



Meeting Minutes Nevada Earthquake Safety Council

Attendance	DATE	Thursday, February 4, 2015	
	TIME	1:00 P.M.	
	LOCATION	Nevada Division of Emergency Management Executive Conference Room 2478 Fairview Drive Carson City, NV 89701	
		Clark County Fire Department, Station 18 2 nd Floor Conference Room 575 E. Flamingo Road Las Vegas, NV 89119	
	METHOD	Teleconference	
	RECORDER	Janell Woodward	
Council Members	Present	Staff and Others	Present
Alan Bennett		Janell Woodward	X
Michael Blakely	X	Rick Martin	X
Ian Buckle		Debbie Tanaka	X
Wayne Carlson		Henna Rasul	X
Craig dePolo	X	Stephanie Parker	
Jim Faulds	X		
Jeff Hahn	X	Gary Hourt	X
Graham Kent	X	Karen Johnson	X
Ron Lynn	X	Mike Connell (NNG)	X
Connie Morton			
Jim O'Donnell	X		
Vance Payne	X		
Jim Reagan	X		
Woody Savage			
Wanda Taylor			
Jim Walker			
Jim Werle	X		

1. CALL TO ORDER AND ROLL CALL

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. Jeff Hahn gave an update regarding the FEMA 154 and ATC-20 course in Las Vegas on February 3 with 85 in attendance. There was a good cross-section of attendees. Jeff thanked everyone who had a hand in this great training opportunity. One comment was that some felt the FEMA 154 and ATC-20 course combination was quite compact with a lot of information in one day.

Craig dePolo added that he attended the Basin and Range Seismic Hazard Summit meeting in Salt Lake City. Rich Harvey, incident commander from the Wells earthquake, gave a talk regarding the Wells earthquake and the need for an incident commander handbook for earthquakes was re-emphasized. Additionally, Craig was approached at the meeting by members of the Utah Seismic Safety Commission who pointed out that it was time for another joint meeting between Utah and Nevada. Utah realizes the financial limitations for Nevada and volunteered to come to Nevada for this meeting. Craig suggested Reno as the last meeting was held 2 years ago in Las Vegas.

3. APPROVAL OF MEETING MINUTES

Chair, Ron Lynn asked for a motion to accept the minutes from the November 5, 2014 meeting as submitted. Vance Payne made a motion to accept the minutes as submitted and Jeff Hahn seconded. There was no discussion and no changes were recommended. All were in favor and the motion passed unanimously.

4. NOMINATION AND VOTE FOR NESC VICE-CHAIR PER BYLAWS

Chair, Ron Lynn indicated that per the NESC bylaws, a vice-chair position is in place which needs to be filled. Ron asked for volunteers or nominations to be vice-chair. Graham Kent volunteered to be nominated for the position. Mike Blakely nominated Graham Kent for the position of vice-chair of the NESC. Jim Reagan seconded. Graham Kent recused himself during this vote. There were no other nominations and Ron closed the nominations. All were in favor and the motion passed unanimously.

5. NESC RECOMMENDATION TO NDEM AND CHIEF SMITH REGARDING WORKING WITH CALIFORNIA SEISMIC SAFETY COMMISSION

Chair, Ron Lynn opened the discussion regarding NDEM working with the California Seismic Safety Commission. Rick Martin stated the only concern that Chief raised was the issue of any additional funds that might be needed above the existing budget. He also would like more information regarding the conversation from Governor's office to Governor's office so that this could be taken to the Chief of Staff at the Governor's office.

Conversation ensued regarding who the person was from California who instigated the conversation regarding the Governor's office. Graham Kent stated that Dick McCarthy is the Executive Director of the California Seismic Safety Commission (CSSC) and a permanent state employee. Tim Strack is the chair of the CSSC which is rotational position. Ron indicated he felt that Dick McCarthy was the appropriate person to be contacted. Graham Kent has Dick's contact information and has already spoken with Dick regarding this. Graham indicated that Nevada's budget in working with California could be zero if they so choose.

Graham suggested that both he and Ron Lyn attend California's upcoming meeting at JPL in Pasadena, CA on March 4, this would be helpful with regard to projects that would have the best potential for benefitting both states. Graham clarified that the current motion was to

just give approval to work together with California with California carrying the cost at this time. Ron asked that Graham try to get Chief Smith together with Dick McCarthy in order to be able to smooth the way and avoid unintended consequences of the two states working together.

A suggestion was made by Craig dePolo that we get some clear vision regarding the benefits to Nevada in working together with California prior to putting Chief Smith and Dick McCarthy together. Ron stated that the intent is to explore the possibilities of working together and think about what projects might be mutually beneficial for both states. It was suggested we cannot go forward without concurrence from our charging authority, Chief Smith, and that is what we are looking for here. If Chief Smith and NDEM occur and the Governor's office agrees, then we can move forward to flesh out details and look at what any costs might be.

The question was asked as to what opportunities exist. As an example, Graham indicated that NASA flew over Napa and mapped the quake two days after the event occurred. Nevada could piggyback on that relationship and have the same outcome for Nevada once that relationship is built. Craig interjected that what was gained was deformation patterns on the ground as well as a lot of good information for emergency management. California is also developing a business resiliency program that could turn into a bi-state resiliency plan benefitting both states. Furthermore, another project includes agricultural recovery after an earthquake, as well as a long list of other potential projects. The March 3 meeting at JPL would be a great opportunity to gain more information. Chief Smith can relay this information to the Governor's office so that they are aware that there are tangible possibilities.

Michael Blakely added that it is important to note the reciprocity of working together and how Nevada can in turn help California and not simply California helping Nevada.

Some additional discussion ensued regarding whether a motion even needed to be made for this agenda item. Chief Smith has already given his approval for the NESC to move forward in working together with California. Rick Martin suggested that we provide Chief Smith with some bullet points with some projects that the NESC would like to move forward with along with Dick McCarthy's contact information so this could then be provided to the Governor's office.

Graham Kent suggested that a motion could be that the Vice-Chair (Graham Kent) provides Chief Smith with Dick McCarthy's contact information, and that the NESC would work together with CSSC to develop a list of potential projects to move forward with that could come back to the committee for a vote. Craig dePolo stated he would second that motion. Mike Blakely suggested adding to that motion a zero budget at their request. All were in favor and the motion passed unanimously.

Ron Lynn also suggested that all NESC members make a written list of their concept of benefits of working together with working with California, i.e. benefits to Nevada versus benefits to California. Ron asked everyone to please send these lists to Janell and Ron who will then talk and compile these benefits and forward this to Chief Smith and Graham Kent for their consideration in moving forward in discussion.

6. UPDATE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Ron Lynn introduced Kelly Stone, the new FEMA Region IX earthquake program manager. Kelly gave a short background introduction of herself stating she has a geology background and is here to help in any way. She announced that the FY2014 NEHRP grant decisions are being finalized at this time and should be available soon. Rick Martin asked whether there was any indication that FY2015 would have an increase in funding. Kelly stated she had not heard anything in this regard yet.

7. NEVADA DIVISION OF EMERGENCY MANAGEMENT UPDATE

Rick Martin started his update with planning, training and exercise. He stated the three exercises Nevada is working on currently include Cyberstorm V to happen in early 2016 and Vigilant Guard 17 which will happen in November 2016 and will be a major earthquake based in Southern California. This exercise may allow us to practice the response and recovery framework for transporting back and forth. The third exercise will be NDEM working on a recovery-based workshop and a tabletop exercise using the Cyberstorm V scenario.

With regard to training, we are currently having the FEMA-154 and ATC-20 course which occurred February 3 in Las Vegas and being held February 4 and 5 in Reno. There has been great turnout for these. With the efforts of Jeff Hahn, Werner Hellmer and Janell along with the City of Reno, we had nearly 300 participate in these 3 days of classes. Some discussion ensued regarding whether it would be allowed to utilize a casino/resort location in holding the classes. This question was asked of Kelly Stone who said she would find out a definitive answer from FEMA and get back to us.

For planning, Bill Elliott continues to work with statewide regional planning for earthquake response plans, working currently with Washoe County and will then soon with Clark County.

Funding for EMPG FY15 is attached to the Homeland Security suite and we do not yet know what that amount will be. This funding affects the NESC group. Pre-disaster Mitigation grants have an open period from March and closing in July. They currently have one potential project with UNR to retrofit a dormitory on the UNR campus.

A lot of NDEM staff has been down in Las Vegas since December with regard to recovery as Nevada had our first Presidential disaster declaration for the Moapa flooding event which occurred in September. This was identified on the reservation as a 1000-year flood with approximately 20 projects totaling \$3-4 million.

Last year Rick attended the National Earthquake Program Manager's meeting in Denver, CO. This year this meeting will be held in Charleston, South Carolina and Rick will attend this May 4-8. Rick stated he would like to get Ron, Graham and Janell's input along with anyone else who has information to include regarding challenges.

Jim Faulds added that Nevada Bureau of Mines and Geology (NBMG) folks did a little bit of work on the Moapa event and would be publishing a paper through the Bureau and suggested that perhaps he and Rick talk about this on the side at some point.

8. PRESENTATION OF EARTHQUAKE VIDEOS BY THE NEVADA BUREAU OF MINES AND GEOLOGY (NBMG)

Craig dePolo showed the two time lapse videos created for both historic and more recent earthquakes and narrated through the timeframe. A suggestion was made to put these videos on You-Tube.

9. PRIORITIZED LIST OF FAULTS IN NEVADA FOR UNITED STATES GEOLOGICAL SURVEY (USGS)

Craig dePolo updated the NESC on a project that came out of the NESC but he was unsure whether the Council has been involved recently. This project is prioritizing faults for the United States Geological Survey (USGS) NEHRP program. They look to the states to help identify which faults each state believes are the highest-risk faults in their states and should be studied. Craig stated that in 2006 they actually got together for a couple of days and studied the faults throughout the state and since then the states have just supplied prioritization lists. Craig went through the lists for the different geographical areas of the state. Craig and Wanda Taylor went out to look at the Las Vegas faults with members from the USGS.

Vance Payne asked Craig to clarify whether or not the fault proximity to population was utilized in the prioritization of these faults. Craig confirmed this was one of the factors. Vance further asked whether this was the main criteria. Craig stated there is an emphasis on urban areas as they are a greater risk. He also stated that he wants to try to ensure that the rural areas do not get left behind.

Discussion also ensued regarding the USGS and their view of the Las Vegas area faults.

10. REPORT OF RECENT SEISMICITY IN NEVADA AND UPDATE FROM THE SEISMOLOGICAL LABORATORY, UNIVERSITY OF NEVADA

Graham Kent provided an update from the Seismological Laboratory at UNR as well as a report of recent seismicity in Nevada. Graham provided a graphic of all the seismicity in Nevada for 2014 greater than a 2.5 magnitude. Northwestern Nevada has been quite active as well as throughout all of Nevada. Taking all magnitude 4.0 earthquakes in the west, 37% have been in the Nevada network. There have been a total of 175 earthquakes that were magnitude 3.0 or greater since July. Channel 3 folks have worked with the Seismological Laboratory and NBMG and got some stories. Graham showed the news stories videos. Graham also spoke about an early warning system and talked about how the need for density of stations in order to have an early warning system. The Seismological Laboratory has been working toward adding additional seismometer stations as well as cameras utilizing Alert Tahoe system. The cameras are able to be utilized for other hazards, especially fire and have been utilized for early detection as well providing a visual of how the fires spread.

11. REPORT ON THE NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP)

Chair, Ron Lynn provided an update for the NEHRP. They have not had a recent meeting. Ron did do a paper based on the number one priority which is on building rating systems. Ron asked Janell to put this on the agenda for the next meeting so he could make a formal presentation once the paper has been vetted through the NEHRP committee. Werner Hellmer also contributed to this paper. This paper solely focused on the rating system. The

paper references work completed by the Structural Engineers of California, Structural Engineers of Northern California, the U.S. Resiliency Council, Mike Mahoney, and the Insurance Standard Organization (ISO), as well as Ron's independent research.

12. UPDATE ON CLARK COUNTY UNREINFORCED MASONRY (URM) 2013 NEHRP PROJECT

Werner Hellmer stated the project is substantially completed. The final report was distributed to the committee members and Werner is actively seeking comments on their final report which was submitted to Earthquake Engineering Research Institute (EERI). The most significant lesson learned from this project was that the process needed more time. Originally they envisioned that they would be able to determine if a building was under-reinforced. However, this was found to not be a practical goal. A good number of people declined access to the property. As well, some people did not want the rebar equipment utilized on their buildings. Likewise, in order to call something under-reinforced, it would need to be compared to a specific set of criteria and it was not quite clear what criteria should be utilized.

Werner discussed the findings to date in their URM verification process from the report submitted to EERI. Statistics were provided from this report.

Goals going forward would include getting to the buildings they could not get to, and trying to figure out a method of a more detailed inspection on buildings that were unable to be determined. They will look for opportunities for additional funding to include all of Clark County versus the unincorporated Clark County which was the current scope for the project just completed. Werner stated that Clark County would like to move forward with helping other areas within the State with their verification projects so that this verification could be done throughout the State.

In late September/early October 2015, the National Council of Structural Engineers Association (NCSEA) will have a large symposium in Las Vegas and Werner will submit an abstract for that detailing the Clark County URM verification project. He previously presented this to the local SEA and had a pretty positive response.

Another question Werner asked was whether it was worth it to generate a paper at the state level regarding URMs in Nevada. The additional question is what should be done with the information that is being collected. Clark County will be putting their information into a GIS database.

With regard to buildings that were listed as unable to determine, Clark County will keep these listed with the original list and attempt to verify these at a later date. Werner would like to pull the buildings determined not to be URMs off the master list.

Ron Lynn gave a short overview of the project funding itself for Kelly Stone's benefit. Clark County absorbed much of the cost for the project with the added help from the funds from EERI which totaled \$17,000 of the total \$20,000 grant with EERI keeping \$3,000 in administrative costs.

Werner projected approximately 250-300 URMs out of 14700 in all of Clark County. The scope of the project only covered unincorporated Clark County so separating those out left 4,700 in unincorporated Clark County. The other 10,000 were in Henderson, Las Vegas, North Las Vegas, etc. There has been conversation with the other incorporated areas of Clark County to expand this project once funding is determined.

The benefit of knowing the outcome of this project helps in response after an earthquake. We know that the URMs are where the heavy damage will be in an earthquake. Knowing exactly where these buildings are helps the first responders know they areas that will be hardest hit.

The question was asked regarding schools in the list of URM buildings. There is one private school in Las Vegas that is a URM building. Ron Lynn stated that they were happy to come in and help inspect their building if they are invited. Dimitri Theodorou asked that Werner or Ron send him an email regarding this and he would try to obtain approval for this.

13. CREATION OF LIST OF POTENTIAL PROJECTS FOR SUBMISSION TO NDEM FOR CONSIDERATION OF FUNDING WITH DEOBLIGATED FUNDS

Chair, Ron Lynn opened the meeting for suggestions for potential projects that could be submitted to NDEM for potential funding should there be any deobligated funds for the grant cycle.

Craig dePolo presented two possible projects regarding mapping of faults in the north and in the south. This included creating 1 x 2 degree quads for the state, 18 total with 9 maps for each project. This is at a scale of 1:250,000. This is a very visual scale for humans to look at faults on a map. This project is kind of expensive so it was divided into two separate projects for the north and for the south. The cost for the north is \$17,614 and south 16,355. The Emergency Management Preparedness Grant (EMPG) requires a 50% match. Craig elaborated on how these mapping projects would meet the required correlation to emergency management stating that these maps would help with emergency management planning but mapping the faults around the rural communities so that they would be able to know more exactly where their threats are with regard to earthquakes.

Graham Kent asked whether the deobligated funds reflected money that is actually available versus might be available, might it be more or less. Rick Martin indicated that whether or not there is money and how much is determined on how much money is returned by subgrantees. All projects submitted to NDEM are then reviewed and chosen for funding based on what become available. Ron Lynn asked whether the URM projects would be eligible projects and the answer was affirmative so Ron suggested that all locations throughout the state would be good options. Rick Martin added that the performance period for the EMPG deobligated funds would be a very short performance period so we will need to receive projects as soon as possible. The project timeframe will need to be part of the project submission to indicate that the project can be completed quickly.

Karen Johnson added that another possible avenue of funding for the URM project in Clark County would be the Pre-disaster Mitigation grants. Clark County will be updating their hazard mitigation plan this year and this could be added into that project. This grant is a 75/25 grant and would require the 25% match.

Ron asked everyone to send any potential projects to Janell within the next 30 days so that a special meeting can be determined to rank these projects.

Rick Martin suggested that in the future, this project submission process should be done as a regular occurrence each year at the February meeting so that any potential projects are ready for submission as early as possible.

Ron Lynn asked the question of Kelly Stone whether a crowd control class would be viable for training through FEMA. Kelly stated she would follow up on this request and get back to us.

14. ANNOUNCEMENT OF 2015 MEETING DATES

Ron Lynn announced the remaining tentative dates for the 2015 NESC meetings including May 6, August 5, and November 4. Ron asked Janell to contact Bob Carey from Utah regarding a date for a combined meeting in Reno. Janell will get back to Ron regarding the outcome.

15. PUBLIC COMMENT

Chair, Ron Lynn opened the meeting for public comment. Craig dePolo asked whether it would be okay to have a “new business” as a running agenda item which would be similar to public comment but would be new information from the board. Deputy Attorney General, Henna Rasul, indicated that many boards have a “council comment” agenda item for this reason. Craig suggested that we include this agenda item so it does not need to be done under public comment.

Janell Woodward announced that FEMA had chosen the billboard project for the FY14 NEHRP funding. Craig brought up once again a movement toward re-examining re-establishing the money coming directly to the states who are able to provide match instead of the current third-party consortium for NEHRP. Rick Martin stated that the program managers across the nation are in concurrence and will be discussing this at the program managers’ conference in May.

16. ADJOURN

Chair, Ron Lynn declared the meeting adjourned.