



## Meeting Minutes Nevada Earthquake Safety Council

<b>Attendance</b>	<b>DATE</b>	Wednesday, August 3, 2016	
	<b>TIME</b>	9:00 A.M.	
	<b>LOCATION</b>	Nevada Division of Emergency Management Executive Conference Room 2478 Fairview Drive Carson City, NV 89701	
	<b>METHOD</b>	Videoconference	
	<b>RECORDER</b>	Janell Woodward	
<b>Council Members</b>	<b>Present</b>	<b>Staff and Others</b>	<b>Present</b>
Alan Bennett	X	Janell Woodward (DEM)	X
Michael Blakely	X	Rick Martin (DEM)	
Ian Buckle	X	Henna Rasul (DAG)	
Wayne Carlson	X	Caleb Cage (DEM)	X
Oscar Delgado		George Taylor (DAG)	X
Craig dePolo	X		
Jim Faulds	X		
Tim Ghan	X		
Jeff Hahn	X		
Graham Kent	X		
Chris Lake	X		
Ron Lynn	X		
Connie Morton			
Jim O'Donnell	X		
Rob Palmer	X		
Vance Payne			
Jim Reagan	X		
Woody Savage	X		
Stephen Silberkraus	X		
Wanda Taylor			
Jim Werle	X		
Michael Wilson	X		

## **1. CALL TO ORDER AND ROLL CALL**

Chair, Ron Lynn called the meeting to order. Janell Woodward called roll and a quorum was established.

## **2. PUBLIC COMMENT**

Chair, Ron Lynn opened discussion for public commentary for this meeting. There were no comments.

## **3. APPROVAL OF THE MEETING MINUTES**

Chair Lynn asked for a motion to accept the meeting minutes from the May 11, 2016 joint quarterly meeting. Jeff Hahn made a motion to approve the minutes. Michael Wilson seconded the motion. All were in favor of approving the minutes from the May 11, 2016 meeting and the motion passed unanimously.

## **4. ANNOUNCEMENT OF URM COMMITTEE MEMBERS**

Chair Lynn listed the members appointed to the URM Committee as follows: Mike Blakely, Kyle West, Tim Ghan, Werner Hellmer, and Craig dePolo. Ron asked Craig to be the chair of the committee.

Craig indicated he sees the overarching mission of this committee to provide Nevada and Nevadans with recommendations to reduce the seismic risk of URM buildings over the next decade. Ron agreed.

Craig stated this will be a multidisciplinary process which is why this has had such slow process. The Committee will look to get some perspectives on the problem and solutions and a strategy of how Nevada can move forward. Craig would like to have speakers address the Committee with their expertise. The process may take a year and a half to address this issue. The Committee will address different techniques, cost and how they can be accomplished.

Ron suggested an initial meeting scheduled separate from the full NESC meeting and perhaps later could piggyback on the full NESC meeting. The initial meeting should set some goals to achieve including identifying the scope of the problem, determining remediation of the problem, determining cost, and finally a potential legislative component. Craig suggested that any legislative ideas be brought back and handled through the full NESC.

## **5. UPDATE REGARDING MEETING WITH CALIFORNIA COUNTERPARTS**

Ron asked Chief Caleb Cage to provide an update of the meeting with Ron and Graham regarding starting the process of a joint meeting with California counterparts. Chief Cage met with Graham and Ken Smith to discuss some brainstorming of ideas of working together with California. On June 12, Chief Cage sat down with CalOES Director, Mark Ghilarducci to talk about firefighting resources, Homeland Security, and all resources. They will both be at a conference in Salt Lake City next week and will hopefully have the opportunity to interact once again.

Yesterday, Chief Cage had a phone conversation with Ron and Graham to discuss next steps to working with California. They agreed going forward they would use the Vigilant Guard 17 earthquake exercise to bring together the respective states. This would be an excellent opportunity to provide an opportunity to review the exercise and bring together the

chairs of the NESC as well as their California counterparts, the National Guard counterparts, as well as Chief Cage and Director Ghilarducci for an after-action meeting. Additionally, they would have some specific deliverable come out of that meeting such as an MOU regarding seismic safety. Finally, after this would be an opportunity to look for foundation level recommendation to bring before the Legislature. This is the plan as of right now and this conversation is slowly moving forward. This is focused on clear objectives and deliverables in order to move forward.

Graham Kent added that it is important to remember that no disaster is held by geographical boundaries.

Craig dePolo suggested that a possible opportunity to get together with California would be if an unreinforced masonry summit was held. Ron Lynn indicated this might be a better topic with Utah.

## **6. DISCUSSION ON EMERGENCY IDENTIFICATION ACCESS CARDS.**

Ron indicated that in cleaning out his office for retirement that he found his old access card provided by the Division of Emergency Management. Discussion ensued regarding credentialing of professionals for entry to disaster sites.

Mike Wilson asked how access cards would fit together with the current NRS 414A which allows people with qualifications to respond to requests for help. Ron indicated the issue would be with how qualifications are vetted.

The question was asked whether the URM Committee would cover this topic and it was confirmed that the URM Committee will not discuss credentialing.

Janell Woodward indicated that credentialing is being addressed by the Operations Section at DEM but is currently on somewhat of a hold status. Kelli Baratti, Operations Chief, had asked whether there was someone keeping track of the engineering professionals and whether this information was being tracked and provided to local jurisdictions for emergency purposes.

Craig dePolo indicated his feeling that DEM should keep the master list and distribute that as needed.

Craig indicated that it would be important for the researchers to gain access as well as the professionals. If it is an engineer or inspection professional, then it would seem the building departments would keep track of that.

Bottom line discussed was that it always comes down to boots on the ground and whether the person looking at the card believes the card is valid and that person needs to gain access. Jeff Hahn indicated that in the 10 years that credentialing has been discussed, we seem no closer to solving the issue.

Point was made that lists of those attending the ATC course are kept but is an evolving list. While anyone can issue various cards, it is the State who really should be providing that emergency access authority.

Graham Kent indicated that the ability to place seismometers immediately after the event is very important. Currently there is no real credentialing for seismologists.

Craig indicated that in the next month, a list of those with appropriate engineering capabilities should be updated or put together. It appears that Southern Nevada has done a better job of maintaining a list than Northern Nevada. The question of whether a list could be provided to DEM which could be utilized to draw from for structural engineers.

Ron went back to the beginning of the conversation and indicated that the old credentialed cards had a picture that tied the card to the person and also listed their capabilities.

Mike Wilson indicated that the Intrastate Mutual Aid Committee was working on how to credential individuals and suggested that perhaps an update from Chief Caleb Cage who chairs that committee would be a good idea. Janell suggested that Ron have a conversation with Kelli Baratti and will send Ron her contact information. He will find out whether or not the committee is going in the same direction as the NESC is thinking with regard to structural assessment which is different than emergency access. This would also include scientific evaluation.

Ron also provided Chief Cage with a brief summary of the identification access cards.

## **7. UPDATE OF BYLAWS.**

Vice Chair, Graham Kent, indicated that in order to allow Ron Lynn to continue as chair of the NESC, the bylaws would need to have a slight change. Currently all positions are filled on the NESC so it is necessary to add a position to the NESC. This is supported by Chief Caleb Cage. As a fully-appointed council, we are unable to simply transfer him to another position on the Council. An additional Member at Large was added to the total of the membership of the Council. Craig dePolo moved to increase the number of council members to 23 at the discretion of the Chief of Emergency Management. All were in favor and the motion passed unanimously. Ron Lynn abstained from the vote.

## **8. PRESENTATION ON THE 1954 NEVADA EARTHQUAKES.**

Craig dePolo provided a presentation on the 1954 Nevada earthquakes. A 7.3 in Kern County was the largest earthquake. There were nine M 5.0 or greater earthquakes in 1954 from July to December with five M 6.0 or greater. Craig indicated that there has never been a death from an earthquake in Nevada. However, this has largely been luck. All earthquakes back then were late at night so people were not around the dangerous buildings. Historical information was covered in the discussion as well as pictures of the damage to buildings and how they have been addressed over the years. Please see the PowerPoint presentation for photos and additional information.

Earthquake Fault Lessons include:

- Significant portions of faults can be buried within valleys (Rainbow Mountain fault).
- Multiple earthquakes of different sizes ruptured the Rainbow Mountain fault.
- An earthquake on one fault can trigger an earthquake on an adjacent fault.
- Faults that haven't had an earthquake in the last 30,000 years (Bell et al., 2004) can have a damaging earthquake (130,000 is recommended maximum age).
- Two faults ruptured out in their entirety – so maximum earthquakes should be used for seismic hazard analyses.

Societal Lessons include:

- You need to be prepared/safe before an earthquake (rousing from sleep).
- Collateral hazards, such as liquefaction, need to be considered (damaged roads).

- Some communities are living with substantial earthquake risk – seismically dangerous buildings.

The presentation also included images of the various damaged unreinforced masonry buildings in Fallon. Discussion also included historical seismicity sequencing throughout the country.

## **9. NEVADA DIVISION OF EMERGENCY MANAGEMENT (NDEM) UPDATE.**

Rick Martin provided an update from the Division of Emergency Management (DEM). With regard to grants, we just received the 2016 funding for the Emergency Management Performance Grant (EMPG) which is about nine months late. This grant was made retroactive to October 1, 2015. DEM will be working with Graham and Annie regarding the EMPG funding for the Seismological Laboratory. There is no information yet on any deobligated funds. However, NESC provided projects last year for funding by deobligated funds and it is about that time again for NESC to put together potential projects should some funding become available. Performance period for EMPG is October 1, 2015 to September 30, 2016. Projects should be submitted by the next quarterly meeting.

The upcoming exercise in November is Vigilant Guard 17 (VG-17) which will be earthquake oriented. This will start in Las Vegas and extend to the San Andreas. We will be exercising mass evacuation, mass care, and recovery. This will include California and Nevada with a lot of people around the state and other states as well. August 17 and September 14 will be the next two preparation exercises and everyone is welcome to attend these exercises. We have had good participation in these exercises. Start time will be 8:30 to 9 am and will go approximately four hours in length.

DEM is putting together a statewide recovery framework plan and focusing on mid-term and long-term recovery. This will be a template that can be used by all local jurisdictions to put together their own framework plans. It is anticipated this template will be completed in December.

The URM application project from 2015 is still in process. Earthquake billboards in Clark County went over very well. The final project was the earthquake flashcards from flash.org which were completed last fall as well. Werner Hellmer indicated he has a beta version of the app at this time but the app should be completed by September. This project got a late start but once they started it has moved along fairly quickly.

NEHRP 2016 projects include Clark County Billboards, a seismic waveform display, and the Home Depot water heater strapping. These projects will begin October 1, 2016.

There is a good chance that NEHRP funding will come back through the states which will make it much easier to determine what is best for the State of Nevada. NEHRP funding has gone through third-party consortia partners for the last three years.

Finally, Janell needs to meet with Kyle West and Werner Hellmer regarding what training is going to be requested for 2016 NETAP training. Last year for 2015, Nevada offered FEMA-154/ATC-20 as well as the hospital mitigation course. We could potentially offer the school training course.

## **10. FEDERAL EMERGENCY MANAGEMENT (FEMA) UPDATE.**

A representative from FEMA was unable to attend the meeting so no update was provided.

## **11. RECENT SEISMICITY IN NEVADA AND REPORT FROM THE SEISMOLOGICAL LABORATORY, UNIVERSITY OF NEVADA, RENO**

Annie Kell provided the presentation by the Seismological Laboratory with Graham Kent on the phone. We have had nearly 10,000 events to date with seven M4 events and 52 M3 events including the M3 event in south Reno over the weekend. The Sheldon sequence is still ongoing. Hawthorne also has two separate earthquake clusters with which containing a M4 event. Gerlach had a sequence as well with a 4.9 on the fault system in Owens Valley near Burning Man. This sequence has slowed down since May.

The other main activity for the Seismological Laboratory has been installing fire cameras. They have spotted 52 fires in their early stages to date. These cameras have proved to be an invaluable tool spotting many events. They have placed eight new cameras in 2016.

Graham added that the Virginia Mountain fire complex was an excellent example of identifying the fire when it started after a lightning strike. Discovering the fires early on has saved millions of dollars in response cost. Starting August 15, the Seismological Lab will begin working on earthquake early warning through a grant from the USGS.

Ron Lynn indicated he will take some of the Seismological Laboratory slides to NEHRP to see if he can garner any funding for them for these cameras.

## **12. UPDATE FROM THE WESTERN STATES SEISMIC POLICY COUNCIL (WSSPC) AND NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP)**

Chair, Ron Lynn provided an update from the Western States Seismic Policy Council. Ron indicated he had a meeting with Patti Sutch from WSSPC. Routine policy updates will be undertaken. He is stepping down as chair of the Architecture and Engineering Committee. He provided three names as replacement including Woody Savage. The next major policy updates will likely revolve around schools and risk analysis of schools.

With regard to NEHRP, new maps will be coming out. Additionally, Ron brought back to NEHRP from Nevada as well as other states the desire to have NEHRP funding go directly to states once again instead of through third-party consortia.

Werner Hellmer discussed the funding from Clark County with UNLV and UNR for \$1.7 million to do a fault characterization study. Ron indicated this could not have happened without Craig and Werner's assistance. Eight million dollars have been spent by Clark County for earthquake and fault-related issues which is more than any other jurisdiction. The funding of \$1.7 million will be \$1.1 million to UNR and \$600,000 to UNLV for this fault characterization study over four years.

If anyone has anything for Ron to bring to NEHRP, please let me know. Ron believes he has one more year with NEHRP.

## **13. COUNCIL MEMBER COMMENTS**

Ron indicated he was recognized at the Clark County Commission meeting with recognition for his work and the proclamation of August 2 as Ron Lynn Day. Ron is retiring this Friday from Clark County Department of Building and Fire Prevention after 35 years of service.

Jeff Hahn reported some outreach activities. The resorts have formed an emergency management working group. This is an offshoot of the Chiefs Association with a mission of information sharing, best practices, etc. This group started small and is growing at a rapid rate. Jeff will provide a NESC update to this group on a quarterly basis.

Mike Wilson provided an update on K-12 education. School crisis emergency plans have been from robust to minimal. School plans are being worked on at various school districts. Hazards identified in the hazard mitigation plan need to be included in the school plans. School districts from 11 out of 17 counties are signed up for Shakeout.

Finally, Alan Bennett is retiring from the City of Reno Building Department soon.

#### **14. PUBLIC COMMENT**

Chair, Ron Lynn opened the meeting for public comment. Irene Navis stated Clark County is updating their county hazard mitigation plan including all of the hazards and threats. They will include the URM studies that Werner has been heading up for Clark County. They are also updating their emergency operations plan.

#### **15. ADJOURN**

Chair, Ron Lynn declared the meeting adjourned.