



**ALFRED E. ALQUIST**  
**SEISMIC SAFETY COMMISSION MEETING**  
 In-Person and Zoom Teleconference Meeting  
 October 12, 2023

**I. Opening:**

Cindy Silva, Chair commenced the meeting and welcomed attendees from Sacramento and those joining virtually.

**II. Chair Remarks:**

Chair Silva emphasized recent seismic events in Morocco and Afghanistan.

Commissioner Miyamoto provided a global seismic update and reported incident impacts on remote villages making humanitarian aid was challenging. Commissioner Miyamoto stressed the significance of mobilizing not just governmental or international funds, but also local resources to accelerate recovery.

**III. Call to Order:**

The meeting was called to order by Chair Silva. Roll call was conducted by Tanya Black and the following Commissioners and Representatives were present or virtual:

Commissioner	In-person	Virtual Attendance	Absent
Cindy Silva, Chair	X		
Representative Lori Nezhura for Nancy Ward	X		
Vincent Wells	X		
Debra Games	X		
Representative Sean Connelly for Assembly member Freddie Rodriguez, Vice Chair		X	
Representative Irina Brauzman for Building Standards		X	
Representative Diane Gould for Ida Clair		X	
Representative Sean Connelly for Assembly member Freddie Rodriguez, Vice Chair		X	
Alegria De La Cruz		X	



Joone Kim-Lopez		X	
Kevin McGowan		X	
Dr. H. Kit Miyamoto		X	
David Rabbitt		X	
Freddie Rodriguez			X
Anthony Portantino			X
Ida Clair			X
Nancy Ward			X

**IV. Public Comment:**

Chair Silva opened public comments for agenda items. There were no public comments.

**V. Approval of Seismic Safety Commission (SSC) Meeting Minutes for July 20, 2023, and August 31, 2023:**

A motion to approve by Representative Nezhura and seconded by Commissioner Rabbitt. A roll call vote was taken, and the motion to approve the July 20, 2023, Meeting Minutes passed unanimously.

Commissioner	Yes Vote	No Vote	Abstained
Cindy Silva, Chair	X		
Representative Sean Connelly for Assembly member Freddie Rodriguez, Vice Chair	X		
Debra Games	X		
Alegria De La Cruz	X		
Representative Lori Nezhura for Nancy Ward	X		
Joone Kim-Lopez	X		
Representative Irina Brauzman	X		
Kevin McGowan	X		
Dr. H. Kit Miyamoto	X		
David Rabbitt	X		
Vincent Wells	X		
	<b>Total Votes: 11</b>	<b>Total Votes:</b>	<b>Total Votes:</b>

A motion to approve by Commissioner Games and seconded by Commissioner Wells. A roll call vote was taken, and the motion to approve the August 31, 2023, Meeting Minutes passed unanimously.



**Cal OES**  
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Commissioner	Yes Vote	No Vote	Abstained
Cindy Silva, Chair	X		
Representative Sean Connelly for Assembly member Freddie Rodriguez, Vice Chair	X		
Debra Garnes	X		
Alegria De La Cruz	X		
Representative Lori Nezhura for Nancy Ward	X		
Joone Kim-Lopez	X		
Representative Irina Brauzman	X		
Kevin McGowan	X		
Dr. H. Kit Miyamoto	X		
David Rabbitt	X		
Vincent Wells	X		
	<b>Total Votes: 11</b>	<b>Total Votes:</b>	<b>Total Votes:</b>

**VI. State Historic Building Safety Board Appointment:**

The Seismic Safety Commission (SSC) has a representative seat on the State Historic Building Safety Board (SHBSB). Representative Brauzman expressed willingness to assume this role, necessitating a Commission vote. A motion to approve by Commissioner Garnes and seconded by Representative Connelly. A roll call vote was taken, and the motion to appoint Representative Brauzman passed unanimously.

Commissioner	Yes Vote	No Vote	Abstained
Cindy Silva, Chair	X		
Representative Sean Connelly for Assembly member Freddie Rodriguez, Vice Chair	X		
Debra Garnes	X		
Alegria De La Cruz	X		
Representative Lori Nezhura for Nancy Ward	X		
Joone Kim-Lopez	X		
Representative Irina Brauzman	X		
Kevin McGowan	X		



Dr. H. Kit Miyamoto	X		
David Rabbitt	X		
Vincent Wells	X		
	<b>Total Votes: 11</b>	<b>Total Votes:</b>	<b>Total Votes:</b>

**VII. Presentation: Intersections: A Strategy for Increasing Seismic Infrastructure Resilience**

**Speaker: Kenneth W. Hudnut, Ph.D., Seismic Expert, Business Resiliency Department, Southern California Edison (SCE)**

Dr. Ken Hudnut from Southern California Edison (SCE) delivered a presentation concerning SCE's efforts in seismic resiliency. Dr Hudnut stressed the importance of disaster resilience planning, seismic mitigation, and risk reduction.

The presentation emphasized the vital role of collaboration between earthquake engineers and earth scientists in enhancing infrastructure resilience and highlighted the SCE Seismic Resiliency Pyramid. At the top of this pyramid, SCE has identified 1,266 critical assets including lattice towers and data centers.

**VIII. AB 100 Report from the California Public Utilities Commission (CPUC)**

**Speakers: James Cho, Program Manager, Security and Resilience and Danjel Bout, Director of Safety Policy Division, California Public Utilities Commission**

James Cho discussed the importance of CPUC's role in setting regulatory requirements for investor-owned utilities in California, spanning sectors like electric, gas, water, telecommunications, and rail. James Cho highlighted the CPUC's focus on seismic compliance, executed in coordination with both state and federal agencies. The CPUC's primary goal is to ensure safety and reliability across these sectors in California, emphasizing an all-hazards approach to safety and emergency management, ensuring these industries are prepared for potential disasters.



James Cho delved deeper into the CPUC's approach, emphasizing three main pillars: coordination, preparation, and mitigation. He highlighted the importance of aligning with regulatory partners at both state and federal levels.

In the realm of Communications, specifically Wireless and Wireline, recent decisions D.20-07-011 and D.21-02-029 mandate all California-based wireless and wireline providers to create and submit All-Hazards Emergency Response Plans and Communications Resiliency Plans. The Communications Resiliency Plan should follow six primary strategies:

1. Ensure a backup power supply for 72 hours to maintain essential communication equipment and minimum public service levels.
2. Construct and uphold redundant communication networks.
3. Strengthen communication networks to resist damage.
4. Utilize temporary facilities, like mobile cell sites or satellite backhaul, to reinstate service where infrastructure has been damaged or destroyed.
5. Create communication and coordination protocols with first responders, other utilities, CPUC, and the public.
6. Devise preparedness strategies for staff and guarantee adequate staffing levels.

CPUC, in collaboration with the State Water Resources Control Board (SWRCB), also oversees water quality and safety for 89 Investor-Owned Water Utilities in California.

#### **IX. AB 100: Seismic Safety and Earthquake Preparedness Activities Report from the California Energy Commission (CEC)**

***Speakers: Mike Turner, PG, CEG, QSD, Engineering Geologist, Siting, Transmission & Environmental Protection Division; Sean Anayah, Energy Research and Development Division (ERDD); and Brett Fooks, Acting Safety and Reliability Branch Manager, Step Division; and Peter Chen, Supervisor, Energy Research and Development Division (ERDD)***

The CEC's Chief Counsel's office releases an updated version of Warren-Alquist Act in response to the 1970s energy crisis annually. Today, the CEC aims for a 100% clean energy future for California and stands as the state's main energy planning policy agency, striving for an energy system that's clean, modern, affordable, and safe.



The CEC prioritizes earthquake preparedness and seismic safety through various means including funding energy innovation and offering grants, conducting detailed environmental assessments for thermal power plant licensing, reviewing seismic reports via the Diablo Canyon Nuclear Power Plant's Independent Peer Review Panel, and supplying expertise in petroleum, natural gas, and energy sectors to the Cal OES for emergency and major earthquake planning.

Sean Anayah discussed four seismic-focused projects:

1. "Potential Induced Seismicity from Carbon Dioxide Sequestration" (<https://www.energy.ca.gov/sites/default/2021-06/CEC-500-2017-028.pdf>)
2. "Pipeline Right-of-Way Monitoring and Notification System by GTI Energy" (<https://www.energy.ca.gov/sites/default/2021-05/CEC-500-2020-024.pdf>)
3. UC Berkeley's Open Seismic Risk Analysis (SRA) offers regulators and utilities a tool for analyzing seismic risks to gas infrastructure (<https://peer.berkeley.edu/opensra>)
4. UCLA's SRA tool which provides real-time seismic data for quantitative predictions and failure analysis of gas infrastructure affected by earthquakes (<https://www.risksciences.ucla.edu/nhr3/cec/home>)

Mike Turner discussed the Siting, Transmission, and Environmental Protection (STEP) Division. STEP ensures the safety and reliability of the electric system.

The CEC also offers expert assistance to Cal OES in emergency and catastrophic planning. CEC staff have contributed to the Bay Area Earthquake Plan Update and the Southern California Catastrophic Earthquake Plan.

The CEC's seismic safety and earthquake preparedness objectives are:

1. Investing in energy innovation, resilience, and reliability.
2. Ensuring both existing and upcoming power plants meet seismic safety standards.
3. Advancing the seismic safety of the Diablo Canyon Nuclear Power Plant.



4. Providing the California Office of Emergency Services with skilled and experienced experts.

**X. Presentation: Federal Emergency Management Agency (FEMA)  
Earthquake and Preparedness and Mitigation Update**

***Speaker: Anne Rosinski, CEG, Earthquake Program Manager, Mitigation Division, Region IX***

Anne Rosinski described projects with various partners. Highlights included success in Benefit Cost Analysis (BCA), participation in a multi-hazard inventory workshop spanning 3 days, and involvement in the Ferndale earthquake project. Additionally, the FEMA Earthquake Mitigation Planning Guide is now in draft form and open for comments.

Anne Rosinski expressed honor at being a part of the National Advisory Council (NAC) Seismic Panel that delve into specific challenges related to earthquake insurance after providing a broader context about earthquakes. They highlighted several challenges.

The National Advisory Council has provided recommendations to FEMA:

- NAC recommended that FEMA enhance resilience and insurability in the most vulnerable communities by:
  1. Assisting private homeowners in high-risk areas to build to higher standards.
  2. Engaging with the insurance and reinsurance industry to discuss unique underwriting standards for specific hazards and more resilient housing.
  3. Collaborating with state insurance commissioners and industry stakeholders to create educational programs. These programs would inform homeowners about resilient standards and options, ensuring the continued insurability of their properties.
- For technical assistance, the NAC has recommended that FEMA bolster the resilience of structures by encouraging and funding state, local, tribal, and territorial governments to:
  1. Conduct disaster scenario studies and share their findings
  2. Undertake building inventories and retrofit vulnerable structures, prioritizing those crucial for community resilience.



3. Seek ways to refine the Building Code Effectiveness Grading Schedule (BCEGS) and Building Code Adoption Tracking (BCAT) to optimize local building code enforcement.
- The NAC has also put forth the following seismic recommendations to enhance earthquake preparedness:
    1. Increasing funding allocation amounts to National Earthquake Hazards Reduction Program (NEHRP) beyond the Congressionally mandated minimum and provide equal mitigation funding for tribes.
    2. Updating BCA requirements to capture the unique losses and benefits of earthquakes and associated mitigation activities more accurately.
    3. Updating mitigation grant scoring criteria to capture the benefits of structural retrofits and other seismic mitigation activities more accurately.

Anne Rosinski concluded the presentation by highlighting the alignment between FEMA's earthquake program and the NAC's desired outcomes.

## **XI. Project Updates**

***Speaker: Annde Ewertsen, Executive Director, SSC***

Director Ewertsen provided the following project updates:

1. Strategic Plan: A draft has been completed and will be reviewed with the Ad-Hoc Committee with the tentative plan to present the plan to the full Commission at the January 2024 meeting.
2. Ferndale and Türkiye Report:
  - a. The first interview with Humboldt County officials is completed and all interviews are set to conclude by the end of October.
  - b. Partnering with United States Geological Survey (USGS), California Geological Survey (CGS), and Southern California Earthquake Center (SCEC) to select the most probable doublet-induced earthquake scenarios for both the San Francisco Bay and LA regions.
  - c. Third Uniform California Earthquake Rupture Forecast with an Epidemic Type Aftershock Sequence (URF3-ETAS), and SCEC's 3D simulator cyber shake, will be employed for the LA risk assessment.





- d. USGS geophysicists will undertake a 3-day ground motion simulation for the Bay Area.
  - e. Once hazard data becomes available, the Pacific Earthquake Engineering Research Center (PEER) team will commence the engineering analysis, focusing on building damages.
  - f. Interdependent Networked Community Resilience Modeling Environment (IN-CORE) Project:
    - i. Awaiting approval on scope from Colorado State University.
    - ii. Collaborating with Rio Dell to gather water infrastructure and economic data. This will examine impacts on water and transportation infrastructure.
    - iii. Considering another community alongside Crockett for comparison based on water infrastructure availability.
3. Fire Station Seismic Vulnerabilities Inventory Project:
    - a. Initial questionnaire being refined for clarity and alignment with hazards requirements.
    - b. After review with the Ad-hoc Committee, it will be shared with Cal OES Fire, Cal Fire, and Earthquake Early Warning (EEW) for feedback.
  4. Other Projects:
    - a. Awaiting further information to finalize the scope for the Northridge Anniversary Events for which Earthquake Country Alliance (ECA) sought approval.
    - b. For the unmanned aerial vehicle (UAV) contract with University of California San Diego (UCSD), deliverables will be added to the current agreement with UCSD Shake Table for the 10-story cold-formed steel project. The contract will also be extended as they are slightly behind schedule.

## **XII. Miscellaneous Announcements**

***Speakers: Tanya Black, Administrative Processes Manager and Annde Ewertsen, Executive Director, SSC***

Tanya Black presented a budget update. In September, several accounts were approved by Cal OES. The SSC General Fund for the fiscal year 2023/2024 received \$366,000, primarily for administrative costs. The Special



Deposit Fund (CRAF) has a yearly budget of \$700,000, with a current balance of approximately \$2,876,975.02.

The primary funding for the Insurance Fund is sourced from the California Department of Insurance (CDI).

For the current fiscal year, the Insurance Fund was approved for \$1,366,054. The rate for these assessments has been reduced from .15 cents to .13 cents per exposure for the fiscal year 22-23.

Lastly, there's an Insurance Fund reimbursement account with \$15,000 set up for the California Public Utilities Commission to reimburse the SSC for staff assessments on the Diablo Canyon Nuclear Power Plant.

In the report, Director Ewertsen covered three main topics: Year-In-Review, ShakeOut Events, and 2024 SSC meeting dates. Over the past year, several achievements were noted: updating old policies, updating the website, and correcting errors, translating the commercial property owner's guide into Spanish, drafting a new strategic plan, funding four projects, hiring two staff members, and relocating to the Cal OES campus. Additionally, the Commission staff engaged in various initiatives, such as implementation of damage proxy maps, a photo library, and mobile home projects. They also participated in panels, presentations, and conferences to enhance California's seismic safety.

Director Ewertsen also mentioned that the new SSC webpage on the Cal OES website is now live and is accessible under the Office of the Director's tab. Additionally, "The Great California ShakeOut" is scheduled for the week of October 11, 2023. The Seismic Hazards Branch will be promoting ShakeOut events throughout California and showcasing the shake trailer. Finally, 2024 Seismic Safety Commission meeting dates have been finalized:

1. January 11th: General meeting with all necessary business updates, including a Structural Engineers Association of California (SEAOC) update.
2. April 11th: Election for Chair and Vice Chair positions and an education theme with AB100 reports for California State University (CSU) and University of California (UC)s.
3. July 18th: Focus on water.
4. October 10th: Focus on transportation.



### **XIII. Public Comment**

There were no public comments on items that were not on the agenda.

### **XIV. Adjourn**

Chair Silva adjourned the meeting at 11:35am.

To view the full meeting recording go to the following link:

<https://youtu.be/B38kXU5VFTo?si=FpMLIT-IPJ6uYZ7O>