





ALFRED E. ALQUIST SEISMIC SAFETY COMMISSION MEETING

In-person and Teleconference Meeting Thursday, April 10, 2025

1. Call to Order and Roll Call

Chair Rabbitt called the meeting to order at approximately 10:16 a.m. A roll call was conducted to establish a quorum.

Commissioners In-Person Attendance

David Rabbitt, Chair, Local Government
Debra Garnes, Vice-Chair, Local Government
Ida Clair, California (CA) Division of the State Architect
Representative Jose Lara for Nancy Ward, CA Governor's Office of Emergency
Services (Cal OES)
Joone Kim-Lopez, Public Utility
Cindy Silva, Local Government
Vincent Wells, Fire Protection

Commissioners Virtual Attendance

Representative Irina Brauzman for Stoyan Bumbalov, Building Standards Commission Alegría De La Cruz, Social Services Kevin McGowan, Emergency Services

Commissioners Absent

Dr. H. Kit Miyamoto, Structural Engineer Gail Pellerin, CA State Assembly

2. Chair Remarks

Chair Rabbitt began the meeting by thanking everyone for their patience in starting the meeting.

3. Public Comment: Items on Agenda

Chair Rabbitt invited the public to comment on agenda items. No public comments were submitted regarding the agenda items.







4. Approval of Seismic Safety Commission (SSC) January 9, 2025, Meeting Minutes:

Commissioner Silva made a motion to approve the amended SSC January 9, 2025, meeting minutes to remove Commissioner Silva's virtual attendance, seconded by Commissioner Kim-Lopez. A roll call vote was conducted, and the motion passed unanimously.

5. California Research and Assistance Fund (CRAF)

Lori Nezhura, Acting Executive Director, SSC

Chair Rabbitt directed to take up the next item later in the meeting. Commissioner Silva made a motion to direct agenda item #5, California Research and Assistance Fund (CRAF), be heard after item #10, Golden Gate Bridge, Highway & Transportation District, seconded by Commissioner Kim-Lopez. A roll call vote was conducted, and the motion passed unanimously.

Following item #10, item #5 was presented. At the January 2025 meeting, Commissioners asked SSC staff to provide a fiscal analysis of the CRAF. Acting Executive Director Lori Nezhura provided an overview of expenditures and encumbrances between 2020 and 2030.

6. Fire Station Risk Assessment Report

- Lori Nezhura, Actina Executive Director, SSC
- Jia Wang-Connelly, Senior Structural Engineer, SSC

Acting Executive Director Nezhura and SSC Senior Structural Engineer Jia Wang-Connelly presented the draft California Fire Station Risk Assessment and Retrofit Benefit Cost Study, Part 1.

The report explores the seismic risks associated with fire stations and evaluates the benefits of potential retrofit solutions. This assessment utilizes the HAZARDs U.S. (HAZUS) Advanced Engineering Building Module (AEBM) and the Benefit-Cost Analysis (BCA) Toolkit Earthquake Structural Model developed by FEMA to estimate potential losses and loss avoidance due to seismic retrofit. The report calculates costs, and the benefit-to-cost ratios associated with retrofitting fire stations to various seismic performance standards.







Commissioner Garnes made a motion to approve, seconded by Commissioner Wells. A roll call vote was conducted, and the motion passed unanimously.

7. SSC Project Ad-Hoc Committee Votes:

Acting Executive Director Nezhura outlined in Government Code sections 8589.75 and 8589.76, the SSC and Cal OES legal counsel developed a policy for establishing and maintaining ad-hoc committees. Volunteers for the following committees were announced and a vote for each committee was taken to appoint members.

Mobile Home Building Code Project (BRIC)

The Mobile Home Building Code Project, funded by a FEMA Building Resilient Infrastructure and Communities (BRIC) grant, will assess California's regulations on wind tie-down, engineering tie-down, and earthquake bracing systems for manufactured homes. The project includes reviewing past performance, conducting lab and field tests, and developing recommendations for new construction standards and a statewide mitigation program for these homes. Committee members will be asked to provide technical/expert reviews of project deliverables.

Commissioner Kim-Lopez made a motion, seconded by Commissioner Silva appointing Commissioners Rabbitt and Bumbalov to the Ad-Hoc Committee for the Mobile Home Building Code Project. A roll call vote was conducted, and the motion passed unanimously.

• Reducing Post-Earthquake Ignitions

SSC approved this project at the October 2024 meeting. Dr. Scawthorn received approval for a research project on the potential feasibility of reducing fires following earthquakes via improved gas seismic shutoff devices. Committee members worked with Dr. Scawthorn to scope the project and provide technical support and review of all deliverables.







Commissioner Rabbitt made a motion, seconded by Commissioner Kim-Lopez appointing Commissioners Kim-Lopez and Wells to the Ad-Hoc Committee on Reducing Post-Earthquake Ignitions. A roll call vote was conducted, and the motion passed unanimously.

Improving Post-Earthquake Firefighting Water Supply Capacity and Reliability

Dr. Scawthorn presented this proposal at the January 2025 meeting requesting the SSC support a workshop for water and fire agencies to discuss water distribution issues after an earthquake. This project was tabled during the January 2025 meeting as several commissioners asked to further define the scope and outcomes. Committee members worked with Dr. Scawthorn to scope the project with another proposal to the SSC.

Commissioner Kim-Lopez made a motion, seconded by Commissioner Wells appointing Commissioners Rabbitt and Garnes to the Ad-Hoc Committee on Improving Post-Earthquake Firefighting Water Supply Capacity and Reliability. A roll call vote was conducted, and the motion passed unanimously.

Building Health Monitoring and Shake Table

At the January 2025 meeting, Richard Allen, Director of UC Berkeley's Seismology Laboratory, received approval for a 12-month project to research the MyShake smartphone app and how recent results show these waveforms can be used to extract state of health information.

Commissioner Kim-Lopez made a motion, seconded by Commissioner Silva appointing Commissioners Rabbitt and Garnes to the Ad-Hoc Committee Building Health Monitoring Using California's MyShake Smartphone App. A roll call vote was conducted, and the motion passed unanimously.

• Ferndale and Türkiye Project

A three-part project encompassing (1) a report on the impediments to recovery in Rio Dell; (2) data on tectonics/triggered 3 events, like







Türkiye, with PEER, modeling locations in Northern and Southern California; and (3) recovery simulations provided by IN-CORE. Committee members will be asked to provide technical/expert reviews of project deliverables. Representative Lori Nezhura stepped down from her duties to serve as the SSC's acting Executive Director, and a new member must be selected. Commissioner Miyamoto will continue to serve.

Commissioner Kim-Lopez made a motion, seconded by Commissioner Silva appointing Commissioner Garnes to the Ad-Hoc Committee on Ferndale and Türkiye. A roll call vote was conducted, and the motion passed unanimously.

Due to the technical nature of the topics, SCC staff recommended certain academic/industry experts be added to the Ad Hoc Committees for both the Ferndale Türkiye Project and Building Health Monitoring Project.

Commissioner Silva made a motion, seconded by Commissioner Wells to approve technical experts for both Ferndale Türkiye and Building Health Monitoring Projects, as updated. A roll call vote was conducted, and the motion passed unanimously.

Executive Director Recruitment

This committee will assist with the Executive Director Recruitment process.

Commissioner Kim-Lopez made a motion, seconded by Commissioner Silva appointing Commissioners Rabbitt and Garnes to the Ad-Hoc Committee for the Executive Director Recruitment. A roll call vote was conducted, and the motion passed unanimously.

8. Improving Post-Earthquake Firefighting Water Supply

- Dr. Charles Scawthorn, S.E., SPA Risk LLC, UC Berkeley

Dr. Scawthorn, a structural engineer, visiting researcher at the University of California, Berkeley, and a retired Professor at Kyoto University, is recognized as a leading expert on fire-following earthquakes.







Dr. Scawthorn returned to the SSC on January 9, 2025, following up on recommendations from his 2011 SSC-funded report, "Water Supply in Regard to Fire Following Earthquake." The SSC moved to table his request and elected an ad-hoc committee to revise the proposal. The committee and Dr. Scawthorn worked to refine his proposal, and present and request the commission approve either Option (A) a 12-month project with a budget of \$90,000 or Option (B) a 9-month, scaled down project with a budget of \$68,000.

Commissioner Garnes made a motion, seconded by Commissioner Silva to approve the survey and second proposal for a 9-month project with a budget of \$68,000. A roll call vote was conducted, and the motion passed unanimously.

9. National Institute of Business Sciences (NIBS) Lifeline Infrastructure Hub: Supporting Critical Lifeline Infrastructure Recovery and Resilience

- George Guszcza, President & CEO, NIBS
- Ron Eguchi, Chair, NIBS Lifeline Advisory Panel

George Guszcza, President & CEO, National Institute of Building Sciences (NIBS), and Ron Eguchi, Chair, NIBS Lifeline Advisory Panel, provided an overview of the NIBS Lifeline Infrastructure Hub designed to help the nation with community resilience and recovery after disasters.

10. Golden Gate Bridge, Highway & Transportation District

- John R. Eberle, PE, District Engineer, Golden Gate Bridge, Highway
 & Transportation District
- Denis J. Mulligan, General Manager, Golden Gate Bridge, Highway & Transportation District

John R. Eberle, District Engineer, and Denis J. Mulligan, General Manager, Golden Gate Bridge, Highway & Transportation District, shared activities, including the upcoming seismic safety upgrades and an overview of seismic work performed.

11. Project Updates

- Lori Nezhura, Acting Executive Director, SSC

Acting Executive Director Nezhura moved that the Project Updates







would be emailed to all commissioners after the meeting to save time on the agenda.

- Ferndale and Türkiye
- California Fire Station Seismic Vulnerabilities Survey and Risk Assessment Project
- Shake Table Project
- Mobile Home Building Code Project
- Earthquakes and Climate Change Workshop
- SSC Website & Design Contract
- Quakes Heroes Expos
- Reducing Post-Earthquake Ignitions
- Building Health Monitoring Using California's MyShake Smartphone App

12. Miscellaneous Announcements

Items 12 was taken up after Item 13. SSC Chair David Rabbitt thanked Commissioner Rodriguez for his service, welcomed Commissioner Pellerin, and welcomed Acting Executive Director Lori Nezhura to the SSC. The February 11, 2025 magnitude 4.5 earthquake near Petrolia and March 28, 2025 magnitude 7.7 earthquake in Myanmar were acknowledged. Chair Rabbitt also informed SSC of the Cal OES Seismic Hazards Branch display at the Sacramento History Museum though April 20, 2025.

13. CLOSED SESSION PURSUANT TO GOVERNMENT CODE § 11126(a)(1)

The Board convened in closed session and appointed Lori Nezhura as Acting Executive Director.

14. Public Comment: Items not on Agenda

No public comments were received on items not listed on the agenda.

15. Adjourn

Chair Rabbitt adjourned the meeting at 1:47 p.m.