

**Nevada Earthquake Safety Council Joint Meeting Minutes**  
**Wednesday, November 13, 2013, 8:00 AM**  
Clark County Building Department, Presentation Room  
4701 W. Russell Road, Las Vegas, NV 89118

**Board Members Present:**

Ron Lynn, Chairman  
Alan Bennett  
Michael Blakely  
Wayne Carlson  
Craig dePolo  
Jenelle Hopkins  
Graham Kent  
Steve Koenig  
Jim O'Donnell  
Jim Reagan  
Wanda Taylor  
Jim Walker  
Jim Werle

**Members Not Present:**

Eric Hubbard  
Woody Savage

**Staff:**

Elizabeth Ashby (NDEM)  
Janell Woodward (NDEM)  
Chief Chris Smith (NDEM)  
Rick Martin (NDEM)  
Kelli Baratti (NDEM)

**FEMA:**

Jennifer Lynette (Region XI)  
Doug Bausch (Region VIII)

**Colorado:**

Rob Jackson, co-chair (CEHMC)

**Idaho:**

Mark Stephensen

**Utah:**

Steve Bowman (Staff)  
Bob Carey (Staff)  
Sheila Curtis (Staff)  
Chris DuRoss (Staff)  
Josh Groeneveld (GIS, Staff)  
Leon Berrett (USSC)  
Roger Evans (USSC)  
Keith Koper (USSC)  
Meldee Love (USSC)  
Glen Palmer (USSC)

**Others:**

Lisa Conner (WCSD)  
Ronald Creon (NV National Guard)  
Diane dePolo (Seismological Lab)  
David Donovan (SNWA)  
Jim Faulds (NBMG)  
Terri Garside (NHMPC board member)  
Werner Helmer (CC Building Dept)  
Scott Holt (State Farm Insurance)  
Gary Johnson (NBMG)  
Annie Kell (Seismological Lab)  
Dean Kiernan (WCSD)  
Dean Long (NV National Guard)

**Phone:**

Rose Marie Reynolds (DAG)

## 1. CALL TO ORDER, ROLL CALL AND ESTABLISH QUORUM

NESC Chairman Ron Lynn, opened the meeting by welcoming everyone present to the Nevada Earthquake Safety Council joint meeting to include the Federal Emergency Management Agency (FEMA) and other surrounding states of Colorado, Utah and Idaho. The meeting start time was delayed a short while in order to allow for a group coming the morning of the meeting to arrive at the meeting place. The meeting was called to order about 8:30 am. Introductions were made for all present. Thirteen of 15 NESC board members were present representing a quorum. Utah had 10 attendees with five members of the Utah Seismic Safety Commission (USSC) present representing a quorum for Utah. The co-chair for Colorado was present. The State Hazard Mitigation Officer from Idaho had not yet arrived at the beginning of the meeting due to travel issues.

## 2. PUBLIC COMMENT

Chairman Ron Lynn (NESC) opened the meeting asking for any public comments. Jim Reagan took the opportunity to talk briefly about NV Energy's participation as a company in the Great Nevada Shakeout 2013. He presented certificates of appreciation to Craig and Diane dePolo (NESC) who both participated with training of NV Energy Staff in the northern location in preparation for the Shakeout. He also acknowledged Graham Kent (NESC) and Woody Savage (NESC) who helped with training in the southern location. They had previously received certificates of appreciation. There were no other public comments.

Emergency exits and restroom locations were announced by Ron Lynn (NESC).

## 3. POLICIES

- a. Western States Seismic Policy Council (WSSPC)  
Panel – Rob Jackson (Colorado), Mark Stephensen (Idaho), Roger Evans (Utah), and Ron Lynn (NESC)

Only two of the policies were copied in paper format. However, all of the following building codes were up on the screen for all to review as each policy was covered. These policy recommendations can be found at <http://www.wsspc.org/policy/recommendations.shtml>.

Chairman Ron Lynn (NESC) gave an overview of WSSPC, a regional earthquake consortium in the western states funded by FEMA. WSSPC represents the 14 western states, 3 U.S. territories, a Canadian territory and a Canadian province. They work on policies which are supported by FEMA, a 100% funded process, which are for the benefit of all 14 states and other groups represented also to include the entire United States.

These policies provide templates for states and territories, etc, to easily enhance safety protocols.

➤ **Building Codes:**

- **13-4;** Seismic Provision in the 2012 International Building Codes

WSSPC supports the adoption of these minimum standards in building codes.

Rob Jackson (Colorado) stated the minimum goal was to ensure all states adopt minimum codes which help for the areas that do not have codes. Roger Evans (Utah) added that Utah's adoption of the 2012 International Building Codes went into effect July 1, 2013. Craig dePolo (NESC) indicated the Wells earthquake demonstrated the difference between buildings at code and buildings below code. Alan Bennett (NESC) added that Northern Nevada had adopted the 2012 International Building Codes as of September 1. Ron Lynn (NESC) stated that Southern Nevada was the same with effective date July. Rob Jackson added that Colorado had adopted the 2009 policies.

Wayne Carlson (NESC) moved to adopt 13-4 and Craig dePolo (NESC) seconded. The motion passed unanimously.

Roger Evans (Utah) moved to adopt 13-4 and Leon Berrett (Utah) seconded. The motion passed unanimously.

➤ **School Building Safety:**

- **13-10:** (passed by WSSPC; subject to EERI approval) Joint Policy for the Evaluation and Seismic Remediation of School Buildings

Rob Jackson (Colorado) has been a leader in this area. In Colorado, earthquake concern began in the 1960s with a series of earthquakes near Denver. With existing school buildings, the goal is to survey the buildings and then reinforce as necessary.

Ron Lynn (NESC) summarized that schools house our most precious resource being our children, yet the schools are not the highest priority with regard to building code. Schools are significantly restrained in the budgetary area. Additionally, many schools are used for refuge in disasters not only with earthquakes but also for tornados and other disasters. The

idea is to identify the high-risk buildings and reinforce them. The first step is awareness of the issues. As long as there is a program and process in place, this allows time for remediation to take place. Liability was discussed and ultimately there is a moral and ethical obligation to protect the community and children. There was extensive discussion regarding liability and obligation.

Dean Kiernan of Clark County School District Emergency Management stated they have an initiative for seismic gas shut-off valves. Their third-party insurance carrier gave \$250,000 toward this project. They are also doing seismic bracing. Ron Lynn (NESC) added that the Las Vegas Academy (one of the oldest schools in Clark County) had a student-led initiative for retrofitting for which they received recognition. Sometimes no or minimal cost can fix the issues.

There was extensive discussion regarding gas shut-off valves on both the customer and utility industry sides.

Craig dePolo (NESC) moved to adopt 13-10 and Wanda Taylor (NESC) seconded. The motion passed unanimously.

Keith Koper(Utah) moved and Steve Bowman (Utah) seconded to adopt 13-10. The motion passed unanimously.

- o **13-7: Seismic Design of New Schools**

Past schools are one issue but design of new buildings need to be to a higher safety level.

As a point of order, a question was raised whether a member of the public is allowed to make a motion but not vote. The AG stated only voting members are allowed to make motions for voting.

Wanda Taylor (NESC) asked whether universities were included in the school building policies. Colleges and universities are regularly separately from K-12 because they are governed by a board of regents.

Craig dePolo (NESC) moved to adopt 13-7 and Jim Reagan (NESC) seconded. The motion passed unanimously.

Utah had previously considered this policy and did not address it at this meeting.

➤ **Lifelines**

- **13-11:** Reliability of Lifeline Infrastructure

The lifeline policy is a very broad policy. It was not felt that NESC would not play a large part regarding this policy.

Wayne Carlson (NESC) moved to adopt 13-11 and Graham Kent (NESC) seconded. The motion passed unanimously.

- **13-12:** Earthquake Actuated Automatic Gas Shutoff Devices

The utilities support individuals utilizing these devices as long as they are to code.

Jim Reagan (NESC) moved to adopt 13-12 and Mike Blakely (NESC) seconded. The motion passed unanimously.

➤ **Tsunami** (NOTE: This was not put before the committee)

- **13-1:** Rapid Tsunami Identification and Evacuation Notification

Policy 13-1 was not brought up for an adoption vote as Nevada is not at high risk for tsunami. This policy was covered briefly recognizing there is minimal risk compared to the coastal areas. The difference between tsunami and seiche was discussed. Craig dePolo (NESC), Graham Kent (NESC) and Jim Faulds (NBMG) all participated in discussion regarding potential causes of both tsunamis and seiches.

Ron Lynn (NESC) recommended that this issue be put to the NESC committee for the development of a usable policy for the basin areas.

Ron Lynn (NESC) asked Graham Kent (NESC) to compose a paragraph which he can bring to WSSPC regarding the issues that the basin would face regarding tsunamis and seiches.

➤ **Post-Event Management**

- **13-3:** Post-Earthquake Technical Clearinghouses

Craig dePolo (NESC) brought up the importance of having easy access to information regarding earthquakes.

Craig dePolo (NESC) moved to adopt 13-3 and Graham Kent (NESC) seconded. The motion passed unanimously.

- o **13-6:** Post-Earthquake Information Management System

Ron Lynn (NESC) stated this was the permanent archiving of earthquake information in a centralized location for all to utilize. Information is often lost without a systematic method to archive this information.

Steve Bowman (Utah) shared Utah's work toward archiving state earthquake scientific data. Wanda Taylor (NESC) also talked about UNLV's work in this area.

Graham Kent (NESC) moved to adopt 13-6 and Craig dePolo seconded. The motion passed unanimously.

Glen Palmer (Utah) moved and Steve Bowman (Utah) seconded the adoption of 13-3 and 13-6. The motion passed unanimously.

- b. National Earthquake Hazards Reduction Program (NEHRP) Partnerships between states and FEMA

Jennifer Lynette (FEMA) gave an overview of NEHRP for 2014. Jennifer (FEMA) had met with members of the NESC committee in August where she obtained a "wish list" in priority order which was submitted to FEMA for review. Elizabeth Ashby (NDEM) submitted a list of courses for NETAP training and these are being included in the list of requests.

Jennifer (FEMA) covered the funding methods from past years and why they have ended up with the current funding method. This year FEMA will use consortia to distribute money for projects. This is due to state abilities for matching. Some states could afford matching and some could not match. Last year FEMA allowed a variety of funding methods but this year will only have one funding method through consortia.

There was some discussion about why FEMA cannot allow multiple funding methods for states that can match. There was concern regarding some projects not being adequately funded or accomplished. Jennifer (FEMA) did her best to address these issues. The question was raised regarding how much money was actually available. Jennifer (FEMA) stated there was a little over \$2 million for all the states. FEMA is doing

their best to be specific about each state's needs and projects and it is hoped the process will be an easier using the consortia for distributing money to each state for their projects.

#### 4. LEGISLATIVE SUCCESSES AND FAILURES

- a. Utah – HB 278: Roger Evans. A copy of the bill was distributed. This bill took effect July 1. Utah has done a tremendous amount of work in this area. The bill states that schools must have a seismic safety evaluation. USSC determined that about 61% of the school buildings are susceptible to collapse in a large earthquake. As stated many times in the meeting already, schools are utilized for evacuation centers yet many are old and at risk for collapse. This bill was a great success for Utah in making schools safer. Roger (Utah) gave his email address for any who would like to email him for information at [revans@parkcity.org](mailto:revans@parkcity.org).
- b. Colorado: Rob Jackson stated that Colorado really did not have any legislative actions at this time.
- c. Idaho: Mark Stephensen talked about the difficulty in getting legislation passed in Idaho as well. Of note, the one reference in the Idaho code for hazard mitigation was avoiding building a swine farm on a known fault. Passing a law to be safe is difficult without smoking rubble. The 1983 Challis 7.3 magnitude earthquake was discussed. Earthquakes are listed as a top-three hazard in Idaho.
- d. Nevada: Wayne Carlson indicated the last legislative success for Nevada was 2003. A bill was passed requiring the Public Works Department to adopt the international building policies. NESC adopted four policy statements but legislature would not introduce a bill to carry those forward.
- e. Summary of future action and joint actions: Ron Lynn (NESC).

Ron Lynn (NESC) stated he and Wayne Carlson (NESC) had testified before the legislature regarding unreinforced masonry (URMs). A point was made that sometimes you cannot get things done at the state level but it might be possible at a local level.

Graham Kent (NESC) added that California has passed a \$60 million bill for an earthquake early warning system. Nevada can benefit from this early warning system and it is hoped that at some point Nevada will follow California's lead in this area. Japan also very successfully utilizes an earthquake early warning system.

## 5. STRUCTURAL (Reports/Updates)

- a. Utah: Existing Buildings Committee: Glen Palmer. Utah has an existing buildings committee which works in conjunction with the USSC as a joint ad-hoc committee. They have been working on several publications which include the Seismic Guide for the Improvement of URM Buildings. They also work with public awareness/education. Glen (Utah) noted that the Parent Teacher Association (PTA) can bring a fairly loud voice to push things through legislature. Mothers are concerned for their children's safety and can be very proactive in educating their neighbors in the fight to protect their children. The process can take a long time but Glen (Utah) encouraged everyone to not give up. They are also working on re-implementing a state ordinance called the Parapet ordinance. This enforces connecting roofs to the walls when there are new roofing projects for a building. Costs can vary based on the building. Doing the work while the roof is off is the cheapest time to perform this work.

Ron Lynn (NESC) added that it is difficult to get anywhere without champions for the cause such as PTA and legislators. Roger Evans (Utah) added that once people realize there is a problem that liability becomes an issue and this can sometimes help to build momentum.

- b. Colorado: Seismic Design Category: Rob Jackson. Rob (Colorado) used some slides from a previous talk on seismic design. He stated that risk comes from the intersection of vulnerability and hazard and adds uncertainty. Some feel that anywhere in Colorado (without specific location) has the potential for an MCE (maximum considered earthquake) of 7.5. Colorado's earthquake council has helped Colorado Geological Survey (CGS) with a really good map. Discussion ensued about the 1882 earthquake estimated to be a 6.6 magnitude, as well as the timeline of historical earthquakes in Colorado. Rob (Colorado) stated there was a question of whether or not the earthquakes were triggered. The conclusion was that an earthquake is an earthquake regardless of whether or not it was triggered. Seismic design was further discussed including what population areas are included with each site class. Interestingly, building code does not take into account how many people live in a certain area.
- c. Colorado: Schools as shelters: Rob Jackson. Colorado has had problems with schools being built correctly. It was recommended that no schools be built in category A but rather with a minimum of category B. The city of Denver never allowed category A seismic design category buildings. There were no questions.
- d. Nevada: URM and non-ductile: Ron Lynn. Unreinforced masonry (URMs) are the highest risk buildings out there. Ron (NESC) spoke about the proposal to get engineering students to go out and do ground-truthing with

regard to URMs. The main reason for this is to identify an accurate count of just how many URMs are really out there. Many buildings are under-reinforced which are different than URM buildings.

Craig dePolo (NESC) asked for clarification regarding the year that Clark County began changing their building codes regarding URMs. The code year changed in 1961 and after a 10-year adoption process, 1971 became the date was the year that you could assume that buildings have been reinforced.

Glen Palmer (Utah) added that Utah uses a date of 1976 as a target date of no new URM buildings. The dating process has to be customized to the community.

Elizabeth Ashby (NDEM) interjected that this assessment is an eligible risk assessment for mitigation plans. She recommended to locals that they include this in their strategies so that this can be part of their mitigation planning process.

With regard to non-ductile reinforcement, Ron Lynn (NESC) turned this part over to Werner Hellmer (CCBD). In 1973, they had the first code requirements for concrete frames in zones 2 and 3. They were just beginning to realize they had a problem. Discussion ensued regarding ductile and nonductile buildings in Nevada as well as Colorado.

Ron Lynn (NESC) stated the key is to assess the risk to the environment.

## **6. EMERGENCY MANAGEMENT**

- a. Nevada – Emergency Management Assistance Compact (EMAC): Kelli Baratti, NDEM. Kelli (NDEM) spoke regarding the relationships that are built ahead of time with prior agreements made so that when an earthquake disaster happens, help can be given. Kelli (NDEM) told the story of Hurricane Andrew and out of the aftermath, the southern Governors created the Southeastern Emergency Management Assistance Compact. This was then taken to Congress and in 1996 Congress ratified the law and EMAC was created.

EMAC does not belong to FEMA. All 50 states have signed on and EMAC belongs to the states.

EMAC allows state and local governments to go back and forth across borders to assist each other. All states have an intrastate agreement that mirrors federal law.

With regard to mutual aid, the closest most appropriate resources are

where you want to go. EMAC fills the gap when there is no interstate agreement. EMAC requires a governor's declaration. Majority of major resources belong to local governments. The State Division of Emergency Management deploys local resources for them. All 17 counties in Nevada have adopted NEMAC (Nevada Emergency Management Assistance Compact), very similar to EMAC. Kelli (NDEM) encouraged all the earthquake specialists to reach out to their local response agencies to interact.

Ron Lynn (NESC) asked what could be supplied with EMAC/NEMAC. The answer was that basically anything could potentially be supplied. Specifically, the option of inspectors was brought up and these people would be deployed in the response phase. The caveat would be that agreements must be in place so they can be used as an agent of the state.

There were many questions for Kelli (NDEM). The question of who pays for costs was brought up. Kelli (NDEM) prefaced her answers with the fact that every state is different and every incident is local. Costs are given up front and every community is able to say yes or no to services, fully aware of the costs. Reimbursement can be up to 24 months so reimbursement is quite cumbersome. Kelli (NDEM) discussed the 30/30/30 rule which says 30% of resources are reliably available in an emergency for various reasons. It is very important to have agreements set up before an emergency happens so that resources are deployed immediately. Bob Carey (Utah) also indicated the issues Utah has faced with EMAC and payment agreements. The issue of liability was also discussed and individual states deal with this issue differently.

- b. Mutual aid – panel with Colorado, Utah, Idaho and Nevada. Rob Jackson (Colorado) stated most of his experience with mutual aid has been with ICC. Ron Lynn (NESC) asked Kelli Baratti (NDEM) about mutual aid agreements with Colorado and she stated only EMAC was in place. Roger Evans (Utah) stated Utah has legislation with five counties who have county-to-county intra-state mutual aid. They also have National Guard mutual aid agreements in place. Roger stated Utah is not very anxious to help but more as a last resort. Many people ask for help wanting the National Guard which has to go through the Governor's office. It is also very expensive and anyone asking for National Guard help must be able to pay the bill. They have specific criteria that must be met before it goes to the Governor. Mark Stephensen (Idaho) stated they really have not had much other than EMAC. Kelli Baratti (NDEM) stated that Nevada negotiates far in advance for National Guard services.
- c. HAZUS in the development of emergency scenario planning: Craig dePolo/Ron Lynn. There was discussion about the process of using

HAZUS for scenario planning. Craig dePolo (NESC) brought up the limitations that the HAZUS program has had more recently but many of these issues in overstating costs have been resolved at least for the earthquake portion. Nevertheless, HAZUS has been very effective in understanding the consequences of earthquakes. The Wells earthquake was about \$11-15 million. Most recent estimate \$24 million damage for the Well's earthquake so this is very close. HAZUS can also be a great help for political and planning purposes. Doug Bausch (FEMA) addressed some of the limitations of the software with regard to URMs including the results when you try to "trick" the software by "lying" to it. Mark Stephensen (Idaho) talked about Idaho's use of RiskMap. Craig dePolo (NESC) stated that the seismology laboratory was working on shake maps in conjunction with HAZUS.

## 7. OUTREACH

- a. Utah – Guide for Homeowners: Glen Palmer. Glen Palmer (Utah) stated Utah has been working on this guide for many years. The purpose is to minimize the possibility of a catastrophic failure of a building by the utilization of seismic duct restraints. This is a guide for residential homeowners and contactors rather than for the commercial side. This book is in the process of being updated. The book also covers mitigation for seismic issues within the home. They have also tried to make the book more generic when referencing name brands of items as there is much more competition out there than there was when the book was originally created. The book also covers nonstructural hazards
- b. Utah – Distribution and updating of websites: Roger Evans. Roger Evans (Utah) put together a list of websites that can be shared whenever going to speak with groups. This list makes it easy for the public to go to these websites for helpful information regarding earthquake safety. Everyone should be ambassadors for earthquake safety.
- c. Colorado – outreach experiences: Rob Jackson. Rob Jackson (Colorado) talked about the Shakeout in Colorado as their greatest outreach. The lower level schools had high participation. Rob's (Colorado) building participated building-wide in the Shakeout. In his company, for meetings of 5 or more people, the meeting must begin with safety instruction. Colorado has an earthquake map which has been utilized for outreach. CGS has done an excellent job of updating their website with Colorado earthquake information.
- d. Idaho: Mark Stephensen. Outreach for Idaho includes the Shakeout and projects such as putting together the earthquake booklet. They are going to issue a new version of that booklet. The southern and eastern regions of Idaho represent the stronger seismic areas for the state. There is also

an educational portion of outreach with curriculum to teach about earthquakes in 8-9<sup>th</sup> grade science classes. Part of the problem Idaho faces is with regard to the time between each earthquake event and the public often feels that it is a risk they do not have to worry about. Ron Lynn (NESC) added that electronic media is much cheaper than print media. He stated that people are not reading hardcopy anymore but are rather looking at electronic devices.

Ron Lynn (NESC) reiterated that Nevada had a very high participation rate for the Shakeout.

- e. Nevada – MyPlan/MyHazards: Gary Johnson, NBMG. Elizabeth Ashby (NDEM) gave a history for the creation of MyPlan and introduction to Gary. Gary Johnson (NBMG) gave an overview of the ESRI smart phone app that is available for the public-facing MyHazards. The MyPlan site is for jurisdictional use and one must ask Elizabeth Ashby for permission to access the site due to the sensitive nature of some information included on the site. Gary (NBMG) stated the theme for MyHazards is Flood, Fire and Earthquake. The ESRI ArcGIS smartphone app is a free product that can be utilized by the public. As a free product, this goes a long way in public outreach. Gary (NBMG) covered the map layers that have been built into the system. Craig dePolo (NESC) pointed out that one of the great pieces of information that can be provided is the demographics for a particular area that might include the number of elderly in a particular area. This information comes from the census block data from Urban Development. This would be especially helpful in determining who might need extra help in the event of an emergency.

Ron Lynn (NESC) added that it is up to earthquake specialists to get the public ready for hazards that *might* happen as well as those that definitely *do* happen. Rob Jackson (Colorado) echoed this thought.

Utah stated that they have a [www.beready.utah.gov](http://www.beready.utah.gov) website that adds to public outreach in emergency preparedness. Roger Evans (Utah) stressed that reaching even just K-12 children is really reaching the next generation.

## 8. TECHNICAL

- a. USGS updates and the new fragility curves: Doug Bausch. Doug Bausch (FEMA) gave a presentation on the FEMA Modeling Task Force (MOTF). They are only activated for events that are level 1. As the teams do not perform this work all throughout the year, this limits the ease with which the work is done. This program has allowed for faster identification and inspection of damages. This is because MOTF is utilizing GIS mapping instead of paper maps. This provides more accurate and real-time

information post disaster. They had very good success post Hurricane Sandy. Doug (FEMA) also discussed the issues with debris removal which is a big part of their costs. Also covered was the Colorado flooding and the Oklahoma tornadoes. Hurricane Sandy was a complicated event with both water and snow damage. The concept was to model what you can ahead of events, then ground truth as quickly as possible.

- b. Recent seismic activity in the Basin and Range area: Graham Kent. Graham Kent (NESC) gave an overview of the Great Basin recent seismic activity. There have been over 11,000 earthquakes of varying size. Central Nevada and eastern Nevada do not have as robust a monitoring system as the western side of Nevada. They have received some USGS funding and have been able to upgrade monitoring in the greater Reno and Tahoe area. Graham (NESC) talked about the need to somehow find a way to move their information to the cloud. Their website had 300,000 hits which took down their website for a while after a recent 4.2 Spanish Springs earthquake. This would be so much higher with a large earthquake and they need to find funds to utilize the cloud so that the website does not go down next time there is a larger earthquake.

The Great Nevada Shakeout 2013 was a great success statewide. Craig dePolo (NESC) has written a historical section which will be added as a new tab on the Nevada Shakeout website and they are hoping other states will join with that for their sites. The public service announcement video was shown to everyone. This can be seen at [http://www.youtube.com/watch?feature=player\\_embedded&v=575IDRya9WQ](http://www.youtube.com/watch?feature=player_embedded&v=575IDRya9WQ)

Nevada had 566,000 participants statewide from all parts of the state. All Nevada public schools participate in the Great Shakeout each year. Nevada hospitals have been difficult to bring on board but the Seismological Laboratory continues to work on getting them to participate. The new benchmark for next year (2014) is 600,000 registered participants.

Graham (NESC) also talked about the early warning messages that we all receive on our phones for weather-related notices. California is utilizing the earthquake early warning system. That is something Nevada should move toward utilizing. Werner Hellmer (CCBD) stated that getting the earthquake early warning system is used in his office. He stated that though there is little or no impact to them locally, the warning system is never ignored when it goes off. Graham (NESC) also covered the new cameras that have been placed and happened to catch the Bison fire. This is a technology that can be utilized for multihazard use.

Ron Lynn (NESC) gave some overall thoughts regarding the progress that has been made with regard to earthquake safety. The technology and analytical tools are much improved. Building codes are much better. With the Haiti earthquake, the only buildings that survived were those built to International Building Code (IBC). The “duck, cover and hold,” philosophy is also working quite well. Ron (NESC) encouraged everyone not to become discouraged but to look at the successes and keep plugging away.

## **9. SCHEDULED 2014 CALENDAR YEAR MEETING DATES FOR THE COUNCIL**

Chairman Ron Lynn (NESC) announced the dates listed below for the 2014 NESC meetings. Once again, the meetings will coincide with the Nevada Hazard Mitigation Planning Committee (NHMPC) which will meet on the Thursday following the NESC meeting each quarter. Below are the 2014 meeting dates:

- a. Wednesday, February 12, 2014
- b. Wednesday, May 14, 2014
- c. Wednesday, August 13, 2014
- d. Wednesday, November 12, 2014

Of note, the WSSPC Annual Meeting and Awards Banquet is July 21, 2014 in Anchorage, Alaska.

## **10. PUBLIC COMMENT**

Chairman Ron Lynn (NESC) thanked everyone for taking time out of their busy schedules to travel and attend the meeting. He once again asked for any public comment and there was none.

## **11. ADJOURN**

Chairman Ron Lynn (NESC) asked for a motion to close the meeting. Craig dePolo (NESC) moved and the meeting was adjourned.

Of note, all presentations from this meeting will be available on the NESC website, [www.nbmq.unr.edu/nesc/](http://www.nbmq.unr.edu/nesc/).