



State Of California



ALFRED E. ALQUIST SEISMIC SAFETY COMMISSION

Governor Edmund G. Brown Jr.

Alfred E. Alquist Seismic Safety Commission
Cal OES Headquarters
3650 Schriever Avenue
Mather, CA 95655
Minutes of Meeting
November 14, 2013

Members Present

Mark Pazin, Vice Chairman
Greg Beroza
Salud Carbajal
Ken Cooley/Mark Elsesser
Mark Ghilarducci/Christina Curry
Randall Goodwin
Peggy Hellweg
Tracy Johnson (arrived at 10:13 a.m.)
Emir Macari (arrived at 11:15 a.m.)
Jim McGowan
Timothy Strack
Daniel Torrez (arrived at 10:14 a.m.)
Fuad Sweiss
Chester Widom

Commissioners Absent

Michael Gardner, Chairman
Helen Knudson
Kit Miyamoto
David Rabbit

Staff Present

Richard McCarthy, Executive Director
Karen Cogan, Administrative Manager
Robert Anderson, Senior Engineering Geologist
David King, Legislative & Special Projects Mgr
Henry Reyes, Special Projects Manager
Fred Turner, Structural Engineer

I. CALL TO ORDER/ROLL CALL

Vice Chairman Mark Pazin called the meeting of the Alfred E. Alquist Seismic Safety Commission to order at 10:00 a.m. and welcomed all participants. Administrative Manager Karen Cogan called the roll and confirmed the presence of a quorum.

II. CHAIRMAN'S REMARKS

Chairman's Remarks

Vice Chairman Pazin noted that he would be chairing the meeting because Chairman Michael Gardner was having surgery. He said the Commission will be conducting its regular meeting in the morning, followed by a workshop session in the afternoon.

Ms. Cogan thanked Cal OES for hosting the meeting and workshop in their facility.

III. APPROVAL OF SEPTEMBER 12, 2013 MINUTES

Commissioner Salud Carbajal drew attention to the third paragraph on Page 2, and he pointed out that “chair of staff” should be corrected to “chief of staff.”

ACTION: Commissioner Carbajal made a motion, seconded by Commissioner Timothy Strack, that:

The Commission approve the minutes of the September 12 meeting as amended.

* Motion carried, 11– 0 (Commissioners Tracy Johnson, Emir Macari, and Daniel Torrez absent during voting).

IV. UPDATE ON GLOBAL EARTHQUAKE MODEL

Ms. Kate Stillwell reported that the Global Earthquake Model (GEM) was on track for release of the software and data for the OpenQuake platform. She said OpenQuake is already being used for national seismic hazard mapping programs in Canada, Australia, Italy, and New Zealand. Ms. Stillwell noted that GEM’s risk-based projects are coming to a close, and the hazard mapping projects were completed earlier this year.

Ms. Stillwell announced that AREP had joined GEM as a sponsor, and GEM has been developing partnerships and relationships with some California firms. She said that following the model of the Seismic Safety Commission, the World Bank had recently contributed funds for a particular project with GEM.

Ms. Stillwell noted that GEM finished the second of three workshops in Katmandu with local experts and policy makers to develop a scorecard to measure the capacity of communities to respond to earthquakes.

Ms. Stillwell thanked the Commission for supporting two projects: “Back to Normal,” a recovery modeling study to identify specific actions that can be taken in advance to help facilitate recovery; and “Beyond Button-Pushing,” an evaluation of the assumptions underlying commercial models to determine how much uncertainty exists. She displayed a chart showing the total costs and matching funds for both projects.

Ms. Stillwell introduced two California-based scientists who will be working on the Commission-sponsored research, Stanford doctoral candidates Henry Burton and David Lallemand.

Ms. Cogan advised that the California Office of Technology needs to approve the “Back to Normal” contract because it involves software development. She reported that both contracts were approved by Agency, and the second contract is expected to move through regular channels without any problem.

Ms. Stillwell said GEM is very grateful for the Commission’s support. Vice Chairman Pazin thanked Ms. Stillwell for her presentation.

V. ROLE OF DEPARTMENT OF BUSINESS OVERSIGHT

Executive Director Richard McCarthy noted that the Agency has been working with the newly created Department of Business Oversight on a joint project involving the banking industry, and he invited Ms. Patty Salazar, Deputy Commissioner, to discuss that effort.

Ms. Salazar stated that the Department of Business Oversight was created on July 1, 2013, to oversee banks, credit unions, financial services companies, a community of 350,000 professional licensees, to ensure the safety and security of financial transactions. She said the Department she oversees has the authority to open and close banks and financial institutions in response to earthquakes and other disasters, and the Department has the ability to alter lending practices after catastrophic events. Ms. Salazar noted that exercise of this authority is usually tied to an official declaration of an emergency. She added that the Department works in conjunction with federal agencies.

Commissioner Christina Curry commented that Cal OES works with state regulatory agencies after disasters, and she asked about the Department of Business Oversight's communication process both post- and pre-disaster. Ms. Salazar responded that the Department of Business Oversight has 24-hour services.

Mr. McCarthy noted that the Commission would be hearing about other post-earthquake economic recovery projects at the January meeting, including the project with the Small Business Development Centers and the work with California's agricultural industries. He said both of these projects are coming together well, and he thanked Ms. Salazar and the Department for their assistance.

Vice Chairman Pazin thanked Ms. Salazar for her presentation.

VII. APPROVAL OF FIRE FOLLOWING EARTHQUAKE REPORT PHASE II

Mr. Henry Reyes, Staff Structural Engineer, presented the final report on Phase II of the Commission-sponsored Fire Following Earthquake project. He said this study was first approved by the Commission in November of 2010, and the first phase entailed an analysis of the adequacy of the state's water supply for fighting fires after earthquakes. He indicated that Phase II, described in this report, involved outreach to key urban fire and water departments to encourage coordinated planning. Mr. Reyes noted that the Commission reviewed a draft of the report at the September meeting, and the comments submitted by commissioners were incorporated in this final version. He recommended approval.

Mr. McCarthy said the main change in the report was the part dealing with post earthquake carbon emissions. He explained that Dr. Scawthorn used the ShakeOut scenario earthquake to calculate approximate carbon emissions and concluded that such an event would likely produce about 15 percent of the total emissions from fires in California in any given year. Mr. McCarthy noted that Dr. Scawthorn characterized this as a "low amount," but that level of emissions might not appear "low" to everyone. He said that given the state's commitment to meeting the carbon emission goals in AB 32, the staff deleted that comment from the report. He clarified that the estimates in the report did not change, just the "low amount" comment.

ACTION: Commissioner Hellweg made a motion, seconded by Commissioner Cooley, that:

The Commission approve the Phase II report as presented.

Mr. McCarthy proposed sending the report to the Air Resources Control Board for comments. The maker and seconder of the motion accepted this amendment.

* Motion carried, 14 – 0 (Commissioners Ghilarducci and Macari absent during voting).

VIII. RISK MANAGEMENT GUIDANCE ON COLLAPSE-PRONE BUILDINGS

Mr. Fred Turner, Staff Structural Engineer, suggested that the Commission consider publishing a guidebook on collapse-prone buildings, similar to the guidebook on unreinforced masonry (URM) buildings the Commission published 26 years ago. He noted that the 1987 publication was well received, so this might be a good time to offer similar guidance on other kinds of buildings identified as susceptible to collapse in strong earthquakes. He added that URMs can have problems in earthquakes even after retrofitting, so local governments need to be able to deal with these issues as well as other types of collapse-prone buildings.

Mr. Turner proposed that the Commission first decide whether the guidebook should be updated or expanded. He drew attention to the draft outline under Tab 8 of the meeting packet. He suggested creating an ad hoc committee to assist the staff if the Commission wants to proceed with drafting an update.

Mr. McCarthy noted that the Governor's Office recommends that the Commission undertake this task. He noted that Los Angeles and San Francisco both have ordinances addressing certain kinds of collapse-prone buildings, such as nonductile concrete buildings and soft-story buildings, but there is no statewide mandate. He emphasized the importance of keeping the document usable because having guidelines will assist local governments.

Mr. Turner recalled that the 1987 version of the URM guidebook was created using desktop publishing software that was new at that time. He said the purpose of the guidebook was to serve as a clearinghouse of information for local governments, and it contained writing and graphics for non-technical readers, as well as more technical information and advice in an appendix.

Mr. Turner suggested that the Commission adapt and update the 1987 guidebook with a broader focus on common collapse-prone buildings, and he recommended updating the guidebook periodically. He noted that the guidebook needs to be broad enough so that local governments can tailor the information to their circumstances, and it needs to take a discretionary, advisory tone. Mr. Turner added that there may be some aspects of the guidebook that are not available now, but the Commission can publish a draft online on its web site with gaps that can be filled in later.

Mr. Turner reviewed and discussed the proposed outline of the guidebook contents. He said the first part will be an introduction, with an explanation of why local governments should get involved, steps to manage risks of collapse-prone buildings, and reference material for further information. Mr. Turner stated that the steps to manage risk include a decision-making process that includes public participation, an estimate of the size and nature of the risk, consideration and development of management options, and plans to implement programs. He recommended providing local governments with other resources to help them address their risks, including model ordinances; analyses of the costs and benefits to building owners, occupants, and governments; and options for incentive programs.

Mr. Turner said local governments have six options for managing their risks: 1) rely on current building code triggers and take no action; 2) developing inventories of collapse-prone buildings within their jurisdictions; 3) cursory seismic evaluations; 4) more detailed seismic evaluations, 5) encourage voluntary retrofits, or 6) require retrofits. He observed that local governments have to deal with multiple objectives, including community development, transportation hubs, green building, and historic buildings; training and qualifications of local government staff; and post-earthquake evaluations, stabilization, and repairs. He emphasized the need for a long-term, multiple-decade commitment, with ongoing monitoring of progress and regular evaluations and adjustments.

Mr. Turner welcomed ideas from commissioners about other topics to include. He remarked that it might be helpful to include some success stories, along with brief explanations of why they worked.

Vice Chairman Pazin asked Commissioners Kit Miyamoto, Randall Goodwin, and Fuad Sweiss to serve as an ad hoc committee to assist the staff with developing guidelines that can be used as a template for local governments. He stressed that the committee should keep in mind that the guidelines are discretionary, not mandatory.

Mr. McCarthy proposed that Mr. Turner and the committee meet and decide the scope of work and the resources needed. He said the staff will come back for Commission direction at the January meeting.

Commissioner Strack commented that elected local government officials change frequently, so the guidebook needs to provide clear enough guidance to ensure continuity of programs despite turnover.

Commissioner Greg Beroza remarked that it might be helpful to have a section on pitfalls and unsuccessful approaches as well.

Commissioner Goodwin thanked Mr. Turner and expressed support for issuing guidance to keep local governments focused on risk mitigation. He recommended reaching out to business districts and local business communities to make them aware of the guidebook.

Commissioner Cooley recommended that the Commission monitor progress periodically to find out what local jurisdictions are doing. He recalled that there was some debate and political push-back in the 1980's because URM owners felt the retrofit programs made their properties look back, and he cautioned that the same kind of resistance can be anticipated with this update. Commissioner Cooley suggested that the Commission act as a clearinghouse for current information by providing links online to the latest research studies and information about collapse-prone buildings. That way, he added, opponents would be arguing against current science rather than the Commission.

Vice Chairman Pazin thanked Mr. Turner for his report.

IX. UPDATE ON EARTHQUAKE EARLY WARNING SYSTEM FOR CALIFORNIA

Commissioner Ghilarducci noted the Governor had signed the earthquake early warning initiative, SB 135, and he congratulated everyone who supported this effort. He reported that he

had already been contacted by many private companies interested in participating, and various funding sources were being explored. He invited Ms. Curry and Mr. Mark Johnson to discuss the initiative in more detail.

Ms. Curry said a working group had tackled the first phase of this effort, which entailed defining general parameters for an early warning system for California, and that group will be reconvening in early December. Meanwhile, she noted, SB 135 calls for examination of the individual parts of the statewide system, engaging the expertise needed, and establishing timelines for a path forward. Ms. Curry added that she would have more to report on the implementation plan at the January meeting.

Mr. Johnson described the six-step process that will be used in creating an earthquake early warning system: 1) forming a planning group; 2) understanding California's situation in terms of risks and technology; 3) establishing goals and objectives; 4) developing an overall charter and identifying committees for each objective; 5) getting endorsement from the working group and having committees meet; and 6) creating an implementation plan. Mr. Johnson said the proposed charter will be presented at the working group's meeting on December 3, and the working group will dissolve after identifying the committees, forming an oversight committee, and establishing timetables.

Commissioner Ghilarducci emphasized the importance of creating a strong foundation built on existing systems and technology. He said he envisioned the phases and deliverables of the project in six-month increments, with ample involvement by local governments, potential funders, and stakeholders. He projected that the end product will be ready for roll-out in 2016. Commissioner Ghilarducci remarked that California is in the worldwide spotlight now, and he reported having received calls from a number of countries.

Mr. McCarthy noted that certain industries, including refineries, are concerned about the potential for false alarms that could disrupt their operations; air emissions also tend to increase at start-up.

Commissioner Ghilarducci encouraged all stakeholders to participate in the planning process for the early warning system. He noted that process of creating California's system must be transparent and inclusive.

Vice Chairman Pazin thanked Commissioner Ghilarducci, Ms. Curry, and Mr. Johnson for their report.

X. PUBLIC COMMENT

Mr. McCarthy invited Mr. Larry Asera, Chairman and CEO, Asera, LLC, to describe his company's proposed reuse of space at the Mare Island Shipyard. Mr. Asera advised that his company was looking at building a green-tech IP data center in a cyber-secure area. He said Asera has been working with CSU's Maritime Academy at the site. He added that Asera began with the local fire department, and then became involved with the Department of Defense. He invited the Commission to tour the Mare Island site at some time in the future.

Commissioner Macari introduced himself and said he serves as director of the Smart Grid Center at Sacramento State University. He asked if Asera was working with the Governor's task force on cybersecurity. Mr. Asera replied that he was not, and he welcomed contact information.

Commissioner Macari noted that there is a direct linkage between the electric grid and the energy storage issue. He encouraged Mr. Asera to communicate with OES about his efforts with federal agencies.

Vice Chairman Pazin thanked Mr. Asera for his remarks.

XI. GOOD OF THE MEETING

There were no other matters brought to the Commission's attention.

XII. ADJOURN

There being no further business, the meeting was adjourned for lunch at 11:42 a.m.

WORKSHOP

I. EXECUTIVE DIRECTOR'S REPORT

Vice Chairman Pazin convened the workshop session at 12:16 p.m.

Vice Chairman Pazin invited Commissioner Macari to give a brief report on his recent meetings with Mexican officials. Commissioner Macari indicated that he had attended an event honoring Secretary Clinton. He said he and Mr. McCarthy met with the Mexican Consul General last July to discuss projects of mutual interest and bilateral partnerships, and he noted that Mexico and California share a common earthquake risk. He stated that high-level Mexican officials would be meeting on November 19 to address the Commission's request for collaboration on issues like the early alert system, post-earthquake economic development and recovery, irrigation and agriculture, and the Global Earthquake Model (GEM) projects. Commissioner Macari added that he hoped for good results and would keep the Commission informed.

Mr. King noted that the Department of Finance wants to use CRAF research funds for Commission operations, so there is a constant battle to clarify that those funds are restricted to research.

Mr. McCarthy warned that the Commission will face a tougher fiscal situation next fiscal year because debts cannot be prepaid. He said that at the January meeting, he would discuss taking the 10 percent allowable overhead for completed research projects. He added that he would have a list of completed projects and available funds for the Commission to review in January.

II. HISTORY OF COMMISSION FUNDING

Vice Chairman Pazin asked Mr. McCarthy to provide a brief explanation for new commissioners about how the Commission transitioned from the General Fund to the Insurance Fund.

Mr. McCarthy began by congratulating the Commission on obtaining a permanent funding source. He explained that from its inception in 1975-76 until 2002-03, the Commission's funding came from the state's General Fund, but then the Commission was placed on the Insurance Fund, to be funded through assessments on policyholders statewide. Those arrangements had sunset provisions, so the Commission has had to re-justify its existence every three years, a process that consumed considerable staff time and effort. In 2012, the state's legal

analysts concluded that the policyholder assessment was a tax imposed without the two-thirds majority required by Proposition 26, so the Commission was taken off the Insurance Fund and placed back on the General Fund for a year. He noted that the Commission is now permanently on the Insurance Fund without any sunset date.

Vice Chairman Pazin thanked Commissioner Cooley and his counterparts in the Senate for their help and support.

Mr. McCarthy said the Commission can now look forward to a period of rebuilding, but he cautioned that the Commission currently has 6.5 staff positions, and resources are limited. He commented that in selecting its projects and activities, the Commission should focus on those that have the most relevance and value, while avoiding those that might be duplicative or impose unfunded mandates. He added that more Republican legislators have become receptive to the Commission because of its emphasis on recovery issues, but many still consider the Insurance Fund assessment on policyholders an improper tax.

III. COMMITTEE ASSIGNMENTS

Mr. McCarthy asked commissioners to review the list of committees and let the staff know which groups they might like to join.

IV. RESEARCH FUNDS/PROGRAM

Mr. McCarthy stated that the source of funding for Commission-sponsored research projects is the CRAF fund, a special \$6 million gift that came to the Commission after misappropriation claims against former Insurance Commissioner Quackenbush were settled. The gift agreement allows the Commission to use the funds to support research that creates products of value and that leverages contributions from other partners. He referred to the 2012 annual report to the Attorney General's office for a more detailed description of the research projects funded by the Commission. Mr. McCarthy welcomed suggestions for new projects, and noted that there may be some future proposals pertaining to the proposed high-speed rail system the state plans to construct.

Mr. McCarthy said the Commission is authorized to take up to 10 percent of each project's value in overhead, but those costs have not yet been charged. He advised that the research fund has a remaining balance of approximately \$4 million now, and the CRAF fund expires on June 30, 2015. He noted that the funds must be kept in a special deposit account with certain restrictions, and they may not be combined or comingled with any other funds.

Mr. McCarthy added that the Commission also receives reimbursement for its participation on the peer review panels for the Diablo Canyon and San Onofre Nuclear Generation power plants.

Mr. King reported that he met with a representative of the Attorney General's office to ask about the possibility of replenishing the CRAF funds once they expire, but it does not appear likely that the funds will be replaced.

Commissioner Macari drew attention to an apparent discrepancy in the 2012 annual report to the Attorney General's office: He pointed out that the first page refers to six completed projects, valued at \$682,000, but the table on the third page only shows three projects, totaling \$460,000. He remarked that only four projects were completed in 2013, valued at \$225,000, only about one third of the last year.

Mr. McCarthy suggested that the staff prepare an updated version of the report for the Commission to review at the January meeting. He said the staff would review the report and correct any discrepancies.

Mr. King added that the Department of Finance audits the CRAF fund each year.

V. DISCUSSION ON NORTHRIDGE CONFERENCE AND JANUARY 15, 2014 COMMISSION MEETING

Mr. McCarthy drew attention to the flyer promoting The Valley Economic Alliance conference at California State University Northridge on Friday, January 17, 2014. He noted that this event coincides with the Northridge Earthquake Symposium being held at UCLA on January 16 and 17.

Mr. McCarthy said the first day of the UCLA symposium will feature a series of panel discussions on earth science, utilities and lifelines, structures, and economic recovery, and the second day will have a state policy panel in the morning, followed by break-out sessions on key topics. He encouraged interested commissioners to attend, and he invited Commissioners Cooley and Corbett to participate on the state policy panel the second day. Commissioner Cooley confirmed that he planned to attend. Mr. McCarthy suggested asking Chairman Gardner to serve as moderator of the panel. He said audience members will probably want to know why more things aren't happening and how Sacramento works.

Mr. McCarthy proposed that the Commission hold its January meeting on Wednesday, January 15, possibly at a fire station or community center in Northridge. He suggested inviting policy makers and political representatives to address the Commission.

Vice Chairman Pazin asked for a show of hands in support of meeting in Northridge on January 15 as proposed, and a majority of commissioners approved.

Commissioner Sweiss suggested letting the symposium organizers know that the Commission was planning to meet in Northridge on January 15, and Mr. McCarthy said he would.

Mr. McCarthy asked about attending The Valley Alliance Conference on January 17. He explained that The Valley Alliance is a group of large businesses in the San Fernando Valley, and Chairman Gardner and the Governor's Office had been invited to attend. He suggested it might be worthwhile to split up and have some Commission representatives go to this meeting.

Commissioner Goodwin mentioned an upcoming conference at Sunnylands, noting that President Obama had met last year with the president of China there. He said this year's event is for U.S. and Chinese governors. He added that there was Board of Governors conference in Mexico scheduled for the same time.

VII. 2014 FOCUS – PROJECT PURSUITS, MEETINGS & LOCATIONS

Mr. McCarthy drew attention to the one-sheet chart showing amounts spent on major retrofit projects since the Loma Prieta earthquake in 1989, estimated at \$40.2 billion, of which the Seismic Safety Commission spent \$30 million. He acknowledged that many items were missing, and he welcomed suggestions from commissioners.

Commissioner Ghilarducci noted that OES had spent money on retrofit work as well. Commissioner Sweiss stated that San Francisco passed a \$460 million bond a few years ago, and there are plans for another \$400 million or \$500 million next year. He noted the \$870 million bond for hospitals should also be included.

Mr. McCarthy requested that commissioners send their figures to the staff to be incorporated in the table. Vice Chairman Pazin suggested identifying any statewide spending. Commissioner Beroza observed that it might be helpful to separate the expenditures into local, state, and federal projects. Commissioner Carbajal added that some local jurisdictions have imposed their own self-help taxes that should be included.

Mr. McCarthy said all projects should be post-Loma Prieta earthquake in October 1989. He recommended including private projects as well, noting that more than \$600 million was spent on upgrading the Asian Art Museum in San Francisco.

Ms. Cogan advised that the Commission normally meets on the second Thursday of alternate months. Mr. McCarthy noted that the Commission typically holds two thirds of its meetings in Sacramento. Ms. Cogan welcomed suggestions for possible out-of-town meeting locations.

Commissioner Torrez proposed meeting in Santa Cruz or Santa Clara County next October to commemorate the 25th anniversary of the Loma Prieta earthquake. Commissioner Beroza asked if the staff was aware of any special events being planned, and Mr. McCarthy replied that he had not heard anything yet.

Commissioner Hellweg expressed support for the idea of meeting in the Bay Area next fall. Vice Chairman Pazin recommended foregoing the normal November meeting and meeting in the Bay Area in October, and commissioners agreed. Commissioner Cooley noted the devastating fires in San Francisco's Marina District following the Loma Prieta earthquake.

Vice Chairman Pazin instructed commissioners to plan for an October 9 meeting in the Bay Area. He suggested holding meetings in Sacramento in March and May, followed by a meeting in West Sacramento in July, and then October 9 in the Bay Area and a possible teleconference meeting in December.

VIII. ADJOURN

Vice Chairman Pazin thanked commissioners, staff, and guests for attending.

There being no further business, the workshop was adjourned at 1:32 p.m.

Sue Celli
Office Manager

Approved by:

Richard McCarthy
Executive Director