



State Of California

ALFRED E. ALQUIST SEISMIC SAFETY COMMISSION

Arnold Schwarzenegger, Governor

Gary McGavin, AIA
*Architectural Planning
Chairman*

Dennis Mileti
*Social Services
Vice-Chair*

Hon. Elaine Alquist
State Senate

James Schwab
Senate Representative

Hon. Sam Blakeslee
State Assembly

Dr. Lucy Jones
Seismology

Hon. Mark Church
Local Government

Arul Arulmoli
Soils Engineer

Andrew Adelman
City Building Official

Henry Renteria
*Office of Emergency
Services*

Grace Koch
OES Representative

David Thorman
State Architect

Dave Walls
*Building Standards
Commission*

Hon. Ken Cooley
Cities Government

Chief Don Parker
Fire Protection

Bill Chubb
Utilities

Sharon Leason
Emergency Services

Bradley Mitzelfelt
County Government

Ali Sadre
Structural Engineering

Michael Stevens
Insurance

Richard McCarthy
Executive Director

Seismic Safety Commission
Minutes of Meeting and Staff Workshop
August 9, 2007
Westin Mission Hills Hotel
71333 Dinah Shore Drive
Rancho Mirage, California

Members Participating

Dennis Mileti, Vice Chair
Andrew Adelman
Kandiah (Arul) Arulmoli
Jonathan Changus
William Chubb
Mark Church
Ken Cooley
Lucy Jones
Grace Koch
Sharon Leason
Don Parker
Ali Sadre
James Schwab
Michael Stevens
David Thorman
David Walls

Members Absent

Gary McGavin, Chair
Brad Mitzelfelt

Staff Present

Richard McCarthy, Executive Director
Karen Cogan, Executive Assistant
Robert Anderson, Staff Geologist
Veronica Ramirez, Student Assistant
Henry Reyes, Staff Structural Engineer
Larry Rillera, Director of Legislative Affairs
Fred Turner, Senior Structural Engineer

I. CALL TO ORDER/ROLL CALL

Commission Vice Chairman Dennis Mileti called the meeting of the Seismic Safety Commission to order at 9:05 a.m. Executive Assistant Karen Cogan called the roll and confirmed the presence of a quorum.

II. VICE CHAIRMAN'S REMARKS

Welcome New and Reappointed Commissioners

Vice Chairman Mileti welcomed and introduced the newly appointed members of the Commission: Jonathan Changus, representing Assemblymember Sam Blakeslee; James Schwab, representing Senator Elaine Alquist; and Sharon Leason, Michael Stevens, Ali

Sadre, and Brad Mitzelfelt.

Welcome Remarks

Vice Chairman Mileti thanked Ms. Yvonne Gonzalez and Ms. Dawn Hammond, Westin Mission Hills Hotel, for their assistance in arranging the meeting.

Vice Chairman Mileti welcomed the Commission to the Coachella Valley and Rancho Mirage. He noted that several local officials and emergency managers had been invited to attend the meeting, which would feature a presentation from Commissioner Lucy Jones on the southern segment of the San Andreas Fault and the seismic risk to the Coachella Valley.

Assemblymember John Benoit welcomed the Commission and expressed appreciation for the Commission's work in preparing California for the next major earthquake. He noted that the Coachella Valley could be the future epicenter of an earthquake on the southern segment of the San Andreas Fault, so local governments and citizens are keenly aware of the need to be prepared. He thanked the Commission for visiting and said he looked forward to hearing about ways the region can improve its emergency preparedness and response capabilities.

The Honorable Dana Hobart, Mayor, City of Rancho Mirage, said Rancho Mirage was pleased and honored to host the Commission meeting. He observed that a major earthquake is long overdue, and everyone in the region should prepare by storing food, water, and supplies to last at least 30 days.

Vice Chairman Mileti introduced and welcomed Ms. Kathleen Webb, Insurance Advisor, Office of the Governor.

III. THE EARTHQUAKE THREAT TO THE COACHELLA VALLEY: THE SOUTHERN SAN ANDREAS FAULT WITHIN RIVERSIDE, SAN BERNARDINO, AND IMPERIAL COUNTIES

Commissioner Lucy Jones advised that the Coachella Valley is currently the most dangerous part of California and the United States in terms of earthquake risk, because the next major earthquake is likely to occur in this region. She showed slides illustrating how earthquakes occur and explained that the level of shaking in a given area is a function of earthquake magnitude, distance from the fault, and local soils conditions.

Commissioner Jones reviewed the history of major earthquakes on the southern segment of the San Andreas Fault. She pointed out that the average interval between large earthquakes here has been 150 years, and the last major event was the Fort Tejon earthquake in 1857.

Commissioner Jones said that in order to prepare, a major exercise will be held in November of 2008 based on a southern California earthquake scenario, and over 50 state and local organizations will participate in the drill. She talked about the likely effects of a major earthquake on buildings, lifelines, and transportation networks. She noted that a large earthquake will produce secondary failures such as fires, floods, and landslides, as well as

potentially long-lasting social and economic impacts. Commissioner Jones acknowledged that although earthquakes cannot be prevented, there are many things people can do to prevent disasters, and she emphasized the importance of taking steps beforehand.

Vice Chairman Mileti thanked Commissioner Jones for her presentation.

IV. RANCHO MIRAGE EMERGENCY SERVICES BRIEFING

Ms. Wendy Phillips, Emergency Services Coordinator, City of Rancho Mirage, discussed Rancho Mirage's preparedness and emergency response plans. She noted that the population of Rancho Mirage fluctuates between 16,000 and 20,000 people, depending on the season, and tends to be well-educated and retired. She said the area has about 150 homeowners associations and many gated communities. She advised that the City of Rancho Mirage has an active Emergency Preparedness Commission, a Health and Medical Welfare Commission, and full-time emergency services coordination. The city's emergency management plan adopts a team approach focusing on public education, resources planning, and first responders.

Ms. Phillips said that during the past four to five months, Rancho Mirage has completed a number of steps to improve its preparedness and response capabilities, including purchase of a new city emergency operations vehicle, revamping and reorganizing the emergency operations center, increasing response staff, training all staff, procuring four cargo trailers to store sheltering and medical supplies, purchasing a portable generator, instituting a cable television show, establishing a Citizen Emergency Response Team (CERT) and a volunteer medical corps, doubling the size of the Emergency Preparedness Commission, engaging in two major public awareness campaigns, and expanding outreach to residents of gated communities.

Mr. Jerry Hill, Sun City Palm Desert Emergency Preparedness Committee, discussed efforts to establish neighborhood and community teams of emergency responders in the area's gated communities. He said he lives in Sun City, an active retirement community of 5,000 homes in Palm Desert. Mr. Hill noted that 600 volunteers in Sun City have been trained to respond to disasters using an incident command structure and teams to address specific response needs. He stated that he recently joined two local preparedness organizations, the I-10 North Corridor Association (INCA), a group of 13 communities, and the Desert Standardized Emergency Readiness Team (DSERT), which share the Seismic Safety Commission's objective of helping people become better prepared. Mr. Hill commended and thanked the Commission for its efforts.

Ms. Phillips indicated that there are a number of homeowners associations that have formed disaster teams in nearby cities. She welcomed the Commission's assistance in providing specialized training for volunteers in areas like marketing, public education, and social sciences. She noted that there are many retired doctors and nurses in the area who would like to help in disasters, but who are reluctant to provide services due to concerns about civil liability, and she recommended legislation to eliminate this obstacle.

Vice Chairman Mileti thanked Ms. Phillips and Mr. Hill for their presentations.

V. COACHELLA VALLEY EMERGENCY SERVICES BRIEFING

Mr. John Hardcastle, Emergency Services Coordinator, City of Palm Springs, and President, Coachella Valley Emergency Management Association, discussed the disaster preparedness activities of the local emergency managers association. He said participants, including cities, schools, and the Red Cross, sponsor an annual safety fair, train and oversee CERT volunteers, and disseminate preparedness information to the public. He stated that the organization has developed a series of 30-second public service announcements highlighting various aspects of disaster preparedness.

Mr. Hardcastle noted that getting the preparedness message to the right people is an ongoing challenge. He said emergency managers are responsible for preparedness, mitigation, response, and recovery, and observed that these important activities compete with many other community needs.

Mr. Hardcastle emphasized the importance of having emergency managers report directly to the head of the local government, similar to the Office of Emergency Services (OES) reporting directly to the governor. Otherwise, he noted, emergency management tends to become a lower priority as part of a departmental organization. He encouraged the state government to provide more guidance to local governments about the need for this direct reporting authority and the place of emergency management in a jurisdiction's political organization.

Vice Chairman Mileti thanked Mr. Hardcastle for his remarks.

VI. RIVERSIDE COUNTY EMERGENCY SERVICES BRIEFING

Ms. Kathleen Henderson, Emergency Services Coordinator, Riverside County, talked about Riverside County's preparedness efforts. She said Riverside County has seven emergency services coordinators covering an area of approximately 7,000 square miles. She reported that the county's emergency services personnel meet monthly with other preparedness groups, and she expressed appreciation to her predecessors for establishing this well organized system. She observed that Riverside County is fortunate to have a large base of volunteers and an active CERT program.

Ms. Henderson stressed the importance of having redundant power generation systems to provide air conditioning and heating after disasters. She noted that the region is characterized by extreme summer temperatures, but only five of the county's 30 cooling centers have back-up generators. She recognized that there are likely to be many heat-related deaths if a major earthquake occurs during the summer.

Vice Chairman Mileti thanked Ms. Henderson for her presentation.

VII. METROPOLITAN WATER DISTRICT

Mr. Wally Lieu, Manager, Engineering Services, Metropolitan Water District, provided an overview of the Metropolitan Water District's facilities and seismic safety program. He noted that the Metropolitan Water District is a quasi-state agency that distributes water to local districts

from San Bernardino to Ventura County, serving about 18 million Californians with water imported from the Colorado River and from northern California. He showed a map of the district's service area and pointed out its major pipelines, treatment plants, hydroelectric plants, and dams.

Mr. Liu said that in order to fulfill its goal of providing adequate and reliable water service to the people within its service area, the Metropolitan Water District has implemented a long-term capital outlay program to strengthen its facilities and response capabilities. He noted that the seismic safety program has four major components: facilities, dams, geotechnical and soils studies, and emergency response.

Mr. Liu stated that after a disaster takes place, the Metropolitan Water District conducts rapid evaluation of facilities, followed by detailed structural evaluations and retrofit where needed. He showed slides depicting examples of seismic upgrades to pumping stations, pipelines, standpipes, and anchorage systems. Mr. Liu reported that the Metropolitan Water District is constantly updating its geotechnical studies and has implemented measures to mitigate landslides and stabilize backfill areas. In the event of an emergency, the district opens its emergency operations center and uses a flow chart to identify appropriate levels of response and dispatch damage assessment teams to identify problems and effect rapid repairs.

Vice Chairman Miletì thanked Mr. Liu for his presentation.

VIII. COACHELLA VALLEY WATER DISTRICT

Mr. Dan Farris, Director of Operations, Coachella Valley Water District, provided copies of the district's 2006-07 annual report and water quality report, and noted the map inside the front cover shows the boundaries of the Coachella Valley Water District. Formed in 1918, he noted, the district supplies water for flood protection, agricultural irrigation, and domestic water to about 270,000 people. As part of its services, the district provides sanitation, wastewater treatment, and recycling.

Mr. Farris said the Coachella Valley Water District relies on wells that tap into its natural aquifer, with additional water imported from the Colorado River and the state's aqueduct system to replenish its supplies. He acknowledged that the system would be affected by a major regional earthquake, but advised that the district is well prepared, with back-up generators at all facilities, storage gates and valves to separate damaged areas from other parts of the system, concrete-lined canals for domestic water distribution, and bulldozers ready to repair leaks and breakages. He indicated that there are likely to be some problems with the agricultural distribution system because it relies on older, unreinforced pipe.

In conclusion, Mr. Farris observed that the Coachella Valley Water District is in good shape to weather disasters because of its wells and its full aquifer, plus its ability to address pipe breakages and problems quickly. He said the district also maintains a supply of diesel fuel to operate its back-up generators.

Vice Chairman Miletì thanked Mr. Farris for his presentation.

IX. CALIFORNIA BUILDING OFFICIALS' REPAIR AND RECONSTRUCTION MODEL ORDINANCE

Mr. Dan Kaiser, Acting Director, Palm Desert Building Department, and Chairman, California Building Officials (CALBO) Emergency Preparedness Committee, drew the Commission's attention to the model repair and reconstruction ordinance developed by CALBO. He said the model ordinance addresses gaps in current building code provisions that affect repair of damaged buildings. Mr. Kaiser explained that FEMA is authorized by the Stafford Act to fund repairs of damaged buildings, but FEMA reimbursement is limited to pre-disaster design levels, meaning that upgrades to current code or safety upgrades are typically not eligible. He noted that this created problems in a school damaged in the San Simeon earthquake because FEMA would only pay for rebuilding the school to accommodate 400 students, its original capacity, rather than the 600 students it housed at the time of the earthquake.

Mr. Kaiser stated that the Stafford Act provides an exception to the pre-disaster standard if local jurisdictions require more extensive upgrades, provided that certain criteria are met. He referred to the model ordinance document for a description of the five criteria. He pointed out that local ordinances need to have their requirements in place before a disaster occurs. He recommended that local jurisdictions consider adopting the model ordinance to assist homeowners and encourage structural upgrades. Mr. Kaiser noted that it is up to local ordinances to determine an appropriate damage threshold to trigger upgrades, and he emphasized that a one-size-fits-all approach may not work everywhere.

Vice Chairman Mileti thanked Mr. Kaiser for his presentation.

X. PUBLIC COMMENT

Vice Chairman Mileti welcomed comments from members of the audience. He asked speakers to limit their remarks to two minutes.

Mr. Charles Jachs thanked the Commission for meeting in the Coachella Valley. He said he was a CERT member and appreciated the Commission's work in emergency preparedness. Mr. Jachs expressed concern about allowing construction activities on an unstable alluvial fan site in Palm Springs. He noted there are 400-foot-tall wind turbines nearby that could collapse, causing transportation disruption and damage to other structures.

Mr. Jachs reported that he was able to obtain low-cost insurance with no earthquake exclusions to cover the contents of his home, including valuable artwork, and he recommended that other homeowners investigate this option.

Ms. Susan Cox expressed support for community emergency preparedness activities. She said she was a single mother and had joined a grassroots preparedness group sponsored by her church. Ms. Cox noted that the I-10 freeway is a major lifeline to the Coachella Valley, and damage to this roadway would make it difficult for residents to cross from one side of the freeway to the other. She added that she was excited to hear about the INCA organization mentioned by Mr. Hill because it focuses on this issue.

Ms. Dana Stewart stated that she had three major concerns about earthquake preparedness in the area: developments constructed in dangerous areas, hazards from wind turbines, and water supplies. She noted that tall casino and hotel buildings are being constructed on the alluvial fan, despite two FEMA reports warning of the instability of the area. She said the community should develop plans for airlifts because these sites lack adequate ingress and egress in the event of emergencies.

Ms. Stewart advised that the Coachella Valley's aquifer has been in an overdraft condition for years. She said the Nestle Arrowhead bottled water plant is stealing water, causing pristine desert canyons to dry up as a result. She expressed concern about the impacts of these conditions on wildlife and habitat. She recommended that local cities sue to prevent further degradation of the environment.

Ms. Jeri Barry said she recently moved to a new adult community in the area and helped develop a disaster plan and organize CERT volunteers. She emphasized the need for individuals to take responsibility to better prepare for disasters. She noted that most people maintain emergency kits, water supplies, and canned food, but they are not prepared for the long-term power outages and isolation likely to occur after a major seismic event. Ms. Barry recommended educating the public so they understand they will need to be self-reliant for up to 30 days.

Ms. Cheryl Curley, Foundation for the Retarded of the Desert, observed that people with disabilities also need to be taken into consideration in emergency planning and disaster response. She said her organization serves about 700 clients, and responders should be educated to address the needs of individuals with various kinds of physical and mental disabilities.

Commissioner Koch advised that the State of California has been paying close attention to this issue since Hurricane Katrina, and various agencies, including the California Department of Developmental Services, Department of Rehabilitation, OES, Department of Homeland Security, and the Independent Living Centers have joined together to form a coordinating group. She said a bill passed last year directed OES to appoint people with disabilities to the Standardized Emergency Management System (SEMS). Commissioner Koch added that a few workshops have been held on this topic, and a conference is being planned for later this year. She recommended that interested people consult the OES Website for more details.

Commissioner Leao commented that people with disabilities are often viewed as victims, but they can also be a valuable resource in terms of volunteers. She said CERT training materials are currently being developed that incorporate this concept.

Executive Director Richard McCarthy stated that he attended a meeting in July regarding this issue, and he offered to forward more information to Ms. Curley.

Vice Chairman Miletic thanked the speakers for their comments.

At 12:07 p.m., the meeting was recessed for lunch.

XI. REGULAR COMMISSION BUSINESS

Vice Chairman Mileti reconvened the Commission meeting at 1:09 p.m.

XII. CHAIRMAN'S REMARKS

Vice Chairman Mileti appointed a Nominations Committee with Commissioner Jones as chair and Commissioners Arulmoli and Walls as members. He requested that the committee prepare a recommended slate of officers for the Commission's consideration at the October meeting.

ACTION: No action required.

XIII. APPROVAL OF JUNE 14, 2007 MEETING MINUTES

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

The Commission approve the minutes of the June 14, 2007 meeting as presented.

* Motion carried, 15 - 0 (Commissioner Walls absent during voting).

XIV. EXECUTIVE DIRECTOR'S REPORT

Budget

Mr. McCarthy advised that more details on the status of the Commission's budget and year-to-date expenditures would be provided at the October meeting. He said the Commission receives monthly reports from Contracted Fiscal Services, and the staff also prepares a budget reconciliation report, and the two documents are used to keep track of the Commission's fiscal condition. He noted that the proposed 2007-08 state budget allocates \$1.1 million for the Commission.

ACTION: No action required.

Status of FEMA Project Repayment Plan

Mr. McCarthy explained that the Commission is making arrangements to repay FEMA approximately \$188,000 for amounts FEMA determined were overpaid for the Commission's work on the 1994 Northridge earthquake report. He reported that one payment of \$45,000 was made in June, and he proposed paying \$80,000 between October and December, \$80,000 next June, and the remaining balance next July. He said the Commission has two repayment sources, its \$48,000 reimbursement for its annual review and report on the Pacific Earthquake Engineering Center's activities, and \$8,000 per month paid by the California Earthquake Authority for three-fourths of Staff Geologist Robert Anderson's services.

ACTION: No action required.

Research Program Gift Agreement

Mr. McCarthy drew attention to the proposed gift agreement in the meeting packet and recommended Commission approval. He said the document allows for transfer of approximately \$6 million from the California Research Assistance Fund (CRAF) to be used to fund research contracts. He noted that the Commission will be able to charge up to 10 percent per year for its oversight services, or approximately \$200,000 for the first \$2 million grant cycle.

ACTION: Commissioner Koch made a motion, seconded by Commissioner Leona, that:

The Commission approve the gift agreement as proposed and authorize the staff to sign the document.

* Motion carried, 16 - 0.

XV. LEGISLATIVE REPORT

Director of Legislative Affairs Larry Rillera reported that the Legislature would be in recess until August 20, and would then reconvene to take action on pending bills before adjourning on September 14. He advised that the state budget was currently on hold, but the caucuses were engaged in dialogue. He added that resolution of the budget is critical for the Commission to proceed with its research program. Mr. Rillera directed the Commission's attention to Page 2 of his staff report for a list of trailer bills related to passage of the 2007-08 budget.

Mr. Rillera noted that the Commission's 2007 legislative program focuses on four policy objectives: stabilizing Commission funding, the earthquake research program, supporting the Field Act, and cultivating alliance partners. He said he would prepare a list of legislators in each commissioner's district.

ACTION: No action required.

XVI. RESEARCH PROGRAM PROJECTS

Household Mitigation and Preparedness Study

Mr. McCarthy drew attention to the proposed OES contract in the meeting packet. He said OES wants to proceed with the household mitigation survey now, but the Commission is unable to contribute its share of funding until the \$6 million in CRAF funds are transferred. He noted that OES and the Commission have each agreed to contribute 50 percent of the survey costs. He advised that OES has offered to make the first payment for the survey and have the Commission pay for the second installment.

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

The Commission approve in concept the payment arrangement offered by OES.

* Motion carried, 15 - 0 (Commissioner Leona absent during voting).

Field Act Building Performance Project

Mr. McCarthy noted that commissioners received a draft scope of work for the Field Act research study project. He said the Commission can award one-, two-, or three-year contracts, and he welcomed additional ideas and suggestions regarding possible research topics.

Vice Chairman Mileti reported that the Institute for Business and Home Safety has agreed to contribute \$30,000 for this research.

Staff Structural Engineer Henry Reyes explained that the purpose of the research is to evaluate the effectiveness of Field Act buildings compared to other buildings constructed since 1971. He noted that the review committee met twice to develop the scope of work and statement of qualifications, and he referred to the information in the meeting packet for more details.

Mr. Reyes said three university research groups were contacted and provided with the statement of qualifications. He indicated that the next step will be informal meetings with the contractors to review the scope and goals of the research, and then proposers will be asked to submit formal responses. He noted the review committee will evaluate the responses and make a recommendation to the Commission. He added that the committee consists of Chairman McGavin, Commissioner Thorman, former Commissioners Larry Klein and Dan Shapiro, Commission staff, and DSA staff.

Mr. McCarthy recommended that Commissioner Sadre replace Mr. Shapiro on the committee, and Commissioner Sadre agreed.

Mr. McCarthy advised that the Commission can either contract with state government entities through a memorandum of understanding (MOU) process or solicit competitive bids from private consultants. He said the Commission opted for the MOU process for this first round of contracts, and San Jose State University, University of California at Berkeley, and the Pacific Earthquake Engineering Research (PEER) Center have expressed interest. Mr. McCarthy noted that universities can subcontract with private consultants for up to 25 percent of the work, or \$50,000 in this case.

Mr. McCarthy indicated that the Commission will discuss the Field Act research project in more detail at the October meeting. He said one possible topic for future research in this area might be fires following earthquakes. Commissioner Jones noted that the Riverside Forest Service lab is working with the U.S. Geological Survey on this topic. She asked if the Commission could contract with federal agencies through the MOU process. Mr. McCarthy responded that the MOU process can be used with any state or federal agency.

ACTION: No action required.

X. PUBLIC COMMENT

Vice Chairman Mileti welcomed further comments from members of the public. He asked speakers to limit their remarks to three minutes.

Mr. Robert Philipsen talked about the use of solar-direct pool pumps to enable the use of swimming pools as a source of emergency water supplies during power outages caused by disasters. He noted that in desert communities, many households, communities, and resorts have pools that could be an important resource in improving survivability and maintaining public health. He pointed out that use of pumps can keep water circulating so pools and ponds do not become breeding grounds for mosquitoes. Mr. Philipsen added that solar-direct pumps typically cost less than \$10,000.

Ms. Dana Stewart stated that she has attended over 20 public hearings to express concerns about wind turbines and windmills. She said the windmills near the I-10 interstate have huge blade spans, and the blades could separate from the towers and cartwheel out of control if they become loose in a major earthquake. She urged the Seismic Safety Commission to advocate seismic certification for wind turbine equipment.

Commissioner Koch asked if the Public Utilities Commission and other regulatory agencies were aware of safety concerns about windmills. Ms. Stewart stated that she has tried to bring these issues to the attention of the responsible authorities. She said she spoke with a local police chief, who was unaware of the potential for explosion. She noted that many public hearings have been held at inconvenient times and locations away from impacted areas, and some have been restricted so members of the public could not attend. Ms. Stewart remarked that approval of windmills has been railroaded and fast-tracked, and decision-makers have not listened to her concerns. She added that windmills also kill migratory birds and bats, which has resulted in an increase of rats and other vermin infestations.

Vice Chair Mileti thanked the members of the public who spoke.

XVIII. MISCELLANEOUS & GOOD OF MEETING

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

XIX. ADJOURN

There being no further business, Commissioner Adelman made a motion, seconded by Commissioner Changus, that the meeting be adjourned. The motion was carried unanimously and the meeting was adjourned at 2:07 p.m.

Sue Celli
Office Manager

Approved by:

Richard McCarthy
Executive Director