



State Of California
SEISMIC SAFETY COMMISSION

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*Architectural
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Jeff Sedivec
Fire Protection

Richard McCarthy
 Executive Director

California Seismic Safety Commission's
 Ad Hoc Committee on Tsunami Safety
 Minutes of Meeting
 October 21, 2005

Committee Members Present

- Chief Donald Parker, Chairman (City of Vallejo)
- Mr. Linden Nishinaga (City of Long Beach)
- Mr. Jose Borrero (University of Southern Calif.)
- Dr. Lori Dengler (Humboldt State University)
- Dr. Lucile Jones (CSSC/USGS)
- Ms. Crystal Rockwood (Pillsbury Winthrop Shaw Pittman LLP)
- Mr. Daniel Shapiro (CSSC)
- Mr. Orville Magoon (Coastal Zone Foundation)
- Mr. Michael Reichle (CGS)

CSSC Staff Present

- Mr. Richard McCarthy
- Mr. Robert Anderson
- Mr. Henry Reyes
- Ms. Veronica Ramirez

Observers

- Mr. Stuart Nishenko (PG&E)

Call to Order

The Seismic Safety Commission's Ad Hoc Committee on Tsunami Safety Chairman Mr. Donald Parker called the meeting to order at 10:05am.

Minutes of the September 28, 2005 meeting in Oakland agreed upon.

Review of Committee's task and Priorities of Report

The task is to examine the potential tsunami hazards and risk potential to California and identify areas needing improvement, to finalize suggestions on the report regarding content, graphic tables and pictures, and to prepare a report with no more than five findings and recommendations.

The Committee agreed to devote the meeting to work and arrive at a consensus on the final version of the draft report to be approved at the Commission's meeting on November 10, 2005. Lucile Jones suggested that the Committee first agree on the framework of the report and incorporate additional

comments. A few revisions were made in the wording of the Executive Summary. There was much discussion on the clarity of the wording and the order in which to list the findings and recommendations based on the recommended priorities. A consensus was made to rearrange the order of the findings and recommendations in order of importance and to remove the numbering of the findings in the text boxes throughout the report.

After much discussion the Committee came to an agreement on the wording and order of seven findings and five recommendations as follows:

Findings

1. Tsunamis, generated either locally or from events elsewhere in the Pacific Basin, pose a significant threat to life and property in California.
2. Tsunamis present a substantial risk to the economy of the State and Nation, primarily through the impact on our ports.
3. Californians are not adequately educated about tsunamis and the risk they pose; consequently, many are unaware how to respond to natural or official tsunami warnings.
4. The existing tsunami warning system has not achieved all of its objectives for several reasons including problems with communications, agency coordination and protocols.
5. Present building codes and guidelines do not adequately address the impacts of tsunamis on structures. Currently available tsunami inundation maps are not appropriate for code or guideline applications.
6. Federal programs have provided resources to initiate tsunami hazard mapping and mitigation programs. However, more effort and a better understanding of the risk is required to bring the treatment of tsunamis to a level comparable to other State hazards such as earthquakes.
7. The Governor's Office of Emergency Services and many local governments have been proactive in addressing the State's tsunami risk and since the Sumatran tsunami and the June 14, 2005 Gorda Plate warning, have renewed interest in improving warning dissemination and other aspects of tsunami planning and preparedness.

Recommendations

The State of California should:

1. Improve education about tsunami issues in the State:
 - a. Include multi-language education about tsunami hazards and how to respond to large coastal earthquakes, sudden water level changes and official tsunami warnings in all California schools.
 - b. Actively educate coastal populations about tsunami hazard zones, evacuation routes and install signage consistent with other west coast states as soon as possible.
 - c. Update State and local earthquake preparedness materials to include tsunami safety. Incorporate tsunamis in safety training for workplaces in inundation zones, especially ports.
 - d. Develop multi-language tsunami information and educational materials and make them available to visitors to coastal areas.
2. Work with other coastal states to obtain an external expert review of the NOAA tsunami warning system criteria for issuing and canceling warnings as well as the format and procedures for distribution.
3. Continue to work with federal agencies to develop guidelines for structures to resist both strong ground motion and tsunami wave impact.
4. Support and provide matching funds for tsunami mitigation programs in coastal counties and in OES, including improvements to the communications and emergency response systems. These funds will leverage federal support for tsunami mitigation programs.
5. Support and provide matching funds for the development of improved technologies and methodology to assess the tsunami risk. These new technologies and risk assessments should be used to support better long-term and emergency response planning. Develop probabilistic tsunami hazard maps appropriate for building code and land-use regulations.

Executive Summary was accepted.

Committee reviewed the content of the report and agreed upon the following changes: 1) removed the Earthquake Map under “Tsunami Hazard in CA” to be replaced with a state map that shows location of CA tsunamis, 2) removed a large portion of the history found under the heading “What is the greatest

risk to CA?” 3) addition of a time line for the June 14th event, 4) revisited the signage issue to include new developments, 5) suggested to add paragraphs about dangers of false alarms and use of new technology for tsunami warning, 6) rearranged order in various parts of the report.

Conclusions:

Lucile Jones agreed to draft paragraphs about the dangers of false alarms as well as the need to utilize new technology in tsunami warning systems. Jones then plans to email the paragraphs to Crystal Rockwood for review before sending a draft of the report to Committee members for a final review. The final version of the Tsunami Safety Draft Report will be reviewed at the Commission meeting on November 10, 2005.

Parker adjourned the meeting at 1:45 pm.