUMENTATION NECESSARY FOR A GRANT FROM THE HAZARD MITIGATION GRANT PROGRAM MANAGED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) IN AN AMOUNT STAFF DETERMINES TO BE NECESSARY AND APPROPRIATE TO PAY FOR COSTS AND EXPENDITURES INCURRED IN DEVELOPING INFORMATION REGARDING TSUNAMI CURRENTS AND INUNDATION WHERE OIL PRODUCTION AND TRANSPORTATION FACILITIES ARE LOCATED ALONG THE COAST OF SOUTHERN CALIFORNIA.

2. AUTHORIZE AND DIRECT STAFF TO EXPEND FUNDS RECEIVED FROM THE HAZARD MITIGATION GRANT PROGRAM TO DEVELOP THE INFORMATION FOR WHICH THE FUNDS ARE SOUGHT.