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GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



**AL FRED E. ALQUIST  
SEISMIC SAFETY COMMISSION MEETING**

Microsoft Teams Meeting  
November 4, 2021

**I. Call to Order**

The meeting was called to order by Dr. H. Kit Miyamoto, Chairperson at 9:00 am. Salina Valencia, Legislative & Communications Director, conducted the roll call.

**Present:**

Dr. H. Kit Miyamoto, Chair  
Cindy Silva, Vice Chair  
Representative Diane Gould for Ida Clair  
Representative Nestor Lopez for Ken Cooley  
Representative Lori Nezhura for Mark Ghilarducci  
Mia Marvelli  
Jorge Meneses  
Timothy Strack  
Fuad Sweiss  
Ivan Wong  
Alegría De La Cruz  
Joone Kim-Lopez  
David Rabbitt (departed at 10:42 am)  
Andrew Tran  
Debra Garnes  
Vincent Wells

**Absent:**

Ken Cooley  
Ida Clair  
Mark Ghilarducci



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## **II. Approval of Seismic Safety Commission September 9<sup>th</sup>, 2021, Meeting Minutes**

### **Discussion:**

The Seismic Safety Commission (SSC) discussed September 9, 2021, meeting minutes. Motion to approve by Commissioner Sweiss, seconded by Commissioner Kim-Lopez. Motion passed unanimously.

### **III. Chairman's Remarks**

Chairman Miyamoto had been living in Haiti since August 14<sup>th</sup> due to a 7.2 earthquake, working with United Nations Office for Project Services (UNOPS) and other agencies for damage assessment and recovery. Chairman Miyamoto stated that Haiti and California have a lot of differences and similarities, but the importance of preparedness is critical. Tedious work done by the SSC accumulates and makes a huge impact.

### **IV. Update on Haiti Earthquake**

#### **Speaker – Kit Miyamoto, Chairman, Seismic Safety Commission**

Chairman Miyamoto gave an update on the August 14<sup>th</sup> Earthquake stating it was magnitude 7.2 and is estimated to have 10,000 victims, 130K damaged, or collapsed buildings and houses.

Chairman Miyamoto showed a map that shows the ground acceleration or intensity of the event. Where the acceleration is highest will most likely contain the most damage. Chairman Miyamoto showed the Jet Propulsion Laboratory (JPL) Damage Proxy map, stating a satellite flew over a given area every 6 to 9 hours and captures the before and after pictures and measures the movement of the objects and dots display areas of the structural systems with the most damage.

Chairman Miyamoto stated Haitian construction is different from California except for unreinforced buildings. In Haiti, concrete buildings built prior to the 2010 Earthquake collapse easier than recent buildings. Removing dangerous elements as fast as possible is critical, but at the same time, buildings being taken down can be difficult to replace due to funds. Repairing and strengthening buildings is important for a quick recovery.



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Due to a lack of media exposure on the recent earthquake, low funding is received externally. The ATC-20 protocol is combined with repair assessment for engineers to determine and repair the state of the buildings. A social communicator is assigned to inform owners of building damage and steps needed to be done.

The organization consists of about 500 people right now divided along the affected area. An assessment of a house usually takes about 15 to 20 minutes. Buildings are tagged with paint labels and a QR code to download a report of the damage assessment and repair. About 1,300 buildings have already been assessed and only a quarter have been deemed red tag. The JPL damage assessment map captures movement of a structure but has a low resolution and does not provide house by house assessment by engineers. There are still about 92,000 buildings left to be evaluated.

### **Discussion:**

Commissioner Sweiss asked if the map that shows earthquake faults on the island show the same faults with the previous earthquake?

Chairman Miyamoto expressed it is exactly same fault line from 2010. It crosses from the Jamaica ocean through Haiti to the Dominican Republic. The 2010 earthquake was a blind thrust fault and did not hit the fault line. This recent earthquake hit the fault line so there is concern of the fragileness of the fault.

Commissioner Sweiss followed up with an additional question asking what are the possibilities of future earthquakes and what can be done to eliminate the cycle?

Chairman Miyamoto stated seismology is important for the upcoming earthquake. The fault line in the northern part of Haiti that has not been touched for over 100 years and is due to be ruptured. Preventing the cycle comes down to training and knowledge. There is a permit process so training of professionals and other people can help.

Commissioner Tran asked if there is a difference of learning experience now versus the previous event and how that translates to California? And how that affects engineering and assessment? Does the state have a proper measure in place to make it better?



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Chairman Miyamoto stated damage assessment under Cal OES is a robust system. Thousands of engineers are certified and ready to go, so as far as damage assessment concern, California is top notch and Chairman Miyamoto believes things can be figured out fast. More connection with JPL/NASA would be helpful, the QR code practice could be useful, and private funding coming in as fast as possible is critical.

Commissioner Rabbitt thanked Chairman Miyamoto for his work and being on the ground. He asked did fatalities and injuries within the confined masonry construction type occurred from walls collapsing. Stating the focus is to fix the structures is ideal, but what do you see going forward for the next seismic event?

Chairman Miyamoto stated in Haiti, there are wood elements supporting roof structures so if the walls fall off, the building doesn't fall all the way. Their reconstruction technique is to put the wood behind the wall inside of it, so when the walls fall it doesn't not harm the people sleeping inside. Doing this at the very weak spots of buildings would be very cost effective and reduces risk significantly.

Commissioner De La Cruz asked are there any populations that are struggling to be served in the same way because of structural or institutional equities? Are there differences regarding Haiti? What are the structures in place to ensure equity in this recovery?

Chairman Miyamoto stated the lower the income level, the higher the suffering is because it's not very sound structurally. It is estimated about 500 dollars per house for construction which is probably like the yearly income for those in the Southern part of Haiti. There's no public assistance at this point so the limited money that is available is used to give information about what happened and what needs to be done. There are some private funds but not a huge degree.

Commissioner Kim-Lopez asked based on experience in Haiti and other parts you've responded, what do you see in terms of their water and wastewater systems? The kinds of impacts, especially those underground.

Chairman Miyamoto acknowledged the importance of the water and wastewater systems. A major town in Haiti had a pretty good water system but it is destroyed. There are funds coming through and it is addressed. Expectation of losing power or water in California or other countries is about a week or two, including communication.



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Chairman Miyamoto directed that agenda item V. Executive Director Hiring Process be taken up at the end of the meeting.

## **V. Executive Director Hiring Process**

**Speaker – Lisa Mangat, Chief Deputy Director of Policy and Administration, California Governor's Office of Emergency Services**

Ms. Mangat stated the SSC is conducting a new appointment of an Executive Director, as well acknowledging the upcoming retirement of SSC Executive Director Richard McCarthy.

Ms. Mangat gave an overview of the roles and responsibilities of the Executive Director and the process in hiring an Executive Director within civil services.

Ms. Mangat stated two Commissioners will be selected to participate on developing the documents that will be used for the recruitment process. She stated once the hiring process and duty statement are approved a robust recruitment will be launched.

### **Discussion:**

Chairman Miyamoto stated that Director McCarthy is retiring on December 31<sup>st</sup> so the timing would be peculiar. Recruitment wouldn't start until early next year.

Ms. Mangat mentioned during the transition period they would identify a person to act as Interim Executive Director. Alex Pal, Chief Legal Counsel, Cal OES spoke to how this process would happen.

Commissioner Sweiss inquired if Executive Director McCarthy could stay on during the interim as a contractor capacity.

Ms. Mangat acknowledge Commissioner Sweiss' comment.

Commissioner Silva asked for a timeline of the hiring.

Ms. Mangat reiterated the thorough process of hiring for civil service and acknowledge this process may take a lengthy time to complete.



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Chairman Miyamoto appointed Commissioner Silva and Commissioner Tran as the selection Committee.

## **VI. Transition Report for Seismic Safety Commission**

### **Speaker – Richard McCarthy, Executive Director, SSC**

Executive Director, Richard McCarthy gave an update on studies in which the SSC funded. This included the Fire Following Earthquake and water supply and AlertWildfire, which is a consortium of The University of Nevada, Reno, University California, San Diego, and the University of Oregon which provides fire camera and tools to help firefighters and first responders

The San Francisco Public Utilities Water System Improvement Project which is a 4.5 billion dollar retrofit of the water system that goes from Hetch Hetchy down the valley and up the peninsula. There are 28 customers that draw from that system. It crosses several faults. That project is 99 percent complete, there's a statutory requirement if something changes there needs to be a review. Everything we've reviewed has been completed. It's great news that it has been retrofitted.

Executive Director McCarthy sat in on the State Public Utilities Commission (CPUC) panel for Diablo Canyon. That panel is going to change. The CPUC committee was originally chaired by California Geological Survey (CGS). The SSC has done reviews and studies on impacts of fault on earthquake shaking. However, Pacific Gas & Electric (PG&E) is not going seek relicensing for the plan.

AB100 was a requirement that the SSC set up a website to allow public state agencies to put material on the site that describes what they do, the products they produce, and the budget. On the website now are CGS and the Office of Statewide Health & Development (OSHD). This is a desirable location for a lot of departments to place their information. There is a request from Southern California Earthquake Center and the Earthquake Country Alliance to put their information on the website as well.

Should there be an event in California, SSC will set up and hold hearings for four to five weeks after the event upon invitation of the local government. Testimony from locals and based on that do a report on lessons learned and have





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recommendations in your document. The SSC has previously done reports on earthquakes such as the Ridgecrest and Napa quakes.

The SSC is recognized internationally, and the staff get inquiries from other countries. The SSC is a nonvoting member on the advisory board of the Global Earthquake Model (GEM) and has access to mitigation policies and scenarios happening worldwide. Executive Director McCarthy encourages the SSC to stay engaged with GEM.

When the Governor issued an alert on COVID, the staff was prepared for shutdown. Executive Director McCarthy commented on the efficiency of the staff working from home.

Executive Director McCarthy has been working with Cal OES on his transition. The budget is in good shape then stated it's been an honor to serve as the Director and appreciates all the work the staff over the years.

Executive Director McCarthy thanked Governor Newsom for supporting the SSC and thanked the staff.

### **Discussion:**

Chairman Miyamoto respected Executive Director McCarthy's consistency in the SSC and how other agencies view the SSC is thanks to Mr. McCarthy.

The SSC discussed their appreciation for Executive Director McCarthy's professionalism, consistency, and work over the years.

## **VII. Update on ShakeTable Building Test and Commercial Property Owner's Guide to Earthquake Safety Protocols**

### **Speaker – Jia Wang-Connelly, Senior Structural Engineer, SSC**

Executive Director McCarthy introduced Jia Wang-Connelly to present current projects in addition to Commissioner Silva on the Commercial Property Owner's Guide. Mrs. Wang-Connelly came from OSHPD, with a lot of experience in construction, understands the state process, and is a great researcher. Mrs. Wang-Connelly stated that it is a statutory requirement to adopt and update the Commercial Property Owner's Guide to Earthquake Safety. The current edition is 2006 so it's long overdue.



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SSC will reformat it so that the information flows better and model the style for the Homeowner's guide. We will update information, contacts, provide links for resources, and provide information on earthquake insurance. We are in the process of soliciting inputs from the commercial property owners and thinking of developing a checklist to commercial property inspectors to help potential buyers identify structural components of imposing seismic risk. We will also provide information on how much it costs to retrofit and the cost benefit.

Staff submitted a contract and is waiting to go through the approval process. Staff will be meeting with Vice Chair Silva next week and will have more clarifications.

Vice Chair Silva mentioned it will be content rich but not overly descriptive how-to. The Homeowner's Guide and the Commercial Property Owner's Guide will be two volumes of the same set.

Mrs. Wang-Connelly stated that the UCSD ShakeTable test of 6-Story Cold-Formed-Steel Framed Buildings was a very successful project and the staff is authorized to move forward to 10-story. The 10-story is not allowed by code yet and there is a lot to be learned.

This structural system is more sustainable and noncombustible. According to the last test, it is performing very well and is very easy to put up and put down. The tests will be repeated until a failure is detected. This can lead to solving problems like housing shortage and shortening recovery time. The test is to start construction by September next year.

### **Discussion:**

Chairman Miyamoto mentioned this is ground-breaking phenomenon for California. Right now, when engineering buildings we have one option, wood. However, the shortage is tremendous, and the fire hazard is real. Having this option has a huge impact and we should be proud to be a part of it.

Commissioner Rabbitt thinks it's great to have a proven construction type that can get the densities and housing we're looking for.

Chairmen Miyamoto explained there is a drastic change in cost of structure and now that there's research happening, there's option.





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Executive Director McCarthy commented one of the most significant pieces is after the structure is damaged, they're going to repair it, retrofit it, and then test it again.

## **VII. Miscellaneous Announcements**

Tanya Black, Administrative Processes Manager, explained that SSC is waiting to meet with the internal Cal OES budget team on our approved budget for this next year. Until we do that, we will hold off to give a real look of funding sources which is the general fund received from the state and the property assessments from California Department of Insurance.

The two major things we have for this next year are the Shake Table and the contract for the Commercial Property Owner's Guide.

The tentative schedule for next year was provided and the dates were included in the material sent.

The date for the December meeting will be the 9<sup>th</sup> at 9 AM.

## **VIII. Public Comment**

Commissioner Sweiss asks to update the website with the new commissioners and new information.

## **IX. Adjourn**

The meeting was adjourned at 10:45 am by Kim Miyamoto, Chairman.