



State Of California  
**SEISMIC SAFETY COMMISSION**

*Arnold Schwarzenegger, Governor*

Gary McGavin, AIA  
*Architectural Planning  
 Chairman*

Dennis Mileti  
*Social Services  
 Vice-Chair*

Lawrence Klein  
*Utilities*

Dr. Lucy Jones  
*Seismology*

Hon. Richard Alarcon  
*State Senate*

Saeed Ali  
*Senate Representative*

Hon. Mark Church  
*Local Government*

Dr. Bruce Clark  
*Geology*

Hon. Carol Liu  
*State Assembly*

Donald Manning  
*Assembly Representative*

Celestine Palmer  
*Insurance*

Daniel Shapiro  
*Structural Engineering*

Keith Wheeler  
*Emergency Services*

Jeff Sedivec  
*Fire Protection*

Arul Arulmoli  
*Soils Engineer*

Hon. Jim Wattenburger  
*County Government*

Andrew Adelman  
*City Building Official*

Richard McCarthy  
 Executive Director

Seismic Safety Commission  
 Minutes of Meeting and Staff Workshop  
 October 12, 2006  
 State Capitol, Room 444  
 Sacramento, California

**Members Participating**

Gary McGavin, Chair  
 Dennis Mileti, Vice Chair  
 Mark Church (arrived at 9:35 a.m.)  
 Bruce Clark  
 Lucy Jones  
 Lawrence T. Klein  
 Celestine Palmer  
 Daniel Shapiro  
 Keith Wheeler

**Members Absent**

Andrew Adelman  
 Saeed Ali  
 Kandiah (Arul) Arulmoli  
 Don Manning  
 Jeff Sedivec  
 James Wattenburger

**Staff Present**

Richard McCarthy, Executive Director  
 Karen Cogan, Executive Assistant  
 Robert Anderson, Staff Geologist  
 Fred Turner, Senior Structural Engineer

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

Commission Chairman Gary McGavin called the meeting of the Seismic Safety Commission to order at 9:30 a.m. Executive Assistant Karen Cogan called the roll and confirmed the presence of a quorum.

**VI. COMMISSION’S MOVE INTO STATE AND CONSUMER SERVICES AGENCY (Out of Order)**

Chairman McGavin welcomed Ms. Rosario Marin, Secretary; Mr. Will Bush, Undersecretary; and Ms. Kathleen Webb, Insurance Advisor, State and Consumer Services Agency, and invited them to address the Commission.

Secretary Marin welcomed the Seismic Safety Commission to the State and Consumer Services Agency. She said the Commission joins about fifty other boards and commissions within the Agency. Secretary Marin invited commissioners and staff to contact her directly at any time. She expressed her appreciation to the Seismic Safety Commission for its efforts and said she looked forward to working in partnership.

Undersecretary Bush and Ms. Webb also welcomed the Seismic Safety Commission to the Agency.

## **II. CHAIRMAN'S REMARKS**

Chairman McGavin reminded commissioners of the workshop session the following morning at the Commission office beginning at 8:00 a.m.

Chairman McGavin said the staff is inviting representatives from the Department of Homeland Security, Office of Emergency Services, Citizens Corps, Health and Human Services, and other planning and response organizations to make presentations at the November meeting.

## **III. APPROVAL OF MINUTES**

### **September 13-14, 2006**

**ACTION:** Commissioner Dennis Mileti made a motion, seconded by Commissioner Keith Wheeler, that:

*The Commission approve the minutes of the September 13 and 14 meeting as presented.*

\* Motion carried, 9 - 0.

## **IV. GEOGRAPHICAL INFORMATION SYSTEM (GIS) SOCIAL VULNERABILITY INDEX FOR EARTHQUAKES AND OTHER NATURAL HAZARDS**

Commissioner Mileti introduced Dr. Susan Cutter, Carolina Distinguished Professor, University of South Carolina. He said Dr. Cutter is the nation's leading social geographer and her expertise is known worldwide. He thanked her for traveling from the East Coast to make her presentation.

Dr. Cutter explained that the primary focus of her work on the Geographical Information System (GIS) Social Vulnerability Index is to determine what makes people and places vulnerable to natural, technological, and human-made disasters. She noted that the same event can have drastically different impacts and outcomes on people, and she cited examples from the San Fernando, Northridge, and Loma Prieta earthquakes to illustrate this point. Dr. Cutter said effective application of social science lessons can help redistribute risks both before and after an event.

Dr. Cutter reviewed factors that relate to vulnerability, including special needs, age, economic status, race and ethnicity, and gender. She said the most important factors are socioeconomic status, family status, and age. She explained that the GIS Social Vulnerability Index considers 42 variables in arriving at a single score that ranks a geographical area's risk.

Commissioner Mileti and Chairman McGavin thanked Dr. Cutter for her presentation.

## **V. FIELD ACT HEARINGS**

### **Structural Engineers Association of California (SEAOC)**

Mr. Arthur Ross, Structural Engineers Association of California (SEAOC), stated that SEAOC is a long-time supporter of the Field Act. He said the Field Act provides a standard higher than life safety for schools, primarily due to its thorough plan-check process and rigorous testing and inspection requirements.

Mr. Ross emphasized that the Field Act itself should be viewed as a separate issue from the Division of the State Architect's (DSA's) management and implementation of the law. He expressed strong support for continuing the Field Act. He cautioned that any changes should be weighed carefully to make sure they do not reduce any of the Field Act's protections.

Mr. Ross noted that DSA has taken a number of steps to reduce bin time and provide better consistency in interpretations, but further improvements can be made. He suggested looking at ways to improve the performance of schools used as shelters. Mr. Ross observed that although initial costs of better performance may be higher, they will result in lower repair costs in the long run. He encouraged the state to think of the big picture when considering these investments.

Chairman McGavin thanked Mr. Ross for his presentation.

### **American Institute of Architects**

Mr. Brian Wiese, American Institute of Architects, California Chapter (AIACC), said architects have less consensus than engineers regarding the Field Act. Comparing local jurisdictions with DSA review, he noted that the California Building Code and Field Act have similar technical requirements, and the differences lie in the more thorough plan check and continuous inspection, including in-plant inspections, required by DSA. He stated that DSA plan check can take longer, depending on the local jurisdiction. Mr. Wiese said consistency is one of the major challenges DSA is facing, but their processes and training are improving.

Mr. Wiese recommended focusing on the question of how to improve the delivery of public schools in California. He suggested offering a self-certification procedure for smaller projects, allowing local jurisdictions to conduct plan checks, implementing an electronic plan check system, and providing a more rapid review of new technologies. He noted DSA should review the original intent of the Field Act to make sure its implementation efforts are appropriate. Mr. Wiese added that the eventual goal should be development of a uniform code for all non-residential work in California.

Mr. Wiese reported that the AIACC is doing a study with the University of California regarding school project delivery in California and six other states, and a draft should be ready in March of 2007. He said there appears to be a significant different in the costs of school construction in California.

Chairman McGavin thanked Mr. Wiese for his comments.

### **Earthquake Engineering Research Institute (EERI)**

Mr. Doug Hohbach, Hohbach-Lewin, Inc., Earthquake Engineering Research Institute (EERI), noted that EERI's mission statement is related to the purpose of the Field Act: life safety and protection of property. He said a 1986 EERI publication cites the fifty-year record of good performance of schools as a demonstration of the effectiveness of the Field Act.

Commissioner Jones observed that a 1993 update of that study was provided in the meeting packet. She said it would be helpful to have a comparison of post-earthquake damage to school buildings compared to other types of buildings. She asked if EERI had access to records of damaged Field Act schools compared to the damaged California State University Northridge (CSUN) buildings after the Northridge earthquake, for example.

Mr. Hohbach responded that there were a number of post-Northridge studies looking at different building types, and he offered to check with EERI and extract that data for the Commission. He noted problems in the review process contributed to the failure of the CSUN parking structure.

Mr. Hohbach agreed with previous speakers that the Field Act provides a higher level of safety for schools because of the superior qualifications of DSA's structural engineers and plan checkers, the more consistent plan checks, the inspection process, district engineer oversight, and review by an independent entity. He expressed his opinion that this higher level of safety is appropriate for schools, and that DSA's process is effective, although it can cost more time and money.

Mr. Hohbach suggested improving the DSA process by limiting amendments to the Uniform Building Code to provisions affecting public safety, focusing on big-picture items and key details in plan checks, enforcing codes and published interpretations, and allowing designers to approve minor changes.

Commissioner Shapiro asked if Mr. Hohbach thought the property protection mandate should be eliminated from the Field Act. Mr. Hohbach said he hesitated to go that far, and he suggested that DSA develop more balanced internal interpretations that take costs and delays into account.

Chairman McGavin observed that enforcement of the Americans with Disability Act (ADA) accessibility requirements has significantly expanded DSA's scope, and he asked what percentage of cost increases could be attributed to access. Mr. Hohbach said he could not estimate a percentage, but acknowledged that complying with ADA can be costly. He added that DSA's accessibility review is much more consistent than reviews by local building departments.

Chairman McGavin thanked Mr. Hohbach for his comments.

Chairman McGavin said the next scheduled speaker, Ms. Linda Sweaney, had been held up at the airport and would not be able to arrive before 2:00 p.m.

### **Division of the State Architect**

Chairman McGavin welcomed Mr. David Thorman, State Architect, and Mr. Dennis Bellet, DSA. He began by asking what percentage accessibility adds to project costs. Mr. Thorman said he was unable to provide an estimate. He stated that access review and fire and life safety review are both done within the same timeframe as the seismic review, so they do not contribute to extra time.

Mr. Thorman advised that DSA is currently about 20 percent understaffed, so existing staff people are working overtime and some functions are being outsourced to consultants. He agreed with Mr. Ross that the Field Act itself should be separated from issues and problems with the process. He said that although DSA tends to be a scapegoat, DSA's review takes up only about one third of the total time spent in plan review, and back-checks and responses from the architects take the other two thirds.

Mr. Thorman acknowledged that DSA's four primary challenges are consistency, accuracy, timeliness, and communication, and he described initiatives to improve in each area. He noted many good suggestions were made at the Seismic Safety Commission's Field Act hearings so far, and DSA has already begun implementing a number of them. Mr. Thorman talked about the collaborative process, changes to streamline DSA management, concurrent or incremental review, and the DSA Academy.

Mr. Thorman noted that besides looking at the cost of repairing and rebuilding, the state should consider the value of immediate reuse of facilities. He observed that schools are often used as emergency shelters and bases of response operations after disasters, and building them to higher standards ensures lower long-term costs. Chairman McGavin remarked that immediate reuse of schools is an advantage of the Field Act that should be pointed out in the Commission's white paper.

Mr. Thorman suggested that the Commission's report to the Legislature and Governor be simple, straightforward, and factual. He advocated a proactive approach rather than a defensive tone.

Chairman McGavin thanked Mr. Thorman and Mr. Bellet for their presentation.

## **VIII. EXECUTIVE DIRECTOR'S REPORT (Out of Order)**

### **Letter to Army Corps of Engineers supporting ABAG Proposal**

Mr. McCarthy reported that the Commission had received a request from the Association of Bay Area Governments (ABAG) to send a letter to the Army Corps of Engineers asking for reconsideration of an ABAG planning study for the Delta. He explained that the Army Corps of Engineers is funding other proposals, but ABAG's was the only one that included planning studies to prioritize projects. He invited commissioners to review and comment on the letter drafted by the staff.

Commissioner Clark said he was uncomfortable recommending reconsideration without seeing the ABAG proposal and the competing proposals.

Commissioner Klein suggested revising the letter to emphasize the need for planning studies to prioritize projects and asking the Army Corps of Engineers to reconsider funding the ABAG proposal or something similar. Commissioners expressed support for this approach.

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

*The Commission write a letter of support as proposed.*

Commissioner Mileti stated that he supported the ABAG proposal without seeing it. Commissioner Mark Church proposed that the Commission express support for the concept without referring to specific details.

\* Motion carried, 9 - 0.

At 12:26 p.m., the Commission recessed for lunch. Chairman McGavin reconvened the meeting at 1:52 p.m.

## **VII. AMERICAN SOCIETY OF CIVIL ENGINEERS HURRICANE KATRINA REVIEW PANEL REPORT**

Commissioner Mileti showed a PowerPoint presentations on lessons learned from Hurricane Katrina. He noted it is a fallacy to think that lessons about earthquakes can only be learned through earthquakes; this attitude results in lessons from other hazards being overlooked and waiting too long. Commissioner Mileti stated that lessons focusing on people and organizations transcend hazard types.

Commissioner Mileti discussed the study undertaken by the American Society of Civil Engineers to analyze the levee failures in Hurricane Katrina, the factors contributing to the failures, and the social consequences. He said the study recommends four major shifts in thought and ten critical actions related to those ideas:

Commissioner Mileti noted the first shift in thought involves understanding risk and embracing safety. He said critical actions include keeping safety at the forefront of public policies, quantifying the risks, and communicating the risks to the public and deciding how much risk is acceptable.

Commissioner Mileti discussed the second shift, to re-evaluate and harden high loss-potential constructed protection, and he noted the action recommendations include rethinking the approach from a systems viewpoint that combines constructed protection with other loss reduction strategies, and correcting deficiencies with urgency.

The third shift, Commissioner Mileti noted, is revamping the management of protection. He said the report advocates putting one person in charge and improving interagency coordination.

Commissioner Mileti stated that the fourth shift in thinking is to demand engineering quality by upgrading engineering design procedures, bringing in independent experts, and placing safety first.

Commissioner Mileti concluded by observing that hurricanes and earthquakes are acts of nature, but losses from these disasters are the result of human actions and inactions.

## **VIII. EXECUTIVE DIRECTOR'S REPORT (Continued)**

### **Budget**

Mr. McCarthy noted that in the latest report, Contracted Fiscal Services is projecting a slight year-end deficit, but the staff expects to have a slight surplus. He said the charts do not show the PEER reimbursement.

Mr. McCarthy advised that the Commission's budget is in good shape. He said more detailed projections will be available at the January meeting.

### **FEMA Appeal**

Mr. McCarthy reported that the Office of Emergency Services has not yet received a refund amount from FEMA. He said this information is necessary to determine what the Commission still owes OES.

### **Policy on Annual Leave/Vacation/Sick Hours Maximum**

Mr. McCarthy said many state agencies have policies limiting the amount of vacation and sick time transferees from other agencies can bring. He noted some agencies accept a maximum of 400 hours, for

example. He recommended investigating policy options and adopting a Commission policy on this issue.

### **Revision of the California Earthquake Loss Reduction Plan**

Mr. McCarthy reported that the staff reviewed the California Earthquake Loss Reduction Plan (CELRP) and identified some possible revisions. He suggested appointing a committee to work with the staff to review the plan and recommend updates. He estimated this activity would entail a few hours of work by two or three commissioners.

Commissioners Palmer and Mileti volunteered to help. Commissioner Jones said she was interested, but her time was limited. She noted the Research Implementation Committee will be meeting on October 25, and she suggested referring this task to the committee. Other commissioners expressed support for this approach.

Chairman McGavin asked the staff to email the proposed revisions to committee members before the October 25 meeting.

### **Budget Change Proposals**

Mr. McCarthy noted that the Commission submitted two budget change proposals (BCP's) this year, one for office relocation funds and another for administration of CRAF research funds. He said the CRAF BCP proposes establishment of a special fund within the state from which research funds would be drawn, with the Seismic Safety Commission receiving any interest earned on the unspent balance. Funds not awarded in a given year could be rolled over to the following year. Mr. McCarthy advised that the Attorney General's office will prepare an appropriate gift agreement between the court and the state. He added that the latest estimate of the total amount to be transferred is \$6.6 million.

Mr. McCarthy said the staff originally proposed a 20 percent overhead, and the Superior Court countered with 3 percent. The BCP now specifies 10 percent overhead, a proportion considered reasonable by the court. Mr. McCarthy noted the Attorney General's Office will incorporate the court's conditions in draft language for a trailer bill next May.

Mr. McCarthy stated that the BCP proposes a seven-year funding cycle, with contract terms of three years. He noted the Commission will be able to award funds through memoranda of understanding with public entities or by bid with private contractors.

Commissioner Jones commented that it is much easier to give money to public universities in California than to private universities. Mr. McCarthy noted that both the court's settlement rules and the state's contracting rules will apply to the CRAF funds.

Mr. McCarthy reported that under the terms of the CRAF settlement, the outreach video featuring Shaquille O'Neal will be released to the Seismic Safety Commission. He added that he provided advance copies to Commissioners Mileti and Palmer, and he suggested that the Commission view the videotape at the November meeting.

Commissioner Jones stated that she had viewed the videotape before and found it extraordinarily well done; she added that the message is simple and correct.



Commissioner Clark suggested that the Commission explore opportunities to license the videotape to others.

Mr. Robert Anderson informed the Commission that Earthquake Country Los Angeles is also planning to release its “Written in Stone” video in January. He recommended putting links to both videos on the Commission’s Website.

With respect to the office relocation, Ms. Cogan reported that the staff submitted information on the office building’s ADA requirements to the state Office of Real Estate Services and Design. She said that if a waiver cannot be obtained, the Commission will need to start looking for other office space soon.

### **COG Distribution**

Mr. McCarthy reported that the final version of the revised *Commercial Building Owner’s Guide to Earthquake Safety* (COG) had been printed and was available for distribution.

### **URM Report**

Mr. McCarthy asked commissioners to review the text of the draft report on the status of unreinforced masonry (URM) buildings and send comments and suggestions to the staff so the report can be finalized at the November meeting.

### **Legislative Report**

Mr. McCarthy drew attention to the written legislative report in the meeting packet.

Mr. McCarthy advised that the Governor signed SB 1632 (Blakeslee), a bill requiring the California Energy Commission, in consultation with the Seismic Safety Commission and California Geological Survey, to prepare a report evaluating the vulnerability of four power plants to major seismic events. He noted the California Energy Commission submitted a BCP requesting funding for this activity, and the Commission will be reimbursed for its expenses.

Mr. McCarthy stated that the Governor vetoed SB 1290 (Ducheny), a bill opposed by the Commission that would have allowed community colleges to comply with either the Field Act or the California Building Code. He noted that at the last meeting, the Commission decided to send a letter to the Governor articulating its concerns. Mr. McCarthy said the Governor’s veto message explains that the reason for the veto is that the provisions of SB 1290 are already addressed in the bond measure before the voters on the November ballot.

## **IX. COMMITTEE REPORTS**

Chairman McGavin noted the Research Committee will be meeting on October 25.

Commissioner Shapiro reported that the PEER Review Committee met since the last meeting and will meet once more on November 10.

## **X. PUBLIC COMMENT**



There were no members of the public who wished to address the Commission.

## **XI. MISCELLANEOUS & GOOD OF MEETING**

Ms. Cogan reported that representatives from the Spanish Yellow Pages are offering a discounted rate of \$1,500 for three-page ads in the Bay Area publication, and they expressed interest in distributing a copy of the Spanish *Homeowner's Guide to Earthquake Safety* (HOG) with each copy. She said she was in the process of seeking bids for printing 500 or 600 copies. Ms. Cogan recommended distributing the Spanish HOG through local Chamber of Commerce organizations.

Commissioner Wheeler asked if there was any way to measure results of this effort. Mr. McCarthy suggested this as a potential research topic. He said he would talk with Agency representatives and enlist their help.

Commissioner Mileti expressed support for the idea of surveying people about their preparedness and mitigation activities to find out what information impacts their decisions.

Commissioners asked about the status of the members representing the Legislature on the Commission. Commissioner Jones observed that Assembly Member Liu is being termed out. Mr. McCarthy said Senator Alarcon will be running for an Assembly seat, and Senator Alquist is interested in representing the Senate. He added that these appointments will be made in January.

Ms. Cogan said the head of Homeland Security, the head of OES, and speakers from a number of emergency response and preparedness agencies have been invited to make presentations at the November meeting. She urged all commissioners to attend this important session.

## **XII. ADJOURN**

Chairman McGavin reminded commissioners of the workshop at the Commission's office beginning at 8:00 a.m. the next morning.

There being no further business, the meeting was adjourned at 2:57 p.m.

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Sue Celli  
Office Manager

Approved by:

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Richard McCarthy  
Executive Director