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## SEISMIC SAFETY COMMISSION

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Seismic Safety Commission  
Minutes of Regular Meeting/Workshop  
June 14, 2001  
State Capitol, Room 444  
Sacramento, California

### Members Present

Donald O. Manning, Chairman  
Andrew Adelman  
William L. Gates  
Jerry C. Chang  
Bruce R. Clark  
Lawrence T. Klein  
Stan Y. Moy  
Linden T. Nishinaga  
Ashok S. Patwardhan  
Patricia Snyder

### Members Absent

Daniel Shapiro, Vice Chairman  
Senator Richard Alarcon/Chris Modrzejewski  
Mark M. Church  
Jeff Johnson  
Douglas E. Mochizuki

### Staff Present

Richard McCarthy  
Robert Anderson  
Abby Browning  
Karen Cogan  
Henry Sepulveda  
Henry Reyes  
Fred Turner

## I. CALL TO ORDER/ROLL CALL

The meeting of the Seismic Safety Commission was called to order by Chairman Donald Manning at 9:00 a.m.

## II. CHAIRMAN'S REMARKS

Chairman Manning noted that June 14 was Flag Day.

Chairman Manning observed that fire season has arrived in California. He noted fire often poses a serious danger after earthquakes, especially in rainy years such as this one.

Chairman Manning reported that he participated in meetings with representatives from the Office of Emergency Services (OES), the Federal Emergency Management Agency (FEMA), and the Commission staff to discuss the findings of the FEMA audit regarding the Commission's use of grant funds to produce its report on the Northridge earthquake. He noted Mr. McCarthy would be discussing the findings in more detail as part of a later agenda item. He commended Mr. McCarthy for representing the Commission well throughout the process.

### **III. APPROVAL OF MINUTES**

#### **May 9 and 10, 2001**

**ACTION:** Commissioner Chang made a motion, seconded by Commissioner Snyder, that:

*The Commission approve the minutes of the May 9 and 10 meeting as proposed.*

\* Motion carried, 10 - 0.

### **IV. EXECUTIVE DIRECTOR'S REPORT**

#### **FEMA Audit**

Executive Director Richard McCarthy noted FEMA discussed its preliminary audit findings at a meeting on May 16. He noted the Commission received a \$1 million grant from FEMA's Public Assistance Program for its work on the Northridge earthquake report and compendium. As a condition of the grant, the Commission was required to provide a 10 percent match, consisting in part of in-kind contributions of commissioner time and reports by individual commissioners. At the May 16 meeting, FEMA auditors questioned whether the project met grant program requirements in the first place. The auditors noted that if the grant did not fall under the Public Assistance Program, the funds would come from the Hazard Mitigation Program, which requires a matching contribution of 25 percent, or \$113,000 from the Commission.

Mr. McCarthy said FEMA auditors disallowed the matching contribution of commissioner time, totaling \$216,000 at a rate of \$443 per day. He noted commissioners spent considerable time attending hearings and writing comments on the draft report. FEMA indicated this contribution would have been acceptable if commissioners had been paid for their time by the state instead of donating the time for this project.

Mr. McCarthy reported that FEMA auditors also questioned the \$38,000 spent for publishing 2,700 copies of the report, although the duplication was done at FEMA's own request. The auditors also questioned whether the Commission had double-billed FEMA for some case studies that appeared both in the Proposition 122 reports and in the Northridge report, and they asked about some miscellaneous items as well.

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Mr. McCarthy said the staff is awaiting FEMA's final report, and then the Commission can decide whether to appeal any of the findings. He noted that after the May 16 meeting, OES representatives went back to the office and compiled documents from the federal regulations indicating that volunteer time can count toward matching funds, and that information was faxed to FEMA, but a response has not yet been received.

Mr. McCarthy noted that at the May meeting, the Commission decided not to allocate year-end funds to pay any amount FEMA claims is still owed.

Commissioner Snyder pointed out that FEMA approved the Northridge project and monitored the process for the next six years, with concurrence by OES and the Department of Finance. Chairman Manning noted that there appears to be inconsistency in FEMA's own interpretations, and he expressed disapproval of the preliminary audit findings. Commissioner Adelman commented that local governments encounter similar problems in their dealings with FEMA.

## **Budget Update**

Mr. McCarthy said the Commission expects to end the fiscal year with a small surplus, and he asked Commissioner Gates to provide a more detailed update on the budget.

Commissioner Gates estimated the Commission will have a surplus of approximately \$160,000 at year-end, mostly due to unfilled staff positions. He noted the Commission approved a list of spending priorities at the last meeting, and the staff is now in the process of purchasing some of the second-tier priority items. Commissioner Gates said the Commission will be requesting \$40,000 reimbursement from OES for the *California Earthquake Loss Reduction Plan* update as part of next year's budget. He commented that 2000-2001 was a good year for the Seismic Safety Commission. He noted some of the vacant staff positions will be filled in the coming months.

Mr. McCarthy drew attention to the final report on the Proposition 122 budget. He said the Commission obtained \$165,000 in reimbursement authority for next year to support Proposition 122 education and outreach programs.

Commissioner Patwardhan asked how the size of the Commission's budget is determined. Mr. McCarthy explained that the Commission goes through a budget planning process each year and budget change proposals (BCPs) are prepared to request augmentations for specific purposes in the following year. That process will begin in July for the Fiscal Year 2001-2002 budget. Mr. McCarthy said BCP requests are forwarded to the Department of Finance for review and approval.

Commissioner Patwardhan questioned whether the Commission's budget is sufficient to provide adequate staff support for committees. He noted two of the committees on which he has participated have been seriously handicapped by the lack of staff support. Mr. McCarthy agreed. He noted the new budget includes a \$38,000 augmentation for committee support services. However, because of the energy crisis, the Department of Finance may be asking all state

agencies to cut back on expenses by 2.5 percent. If a cutback is mandated, the Commission will receive only a \$13,000 increase for committee support. He welcomed suggestions from commissioners as to other ways of handling the Commission's workload.

## V. COMMITTEE REPORTS

### Proposition 122 Oversight Panel

Project Manager Henry Reyes noted the Proposition 122 program ends on June 30. He drew attention to his written report summarizing the work done since 1991 in the Proposition 122 program. Mr. Reyes thanked Ms. Karen Cogan and other staff members for their assistance over the past several years. He also recognized the work of the 19 Oversight Panel members who have served since Proposition 122 was approved. He noted certificates of appreciation will be sent to all of the panelists along with a copy of the final report.

Commissioner Chang recommended adding the names of commissioners to the acknowledgement list. Mr. Reyes noted that many commissioners have served on the Commission during the past ten years, so it would not be practical to include all the names.

Commissioner Patwardhan asked about plans to continue the work begun by Proposition 122 and follow-up activities. Mr. Reyes responded that the Commission is working closely with Mr. Joel McDonald, chair of the Oversight Panel, to ensure that outreach continues. Commissioner Patwardhan asked if there were any prospects for obtaining more funds. Mr. Reyes said Senator Speier has introduced a bill to provide bond funds for retrofitting additional government buildings.

Mr. McCarthy commended Mr. Reyes and Mr. Fred Turner for their work on Proposition 122. He noted some of the Proposition 122 projects have received awards, and all have been well received by end users.

Ms. Cogan added that copies of Proposition 122 products are available to commissioners upon request.

### Nominations Committee

Chairman Manning noted the Commission approved a Nominations Committee at the last meeting to propose a slate of officers, but Commissioner Adelman will not be available to serve on that committee. He proposed replacing Commissioner Adelman with Commissioner Chang on the Nominations Committee.

**ACTION:** Commissioner Snyder made a motion, seconded by Commissioner Adelman, that:

*The Commission appoint Commissioner Chang to replace Commissioner Adelman on the Nominations Committee.*

\* Motion carried, 10 - 0.

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### **VI. LEGISLATIVE UPDATE**

Director of Legislation Henry Sepulveda noted the legislative report in the meeting packet contains background information on all bills for the benefit of the new commissioners.

#### **Commission-Sponsored Bills**

Mr. Sepulveda noted that of the seven bills sponsored by the Commission, three have become two-year bills and the remaining four are progressing.

Mr. Sepulveda said AB 1118 (Corbett), a bill for seismic retrofit tax credits and grants, was stripped of its tax credit provisions. Staff recommends changing the Commission's position to "support."

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

*The Commission support AB 1118 and send a letter of support to the author.*

\* Motion carried, 10 - 0.

Mr. Sepulveda said SB 629 (Alarcon), providing for a study of warehouse storage racks, was held in suspense. SB 998 (Alarcon), a bill for a statewide disaster recovery plan, was also held in suspense. Mr. Sepulveda added that it is unclear at this point whether SB 998 will be needed because the OES budget may provide funds for a statewide plan. Mr. Sepulveda reported that SB 717 (Speier), a retrofit bond measure, was amended to include the legislative intent of issuing bonds, and this bill is expected to pass.

#### **Other Bills**

Mr. Sepulveda said the staff is not recommending any changes in positions previously adopted by the Commission on other bills. The Commission will be considering bills related to hospital seismic safety at the July meeting. Mr. Sepulveda noted the Commission has adopted a "watch" position on all design-build bills pending further investigation.

Commissioner Patwardhan asked whether SB 842 (Speier), the bill to extend the 2008 deadline for hospital compliance with SB 1953, had been amended. Mr. Sepulveda responded that Senator Speier accepted the amendments proposed by the Commission and the bill has been passed to the Assembly side of the Legislature. Commissioner Clark noted the Commission should discuss SB 842 in more detail at the July meeting.

#### **Federal Legislation**

Ms. Abby Browning reported that Senator Dianne Feinstein introduced Senate Bill 424 on March 1, and the bill was introduced in the House of Representatives on May 1. The bill provides incentives in the form of tax credits and grants to encourage seismic safety retrofits, and it

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mirrors legislation supported by the Commission on a state level. Staff recommends support for Senate Bill 424.

Commissioner Patwardhan asked how the Commission conveys its support for federal legislation. Ms. Browning responded that the Commission issues a letter of support.

Commissioner Clark noted that Senate Bill 424 formerly included second-year funding for a national seismic network, but that provision was deleted from the legislation. He recommended that the Commission support the USGS' efforts to maintain funding for this national program.

Mr. Sepulveda suggested sending a letter of support for second-stage funding. He noted the funding allocation will be included in a separate omnibus budget bill.

Commissioner Snyder observed that the Feinstein legislation reflects the Seismic Safety Commission's efforts in the Northridge earthquake report and the *California Earthquake Loss Reduction Plan*. She noted this important legacy should help convince FEMA of the importance of the Northridge earthquake report. She suggested involving Senator Feinstein in the FEMA audit appeal if necessary.

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

*The Commission support Senate Bill 842 and second-year funding for the national seismic network.*

\* Motion carried, 10 - 0.

## **SB 1953 Bills**

Mr. Sepulveda noted the Commission's ad hoc committee met June 13, and he asked Mr. Fred Turner to give a brief report on that meeting.

Mr. Turner said the ad hoc committee identified key issues, including funding priorities, deadline extensions and conditions, obtaining additional funding, Office of Statewide Health Planning and Development (OSHPD) regulations, and variations in hazards in different areas of California. Mr. Turner noted the July meeting will feature a workshop on SB 1953 compliance that will lead to development of a series of findings to guide the Commission's legislative positions on hospital seismic safety bills. He said the staff is in the process of developing a workshop agenda, and he welcomed suggestions from commissioners as to additional issues that should be considered.

Commissioner Adelman commented that he sits on the Hospital Building Safety Board, and one of the key concerns facing that group is the prospect that hospitals unable to meet SB 1953 deadlines will convert facilities to clinics, thus removing them from OSHPD's jurisdiction and transferring them to local government oversight. He emphasized the importance of OSHPD making sure building records are transferred to local governments in these cases to ensure continuity of oversight. He expressed his opinion that conversions of this type will not enhance seismic safety in California, and he recommended the Commission discuss this issue at the July

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meeting.

Commissioner Patwardhan recommended including hospital representatives at the workshop session. He said he was interested in finding out about the status of retrofit efforts and the estimated costs for that work. He noted the Rand Corporation recently prepared cost estimates.

Commissioner Clark said the June 13 ad hoc committee meeting included representatives from OSHPD, the hospital industry, the California Division of Mines and Geology, and the Hospital Building Safety Board. He added that the purpose of the session was to listen to comments from the participants and discuss key issues.

Commissioner Clark noted a number of things have changed in the seven years since SB 1953 was enacted, including the scope of healthcare services, ground motion estimates, emergency medical care, building codes, building performance, and major earthquake impacts. He added that the hospital industry is still a long way from ensuring life safety or post-earthquake functionality of their facilities. In fact, 975 facilities rated buildings SPC-1, indicating vulnerability to collapse in strong earthquakes. Commissioner Clark noted two Rand Corporation reports funded by the California Healthcare Association estimate that 25 percent of California's hospitals will be unable to meet SB 1953 requirements. The true costs of SB 1953 compliance are estimated at \$10 billion by 2008 and \$24 billion by 2030.

Commissioner Clark said the purpose of the July workshop session will be to listen to hospital experts, determine the next steps in SB 1953 compliance, and recommend priorities for funding.

Mr. Sepulveda noted this year's budget bill contains language requiring hospitals to provide expedited information on all SPC-1 buildings; OSHPD is charged with collecting this information within 30 days after the budget is adopted.

Commissioner Chang inquired about the status of SB 1156 (Aroner), a measure to provide bond funds to help hospitals comply with SB 1953 retrofit requirements. Mr. Sepulveda responded that SB 1156 is progressing; language was added expressing the legislative intent of issuing bonds. Commissioner Chang asked if bond funds would be available for both public and private hospitals. Mr. Sepulveda said SB 1156 bonds would be used for public and not-for-profit institutions, not private hospitals. Commissioner Chang recommended that the Commission work on finding funding sources for private hospitals as well, such as loan programs or state guarantees. Mr. Sepulveda noted that public funds cannot be used to pay for private hospital retrofits, but hospitals can apply for revenue bonds. Another possibility would be tax credits, as proposed in a SB 677 (McPherson), a bill supported by the Commission.

Commissioner Klein asked how many hospital facilities are operating in California. Mr. Turner said there are about 2,500 hospital buildings in the state. Commissioner Klein observed that 966 SPC-1 buildings is a large fraction of that total.

Commissioner Clark noted the staff will be compiling background information in preparation for the July workshop meeting.

## VII. DESIGN-BUILD ISSUES

Chairman Manning welcomed the guest speakers and invited them to make their presentations on design-build issues.

Mr. Ken Baker, Western Pacific Chapter, Design-Build Institute of America, provided an overview of the design-build market in the U.S. He noted there has been a 300 percent growth in design-build projects since the mid-1980's, resulting in a market worth over \$100 billion. This market is expected to grow another 50 percent by 2010. Mr. Baker said the design-build method is used by both public and private owners, and over 40 states now allow design-build procurement.

Mr. Baker noted that in traditional construction projects, the owner contracts for a project designer and then hires a contractor to handle construction. In design-build projects, the owner contracts with a single firm to handle both the design and construction aspects of the work. A design-build process usually results in faster completion, less cost, reduced staffing, and streamlined management.

Mr. Baker reported that the construction industry conducted a study comparing design-build projects to traditional projects in terms of performance and quality. The study found that design-build projects cost 6 percent less, reduce construction time by 12 percent, and result in a 33 percent decrease in overall project time. The quality of work was deemed better than that of traditional projects in terms of start-up, call-backs, exterior and structural elements, interior components, environmental impacts, and equipment needs. Mr. Baker said the study determined that the best-performing design-build projects were characterized by owner decision-making, a well defined scope, excellent team communications, and qualified contractors. Factors involved in the worst performing projects were having the contractor was engaged late in the design process, limited team experience, onerous contract clauses, a poor decision-making process, and lack of a prequalification process.

Commissioner Nishinaga asked about the performance of design-build projects in earthquakes. Mr. Baker responded that the study did not measure seismic performance.

Commissioner Patwardhan observed that the design-build process fundamentally alters the existing structure of the construction industry, where design firms are separate from construction firms. He noted design-build shifts greater responsibility to the building industry. Mr. Baker agreed. He added that design-build is a useful tool in many situations, but it may not be appropriate for complex and unusual projects.

Chairman Manning expressed concern that design-build projects place too much emphasis on saving time and cutting costs. He noted this attitude can create public safety problems. Mr. Baker responded that completion time is a major issue in construction, but owners also need to focus on the end results.

Commissioner Chang asked if design-build projects are always less costly than traditional construction. Mr. Baker noted the construction industry study found that costs average about 6

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percent less, but cost savings is not automatic. He added that faster completion time is the chief advantage of design-build. Commissioner Chang expressed concern about ensuring quality. He noted building owners should take long-term costs and benefits into account, considering factors such as retrofit and maintenance and recovery costs from earthquake damage over the life of a building. Mr. Baker agreed, and commented that long-term considerations are not always factored into competitive bids.

Commissioner Moy said that as a practicing architect, he had both good and bad experiences with design-build projects. He emphasized the importance of assuring high quality, and expressed an interest in seeing how design-build can be used in public-sector projects.

Mr. James Prunty, Associated General Contractors, observed that design-build is nothing new, but it is becoming a more prevalent way of constructing buildings. He said the Getty Center, the Alameda Corridor project, and the new GSA building in Los Angeles are examples of projects that successfully used the design-build method. Mr. Prunty noted there are eleven design-build bills making their way through the California Legislature, many of them dealing with school construction. He stressed that prequalification is an essential element in assuring good quality and safety.

Mr. Robert McLean, McLean & Tillotson Construction, noted that his company uses multi-disciplinary teams of architects and structural engineers to work on design-build projects, and all of these people are committed to ensuring high quality and safety. He agreed with the previous speakers that design-build is a coming trend.

Mr. Paul Meyer, Consulting Engineers and Land Surveyors of California (CELSOC), expressed his opinion that the design function should be independent of the design-build team to assure maximum quality and performance. He said selection of the design-build team should be based on the best value over the life cycle of a project, not just on the lowest bid. Mr. Meyer recommended that building owners provide stipends to firms to encourage them to produce detailed design proposals, noting that ideas from various sources can then be incorporated in the final project design. In terms of assigning liability, Mr. Meyer advocated making each firm responsible only for the project elements under their control.

Mr. Ken Luttrell, structural engineer, Cole/Yee/Schubert & Associates Structural Engineers, Inc., said his firm provides a full spectrum of structural engineering services and frequently subcontracts with building contractors involved in design-build projects. Based on his firm's experience, Mr. Luttrell suggested adopting different approaches to small and large projects. For small projects, he proposed that owners retain a design team and architect to produce a preliminary design and then provide quality control and construction administration services throughout the project. For larger projects, he recommended that the owner retain a project manager to oversee selection of a design team and a construction firm and to oversee the entire design and construction.

Mr. Luttrell discussed key issues that need to be considered in design-build projects: the allegiance of design professionals and conflicting interests, loss of quality-based selection of design firms, quality control of design, and quality control over construction. He noted steps can

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be taken to assure the necessary level independent review and oversight to result in a high-quality, safe project. Mr. Luttrell concluded that the design-build method can be used successfully if approached properly and with careful attention to quality control.

Mr. William Schock, California Building Officials (CALBO), explained that his organization represents local government building officials who are responsible for reviewing and inspecting construction projects in their areas. He said CALBO members believe design-build can work well, especially for industrial-style projects. However, he noted, the design-build process needs checks and balances to assure high quality and safety. Mr. Schock emphasized the importance of proper oversight, clear specifications and earthquake performance expectations, independent third-party technical review of the design, and independent quality control throughout the construction process.

Commissioner Adelman asked about San Diego's and San Francisco's experience with design-build projects. Mr. Schock responded that both cities have found that design-build can be successful with savvy clients and industrial-style buildings.

Commissioner Patwardhan asked how many building owners use long-term value received to evaluate bids. Mr. Baker said the Design-Build Institute does not have records of the exact numbers or percentages. He noted the Institute recommends that building owner use a prequalification process and a best-value approach when considering bids. Mr. Prunty added that most building owners look at receiving maximum value for the money spent rather than simply the lowest cost.

Commissioner Nishinaga commented that design-build projects appear to have benefits for building owners and the construction industry because they save time, but they also tend to lessen the role designers play because most of funds in a project are allocated for construction rather than the design component. Mr. McLean said design-build can be a good approach for simple projects with minimal drawings, thus realizing an economy in the design process. However, he noted, more complex projects with higher performance criteria require more attention to design, so the design-build approach may not produce cost savings in these situations. Mr. Meyer expressed his opinion that design-build projects present a definite risk in terms of quality and safety. He noted the best way to assure a good project is to allocate at least 35 percent of funds for the design and to retain the designer to provide oversight throughout the project. Mr. Prunty stated an engineering team was in place throughout the Alameda Corridor project because the site conditions varied considerably from one place to another. Commissioner Nishinaga noted 35 percent is not much for design.

Mr. Baker said the Alameda Corridor project was constructed by Tudor-Saliba, a firm with considerable expertise in many site conditions. He noted liability was shared between the construction firm and the owner agency, with Tudor-Saliba taking the first \$10 million in risk, the next \$10 million absorbed by the agency, and liability over \$20 million shared 50-50.

Commissioner Clark observed that during the construction process, contractors sometimes assume risk to move forward with the work pending completion of the design, and this can result in situations where the work done does not match the ultimate design. He asked whether there

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were guidelines for designers in such cases. Mr. Meyer agreed that these situations could create serious problems. However, he noted, if a contractor moves forward on an at-risk basis, the contractor would be liable for any resulting damages. Mr. Luttrell strongly recommended that building owners retain professionals to oversee the construction process to avoid such problems. Mr. Meyer added out that the design-build process is usually a cooperative arrangement, so there is considerable communication among team members as the work moves forward.

Mr. Schock said his firm has seen situations where the work progresses faster than the design, and considerable pressure is then put on the designer to make the design conform to the as-built project. Commissioner Adelman noted local building departments seldom require work to be demolished, but he agreed that these situations can pose considerable problems for building officials.

Commissioner Chang expressed concern about how change orders are handled. He noted the primary concern of the Seismic Safety Commission and most designers is safety, but builders usually try to save money. Mr. Baker noted the owner agency can avoid these problems by having a clear articulation of its requirements and design criteria in advance.

Commissioner Moy noted the Commission invited these speakers in order to learn more about design-build issues. He thanked the presenters for their balanced and helpful information. Commissioner Moy expressed his opinion that a low-bid approach was not a good fit for design-build projects.

Chairman Manning thanked all the speakers for their comments.

## **VIII. BAY AREA RAPID TRANSIT RETROFIT PROJECT UPDATE**

Mr. Jim Dunn, Chief Engineer, Bay Area Rapid Transit (BART) , introduced Mr. Tom Horton, Project Manager, and Mr. Ed Matsuda, Project Engineer. Mr. Dunn invited Mr. Horton to provide an update on the status of the BART retrofit project.

Mr. Horton explained that BART is in the process of evaluating the risks and vulnerability of its older system components. He said BART has developed performance standards for its major physical structures, secondary facilities, and other components. During the first phase of the retrofit project, the core system will be addressed; the second phase involves the East Bay system between South Hayward and Berkeley; the third phase will strengthen the outlying legs; and the fourth phase will address all other components. Mr. Horton noted the first phase has been broken into four geographical segments.

Mr. Horton described the approach to BART's vulnerability study. He said the first part involved ground motion studies, followed by a vulnerability analysis of the BART system. After that, BART was able to determine retrofit needs and plan retrofit strategies. Mr. Horton noted BART expects to complete a draft set of plans for the first phase by the end of August, and plans for the other phases will be done next year. He said design criteria are being developed, and those criteria are currently being reviewed. Once that process is complete, BART will produce a final design for the first segment.

Mr. Horton noted funding is the chief obstacle to BART's retrofit progress. He said the first segment of work is estimated at \$250 million, and about half those funds have been obtained.

Mr. Horton reviewed the proposed schedule of work. He said the RFP for the design of the first segment will be completed in July, 2001, and construction is expected to begin in January of 2003. Work will take approximately two years, so the first segment will be completed in 2005. The rest of the system will be strengthened by 2010 if funds are available.

Commissioner Klein noted that San Francisco has embarked on a \$4 billion retrofit of its water system using a process similar to that employed by BART. He asked if BART has authority to issue bonds to provide funding. Mr. Dunn responded that BART has bond authority, and the staff is in the process of investigating alternative sources of funds as well.

Commissioner Patwardhan asked if the vulnerability studies have revealed any major flaws or unexpected problems. Mr. Horton responded that there are serious soil problems at the western end of the Transbay Tube that will need to be addressed.

Commissioner Nishinaga asked if the results of the studies will be made available to the public. Mr. Horton said the analysis of the first segment will be completed sometime in August, and studies on the other parts of the system will be done in spring of 2002. He added that the final reports may be made available to the public.

Commissioner Moy asked what role the Seismic Safety Commission will play in this process. Mr. McCarthy said the Commission will review the studies. He noted the Commission referred BART to the Pacific Earthquake Engineering Research group for independent review as well. He added that the Commission might be able to assist with locating funding sources.

Commissioner Clark observed that BART's rating system uses "SPC" terminology similar to that used by the hospitals, but BART's ratings have opposite meanings. He said he hoped there would be no confusion as a result. Commissioner Clark asked if BART anticipated any major changes to codes and criteria before 2010 that might impact the project design. Mr. Dunn acknowledged that BART is dealing with a moving target. He said BART has hired a knowledgeable consulting team of experts through the life of the project, and adjustments will be made as required. He noted decisions about the first segment of work need to be made soon.

Chairman Manning thanked the BART representatives for their report.

#### **IX. UPDATE ON STRUCTURAL PROVISIONS PROPOSED IN THE NATIONAL FIRE PROTECTION AGENCY (NFPA) INTERNATIONAL 5000 BUILDING CODE DRAFT**

Mr. Raymond Bizal, Western Building Code Field Office, introduced Ms. Bonnie Manley, National Fire Protection Agency (NFPA) and asked her to discuss the NFPA International 5000 Building Code draft.

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Ms. Manley explained that NFPA is a code- and standard-writing organization whose mission is to help reduce hazards from fires and related disasters. NFPA provides expert advice on fire protection issues, fire analysis and research services, post-fire investigations, public safety education, and member programs. Ms. Manley said NFPA is working toward a complete set of ANSI codes and companion training and certification programs.

Ms. Manley noted the current NFPA code addresses life safety, electrical systems, fuel gas, and fire prevention. The group is working on mechanical and plumbing provisions as well, but building and construction issues have not yet been addressed. She said the NFPA International 5000 Building Code is an attempt to fill that gap. The new code will cover a broad scope of safety, health, usability, and public welfare issues. Ms. Manley noted that like other building codes, NFPA 5000 will contain prescriptive requirements, but it will also offer performance-based options.

Ms. Manley said 17 committees are involved in the code-drafting process. A rough draft was released last July, and after going through an extensive review process, a revised version will be published by August 1, 2001. The public comment period will close in October of this year, after which the various committees will meet and evaluate the comments received. A final version of the new code will be ready in March of 2002, and if approved by the NFPA and standards council, the NFPA 5000 will go into effect in August, 2002.

Commissioner Clark asked how NFPA 5000 will interact with other codes. Mr. Bizal responded that for decades, there have been four model code organizations for building issues; three of these model codes were combined in a single set as part of the development of an international building code, but NFPA was not included. He said NFPA's goal is to develop a single set of codes for the U.S., and with the development of NFPA, the U.S. will go from four model codes to only two. Mr. Bizal noted the structural provisions in the two codes are similar. He added that NFPA supports performance-based design.

Commissioner Chang observed that the Northridge earthquake revealed that many steel-frame buildings were damaged at their connections. He asked whether NFPA 5000 incorporates the latest recommendations from the Northridge earthquake follow-up studies. Ms. Manley explained that NFPA works with the National Council of the Structural Engineers Association, of which SEAOC is a member. She said NFPA 5000 uses the SAC provisions for steel-frame buildings. She added that FEMA also participates in these discussions. Mr. Bizal added that the code development committees include building officials, who also help review the code provisions.

Chairman Manning thanked Ms. Manley and Mr. Bizal for their information and asked that they keep the Commission informed of their progress.

## **X. CALIFORNIA EARTHQUAKE LOSS REDUCTION PLAN REVISION**

### **Tracking Report Outline**

Mr. McCarthy reported that the Department of Education has agreed to edit and print the revised

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*Plan*. He noted the final proof will be submitted to the Commission for review, and the revised *Plan* document will be released at the end of the year.

Mr. McCarthy drew attention to the sample tracking report and questionnaire in the meeting packet and welcomed suggestions from commissioners. He noted the questionnaire will be distributed on July 1, with a response deadline of 60 days.

Referring to the proposed letter from the Governor to the recipients of the tracking document, Commissioner Snyder proposed switching the placement of the first and second paragraphs. Chairman Manning agreed, noting busy people sometimes read only the first paragraph of a letter, so the main message should come first.

Commissioner Patwardhan commented that the tracking questionnaire is a good start in measuring the state's progress in meeting the goals articulated in the *Plan*. He added it will be a challenge to complete the document by the end of the year.

Commissioner Patwardhan noted the Commission found many well qualified and dedicated people to work on the subcommittees developing the revisions, and he recommended making good use of this valuable resource. He suggested keeping the subcommittees in place to assist in reviewing the responses to the tracking document as well. Other commissioners agreed. Chairman Manning noted the committees will be maintained until they are officially disbanded and dissolved. Mr. McCarthy said the staff will send the questionnaire and draft tracking report to each subcommittee member.

Commissioner Patwardhan recommending using "Progress Report" as the title of the tracking document. He suggested sending the document to private-sector organizations as well as state agencies. Mr. McCarthy requested that commissioners email the staff with names of people and organizations to receive the report.

Commissioner Patwardhan questioned how progress on the initiatives will be assessed by the respondents. He suggested developing some general guidelines for the types of responses desired. Mr. McCarthy said the staff is aiming for brief one- or two-paragraph responses for each of the 116 initiatives.

### **Draft Governor's Letter**

In the first sentence, Commissioner Snyder suggested replacing "California Seismic Safety Commission" with "State of California."

Commissioner Chang suggested changing the wording of the final sentence in the letter to read: "Although we cannot predict or prevent earthquakes from occurring, we can maintain California's lead in earthquake loss reduction and continued progress in seismic safety."

Commissioner Snyder recommended that Commissioner Chang submit his comments in writing.

## **Regular Meeting Minutes**

### **XI. SEISMIC SAFETY COMMISSION WEB PAGE UPDATE**

Mr. McCarthy noted that at the last meeting, commissioners asked for an accounting of the funds allocated for the Web page so far. He reported that of the \$25,000 approved, \$6,000 has been spent on revisions, and another \$4,000 will be used for salaries, administration, and software, leaving approximately \$15,000 unused after June. He noted San Diego State was in the process of developing the Web site when the state adopted standardized format guidelines last fall, so work on the project was stopped at that point. Mr. McCarthy invited Dr. Mellors to discuss the status of the project.

Dr. Rob Mellors, San Diego State University, said revisions to comply with current California standards will be completed by July, and a skeleton Web site will be developed by September. From September to next January, work will focus on creating content. He estimated that these development activities will cost approximately \$2,000 per month. Once the Web site is up and running, Dr. Mellors noted the Commission will need to decide how to handle long-term maintenance and content additions.

Dr. Mellors displayed a sample illustrating how the Web page will look.

Commissioner Clark recommended keeping the basic design as simple as possible.

### **XII. MISCELLANEOUS**

Mr. John Rowden, Office of Emergency Services (OES), noted that OES has a strong interest in working closely with the Seismic Safety Commission to track progress on *Plan* initiatives. He noted the federal Disaster Mitigation Act of 2000 provides new opportunities to expand the state's role in disaster planning and hazard mitigation. Federal reimbursement will increase from 15 to 20 percent of disaster costs, so coordination among state agencies is very important. He asked that the Commission work through OES to submit progress reports to the federal government.

Commissioner Snyder affirmed the Commission's intention of working through OES as a liaison with the federal government.

Mr. McCarthy suggested having the questionnaire signed by both Dallas Jones and the Commission chairman, noting more agencies are likely to respond if OES is involved. Mr. Rowden said he would ask Mr. Jones to participate. Mr. McCarthy also requested that OES review the proposed questionnaire and provide suggestions.

Mr. Rowden recommended that the Commission schedule a presentation at a future meeting on the federal hazard mitigation program. He noted California received \$930 million in federal disaster funds over the past 10 years, of which over \$700 million was spent on seismic safety improvements.

### **XIII. GOOD OF THE MEETING**

**June 14, 2001**

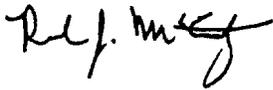
Commissioner Snyder noted the Commission took a position at the last meeting supporting AB 656 (Chan), a bill to extend the seismic retrofit deadline for hospitals in Alameda County. She urged the Commission to be cautious about taking sides on issues that are strictly local, adding that the Commission's past policy has been to get involved only on issues of general statewide concern.

Commissioner Klein asked if the staff had any news about Commission reappointments. Mr. McCarthy responded that the Governor's Office inquired about which groups are represented by the Commission seats, but no announcements have been made regarding appointments.

#### **XIV. ADJOURN**

There being no further business, Commissioner Klein made a motion, seconded by Commissioner Clark, that the meeting be adjourned. The Commission meeting was adjourned at 1:00 p.m.

Approved by:



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Richard McCarthy  
Executive Director