

Seismic Safety Commission  
Minutes of Meeting  
March 14-15, 2005  
Los Angeles Harbor Sheraton Hotel  
601 South Palos Verdes  
San Pedro, California

**Members Participating**

Lucy Jones, Chairman (3/15 only)  
Donald R. Parker, Vice Chair  
Mark Church  
Bruce Clark  
Lawrence T. Klein  
Don Manning  
Stan Y. Moy  
Linden Nishinaga  
Daniel Shapiro

**Members Absent**

Andrew Adelman  
Senator Richard Alarcon/Chris Modrzejewski  
Celestine Palmer  
Jimmie R. Yee

**Staff Present**

Richard McCarthy, Executive Director  
Karen Cogan, Executive Assistant  
Robert Anderson, Staff Geologist  
Henry Reyes, Staff Structural Engineer  
Henry Sepulveda, Director of Legislation  
Fred Turner, Senior Structural Engineer

**I. CALL TO ORDER/ROLL CALL**

The meeting of the Seismic Safety Commission was called to order by Vice Chair Donald Parker at 5:01 p.m. Executive Assistant Karen Cogan called the roll and confirmed the presence of a quorum.

**II. CHAIRMAN'S REMARKS**

Commissioner Parker noted the purpose of the March 14 meeting was to conduct normal Commission business so more time would be available for the guest speakers the following day, March 15.

**III. APPROVAL OF FEBRUARY 2005 COMMISSION MEETING MINUTES**

**ACTION:** Commissioner Mark Church made a motion, seconded by Commissioner Don Manning, that:

*The Commission approve the minutes of the February 10, 2005 meeting as presented.*

\* Motion carried, 7 - 0 (Commissioners Lucy Jones and Stan Moy absent during voting).

**IV. EXECUTIVE DIRECTOR'S REPORT**

### **Budget Update**

Commissioner Lawrence Klein reported that the Commission's budget is on target. He noted the staff's projections match those of the Contracted Fiscal Services.

Mr. McCarthy proposed holding about \$2,000 to cover unexpected bills that may arrive after the end of the fiscal year on June 30, 2005.

### **Web Page Contract**

Mr. McCarthy said \$15,000 is the annual fee for the proposed three-year contract with San Diego State University. He recommended that the Commission authorize this expenditure from the current year's budget.

Mr. McCarthy noted the contents of the Web site are being expanded. He said the draft of the new *Homeowner's Guide* was just posted.

**ACTION:** Commissioner Klein made a motion, seconded by Commissioner Bruce Clark, that:

*The Commission authorize the expenditure of \$15,000 as proposed.*

\* Motion carried, 8 - 0 (Commissioner Jones absent during voting).

Mr. McCarthy said the staff will present a contract for continuing development of the Web site at the April meeting.

### **Update on FEMA Appeal**

Mr. Fred Turner reported that Jerry Quinn, a consultant, was hired last week to help the Commission organize and present its accounting information to the Federal Emergency Management Agency (FEMA). He said the staff held one meeting with Mr. Quinn to familiarize him with the history and appeal issues. For an amount not to exceed \$5,000, Mr. Quinn will be providing advice regarding strategies and possible approaches. Mr. Turner noted the staff defined the scope of Mr. Quinn's work and identified seven subtasks and priorities.

### **OES Request**

Mr. McCarthy informed the Commission that the Office of Emergency Services (OES) asked the Commission to apply for FEMA grant funds for pre-disaster mitigation planning. Commission staff requested \$75,000 per year over a three year period to track progress made on initiatives within the California Earthquake Loss Reduction Plan.

### **Spanish Translation of *Homeowner's Guide***

Mr. McCarthy said the staff has been meeting with California Earthquake Authority (CEA)

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representatives to discuss translating the *Homeowner's Guide* into Spanish. The Commission requested \$10,000 for this project, and CEA determined that a Spanish translation is needed. Mr. McCarthy added that the staff is hoping to have the work completed in time to release both the English and Spanish versions at the Disaster Resistant California Conference in May.

Dr. Guna Selvaduray, Collaborative for Disaster Mitigation, stated that he was fairly certain the translation could be done by that deadline.

ACTION: No action required.

### V. LEGISLATION UPDATE

Mr. Henry Sepulveda referred to his written report in the meeting packet and an updated handout.

#### Commission-Sponsored Bills

Mr. Sepulveda reported that AB 584 (Blakeslee), the clean-up bill to delete obsolete sections of law and release a small amount of funds not used for a conference in 1991, is anticipated to go smoothly, although no hearing date has been scheduled yet.

Mr. Sepulveda noted that AB 970 (Yee) is a follow-up to AB 300, a 1999 bill that directed the Division of the State Architect to survey California schools to assess their seismic vulnerability. AB 970 would allow school districts to obtain the survey information and be immune from liability for a period of up to four years. He said no hearing date has been scheduled for this bill.

Mr. Sepulveda said AB 1374 (Liu) repeals the existing sunset on the Commission's funding arrangement through the Department of Insurance and makes the arrangement permanent. He added that Insurance Commissioner Garamendi supports the bill.

Mr. Sepulveda noted that SB 1054 (Soto) is a follow-up to the Commission's report on the safety of schools. This bill clarifies that charter schools must comply with the California Building Code (CBC). Mr. Sepulveda said Mr. Soto's staff discussed two possible amendments: 1) that the bill apply prospectively, as requested by the Charter Schools Association; and 2) that former military facilities converted to use as charter schools be required to be inspected by local building departments.

Commissioner Dan Shapiro said the military uses an effective worldwide code similar to the Uniform Building Code (UBC), with seismic zoning. He added that the safety of military buildings depends on the year they were built or upgraded.

Mr. Sepulveda indicated that the Legislative Advisory Committee had concerns about military facilities, and in response, the staff asked charter school representatives to identify all military buildings being used as schools in California. He suggested waiting for that information before taking a stance on this issue.

On the issue of charter school building standards, Mr. Sepulveda noted that Mr. Henry Reyes suggested clarifying that either the UBC or the Field Act would apply.

Commissioner Clark commented that allowing a lower standard could encourage more school districts to form charter schools to avoid Field Act compliance.

After some discussion, the Commission agreed that charter schools should have to meet the same minimum standards as private schools. The Commission also rejected the notion that the law would apply only prospectively.

**ACTION:** Commissioner Klein made a motion, seconded by Commissioner Manning, that:

*The Commission request the author to amend SB 1054 to clarify that its provisions apply not just prospectively, and that all charter schools must meet the same minimum standards as private schools.*

- \* Motion carried, 7 - 1 (Commissioner Church opposed, Commissioner Jones absent during voting).

Commissioner Church requested that Mr. Sepulveda provide more information on the Education Code requirements applicable to private schools.

#### **Other Bills of Interest to the Commission**

Mr. Sepulveda drew attention to the chart in his report showing the topics of the 40 bills currently being tracked by the staff.

##### AB 44 (Cohn)

Mr. Sepulveda noted AB 44 (Cohn) is a bill intended to expedite the review of seismic improvements to hospitals, similar to a measure that was proposed last year. Under this bill, hospitals would be allowed to hire independent plan reviewers certified by the Office of Statewide Health Planning and Development (OSHPD) for certain large projects, and OSHPD would have 90 days to act on reviewed plans. Mr. Sepulveda reported that AB 44 was amended on March 9 to extend the deadline for hospitals to submit compliance plans and to allow the Hospital Building Safety Board to approve extensions of 2008 deadlines. He said he called the author's staff to inquire about the rationale for the amendments and was told the bill is now being sponsored by the administration. He recommended that the Commission refrain from taking a position until the purposes of the amendments is clarified.

##### AB 1316 (Salinas)

Mr. Sepulveda noted that AB 1316 (Salinas) is a similar bill intended to expedite OSHPD review of public hospital projects over \$25,000. AB 1316 would also allow hospitals to hire independent OSHPD-certified plan reviewers.

##### SB 167 (Speier)

Mr. Sepulveda drew attention to SB 167 (Speier), a bill that would suspend the 2008 deadline for hospital compliance and move the 2030 deadline to 2020 instead. He said the Legislative Advisory Committee questioned the lack of accountability and milestones. The committee

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expressed concern that the bill was merely a delaying tactic. Mr. Sepulveda recommended seeking amendments to impose definite milestones.

Mr. Sepulveda introduced Ms. Alicia Wachtel, architect, Adams Project Management, and asked her to update the Commission regarding hospital compliance.

Ms. Wachtel stated that the law required all hospitals to submit compliance plans by 2001; although most complied, there are still some hospitals in the state that have not. She expressed concern about what will happen to these noncomplying hospitals if the 2008 deadline is suspended. In addition, she noted, there are some hospitals that are moving forward to comply with the 2008 and 2030 deadlines, but they may be unable to meet the 2020 deadline. Ms. Wachtel said all hospitals that applied for extensions of the 2008 deadline to 2013 were approved; she added that some of these hospitals are counting on not having to close if they fail to meet the 2013 deadline.

Commissioner Nishinaga advocated imposing preliminary and final design deadlines as milestones.

Mr. Sepulveda proposed that the staff work with Ms. Wachtel to identify appropriate milestones. He said he would contact OSHPD for more detailed statistics on deadline compliance so far and bring that information back to the Commission.

### AB 304 (Hancock)

Mr. Sepulveda drew attention to AB 304, a bill authorizing local governments to establish reconstruction standards for soft-story buildings. He said the Legislative Advisory Committee had a concern that this bill would result in local governments pre-empting the California Building Code. The staff inquired was informed by the author's office that the intent was simply to empower local governments to establish a programs to deal with soft-story buildings.

ACTION: No action required.

## **VI. PUBLIC COMMENT**

Mr. James Flournoy, Save Our Community, informed the Commission that the City of Rosemead has not been providing independently reviewed geotechnical reports, as required by law. He expressed concern that geotechnical work done for a local bridge replacement project and a discount supercenter project has been inadequate. Mr. Flournoy also noted there is a potential for conflicts of interest if projects are not reviewed by people outside the City's own staff and contractors.

## **VII. RECESS**

At 6:50 p.m., the meeting was recessed, to be reconvened the following day, March 15, 2005, at 9:00 a.m.

## **VIII. RECONVENE - MARCH 15, 2005 - WELCOME AND INTRODUCTION**

Chairman Lucy Jones reconvened the meeting at 9:05 a.m. Ms. Cogan called the roll and confirmed the presence of a quorum.

Chairman Jones welcomed everyone. She said the purpose of the meeting was to examine tsunami safety efforts in California and identify areas needing improvement. She stated that tsunamis are an inevitable risk for California, and the recent Sumatran tsunami highlights important issues. Chairman Jones noted the agenda begins with an overview of the risk, followed by a discussion of warning and mitigation systems, and then consideration of public education and outreach programs. She asked all speakers to stay within their appointed time limits.

Mr. McCarthy advised that the Seismic Safety Commission's working group would be meeting the next day to plan the Commission's response to the testimony and feedback provided. He invited those interested to attend.

## **IX. TSUNAMI RISK TO CALIFORNIA**

### **Overview of the Indian Ocean Tsunamis of December 26, 2004**

Dr. Jose Borrero, University of Southern California Tsunami Research Center, presented a series of slides documenting his surveys of the Indian Ocean Basin. He began by describing the Sumatran-Andaman Island earthquake and its aftershock zone. He said the event caused a global tsunami, and he displayed a map showing maximum wave height around the world.

### **Investigation and Modeling Overview of Potential Tsunami Sources**

Dr. Michael Reichle, California Geological Survey (CGS), showed a slide presentation about tsunami risk modeling for California. He began with a guided tour of California's most hazardous spots, and said modeling was based on known tsunamis, including the 1946 Hilo tsunami, the 1962 event in Chile, and the well-known tsunami after the 1964 Alaskan earthquake. Dr. Reichle noted there were 11 deaths in Crescent City resulting from the 1964 tsunami, plus three others elsewhere, for a total of 14 in California within recent history. He stated his opinion that most of California is relatively safe, except for Crescent City, where there are records of tsunamis in 1812, 1927, 1930, and again in 1992.

### **Overview of Coastal Processes on Tsunami Inundation**

Dr. Reinhard Flick, California Department of Boating and Waterways, Scripps Institute of Oceanography, gave a slide presentation on coastal processes affecting the magnitude of tsunami run-up. He stated that there are four sources of tsunamis: earthquakes, volcanoes, landslides, and meteors. He discussed and explained six processes that affect tsunami run-up, and noted tectonic/geologic setting, tides and sea level, and waves are most important, while climate change, sedimentation and width of beaches, and human intervention all play a role.

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### **X. PROPOSED EXPANSION OF PACIFIC TSUNAMI WARNING SYSTEM**

#### **Status of California Tsunami Warning and Mitigation Actions**

Mr. Rich Eisner, Office of Emergency Services, discussed the California Integrated Seismic Network (CISN) and showed samples of public information materials. He said there were important shelter-in-place lessons to be learned by finding out more about the structures that withstood tsunamis. He noted disaster workers want to respond immediately, but experience has shown that it is better to wait for a second and third wave before trying to go back to affected areas. Waves can continue to arrive for hours, but people need to be educated to understand that problem.

#### **Tsunami Inundation Mapping Update**

Dr. Jose Borrero, University of Southern California Tsunami Research Center, discussed the status of the tsunami inundation mapping effort for California. He said much has been learned in the past ten years, especially about local events and factors. He noted California is vulnerable because of the dense land use near the coast, the risk of near-shore events and landslides, and the short historical record.

#### **Disposition of Tsunami Warning System and Proposed Expansion of Tsunami Warning System**

Dr. Bernard discussed existing tsunami warning systems and products from NOAA. He talked about the global seismic network, consisting of a wide arrange of tide gauges and buoys, and pointed out links between Alaska and other Pacific rim countries. Dr. Bernard reported that Congress is likely to pass \$35 million in federal legislation in April to fund improvements to the global warning system. Of that amount, NOAA expects to receiver \$24 million, and \$13.5 million will go to the U.S. Geological Survey (USGS). Under the proposal, additional deep-sea buoys that mesh with the international system will be deployed along the Pacific, Caribbean, and Atlantic shorelines. The funding may also provide opportunities for research.

#### **Status of Tsunami Warning and Mitigation in the State of Washington**

Mr. George Crawford, State of Washington Emergency Management Division, talked about Washington's tsunami warning and mitigation program. He emphasized the need for delivering a consistent message over time, sharing resources, and taking a comprehensive approach to safety.

### **XI. PUBLIC COMMENT**

Mr. Paul Somerville, URS Corporation, supported the idea of having a preprogrammed simulation database to help forecast likely scenarios. He recommended using default parameters once an earthquake occurs, and then refining the model with data as it becomes available. He expressed his opinion that direct and immediate use of seismological observations were critically

important.

At 12:15 p.m., the meeting was recessed for lunch. Chairman Jones reconvened the meeting at 1:18 p.m.

## **XII. TSUNAMI MITIGATION**

### **Structural Damage and Response to Historic California Tsunamis**

Mr. Orville Magoon, Coastal Zone Foundation, presented slides showing structural damage and response to historic California earthquakes. He displayed an attenuation map of the San Francisco Bay area and pointed out areas of particular vulnerability.

### **Overview of Infrastructure Performance in the Indian Ocean Basin - Siting and Design Issues for California Infrastructure**

Mr. Martin Eskigian, State Lands Commission, discussed infrastructure issues associated with tsunami risk in California. He said California has 39 marine oil terminals in the state, of which most are at least 50 years old. He reported that as a result of a 1990 law, a regulatory process was established, and new regulations with a tsunami section will be published in May. Mr. Eskigian noted the new regulations revise the 100-year and 500-year run-up estimates for Los Angeles and Long Beach and recognize earthquake performance criteria. He added that if a tsunami is generated by a distant source, there will probably be sufficient time to evacuate people. Mr. Eskigian encouraged people interested in more details to view the documents on the Web.

### **Indian Ocean Basin and Port of Los Angeles Tsunami Planning, Preparedness and Mitigation Activities**

Mr. Peter Yin, Port of Los Angeles, discussed his observation of port facilities in the Indian Ocean Basin and lessons that can be applied to the Port of Los Angeles. He showed slides of the areas he visited in India and Sri Lanka, including ports and harbor facilities. He reported finding a 33-foot high water line in some places, evidence of people and buildings destroyed by earthquake damage, and problems with infrastructure systems.

## **XIII. TSUNAMI PUBLIC EDUCATION/OUTREACH**

### **Tsunami Education and Outreach in Northern California**

Dr. Lori Dengler, Humboldt State University/Redwood Coast Tsunami Work Group, said she has been working with local community groups, state and federal agencies, businesses, and scientists since 1996 to help local governments in northern California coordinate their tsunami education efforts. She showed a map depicting levels of groundshaking and potential tsunami inundation. She said the northern coast of California has experienced many recent earthquakes, some of which have caused death and destruction.

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### **Los Angeles County Tsunami Assessment and Preparedness and Mitigation Activities**

Mr. Jeff Terry, Los Angeles County Office of Emergency Management, said Los Angeles County has been participating on a multi-jurisdictional task since 1998 to develop an interim operational area plan for tsunami response. He noted about 70 percent of California's coastline has been mapped, and detailed maps of all major ports will be available by next fall. He invited Captain Angus Alexander to show a brief simulation video.

### **Inundation Mapping Using Computer Animation and Beach Evacuation Issues**

Captain Angus Alexander, Los Angeles County Fire Department, narrated a video flyover of the Los Angeles County coastline. He showed inundation maps and pointed out areas that would need to be evacuated. He also indicated the location of major sewage treatment plants, power plants, and oil refineries.

### **Tsunami Hazards Response and Planning**

Captain Larry Collins, Los Angeles County Fire Department, discussed Los Angeles County's integrated emergency response and planning system. He said responders are trained to do drive-by "windshield" surveys of disaster areas first to identify trigger points, point out possible fire and rescue complications, and plan effective responses. He emphasized the importance of providing lookouts, communications systems, escape routes, and safe zones. Captain Collins said that in the case of tsunamis, advance warning would allow responders to move and stage resources to safe areas so they can implement an action plan for the impact phase.

### **Program Overview and the Role of the National Weather Service in Tsunami Warning**

Mr. Eric Boldt, National Weather Service (NWS), discussed NWS' role in tsunami warnings. He said NWS provides a wide range of climate forecasts, severe weather watches and warnings, all-hazard radio broadcasts, and assistance with Amber Alerts and civil emergencies. Mr. Boldt showed a map of the tsunami warning station nodes in the Pacific Ocean, Alaska, Hawaii, and other areas.

## **XIV. PUBLIC COMMENT**

Dr. Kirin Magiawala, Northrop Grumman, asked if the speakers' presentations would be made available after the meeting in some form. Mr. McCarthy responded that the staff will request copies of the PowerPoint presentations and other materials so they can be posted on the Website.

Ms. Janet Gunter, San Pedro Homeowners Coalition, expressed concern that the Ports of Los Angeles and Long Beach have been ignoring public safety and emergency evacuation issues for too long.

## **XV. NEXT STEPS**

Mr. McCarthy proposed that the Seismic Safety Commission consider the testimony and develop

a report similar to that on the safety of California schools. He noted the recent Asian tsunamis have raised important issues for California. He suggested taking advantage of the topic's current visibility by examining where the state is doing well and where improvements need to be made.

Mr. McCarthy proposed that the Commission establish an ad hoc committee, inviting participation from earth scientists, university researchers, medical professionals, social policy experts, and others. The group would be tasked with looking at detection, warning, evacuation, response, education, and outreach, developing a few key findings and three or four recommendations. He estimated this effort would take about six months. He invited suggestions from commissioners.

Commissioner Parker spoke in favor of the approach recommended by the staff.

ACTION: Commissioner Parker made a motion, seconded by Commissioner Nishinaga, that:

*The Commission establish an ad hoc committee to develop a report on tsunami hazards and risks for California as proposed.*

\* Motion carried, 7 - 0 (Commissioners Church and Moy absent during voting).

Mr. McCarthy suggested that the Commission discuss SB 50, the federal funding bill mentioned earlier by Dr. Bernard, at the April meeting along with other legislation. He said OES sent a letter listing the State's tsunami risk reduction needs to Senators Boxer and Feinstein, and recommended building on that effort by sending the senators copies of the Commission's tsunami report when completed.

## **XVI. ADJOURNMENT**

There being no further business, at 4:20 p.m., the meeting of the Seismic Safety Commission was adjourned.

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Sue Celli  
Office Manager

Approved by:

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Richard McCarthy  
Executive Director