

**WESTERN STATES SEISMIC POLICY COUNCIL  
BOARD OF DIRECTORS' MEETING  
Holiday Inn Capitol at Smithsonian  
Jupiter Conference Room  
550 C Street, SW  
Washington, DC 20024**

**Thursday March 8, 2007, 8:30 a.m. - 5:00 p.m.  
and Friday March 9, 2007, 8:30 a.m. - Noon**

**MINUTES**

**March 8, 2007**

**Present:**

**Rick Allis, Utah Geological Survey  
David Applegate, U.S. Geological Survey  
Jim Goltz, California Governor's Office of Emergency Services  
Ed Laatsch, DHS/FEMA  
Mike Mahoney, DHS/FEMA  
Vince Matthews, Colorado Geological Survey  
John Parrish, California Geological Survey  
Jon Price, Nevada Bureau of Mines and Geology  
Patti Sutch, WSSPC  
Anita Vollmer, DHS/FEMA  
Jay Wilson, Oregon Emergency Management**

**Call to Order – Rick Allis**

The meeting was called to order and all present introduced themselves.

**Approval of Minutes – Board**

**MOTION:** To approve the minutes of the December 5-6, 2006 Board meeting (Vince Matthews).

**Discussion** – Rick Allis raised a question about the Board decision regarding the disposition of Policy Recommendation 04-7. John Parrish suggested that the minutes be amended to state that the Board recommendation is to let it lapse and WSSPC will continue to monitor the development of the seismic hazards maps.

**AMENDED MOTION:** To modify the original motion as amended by John Parrish (Vince Matthews).

**SECOND:** John Parrish.

**VOTE:** Unanimously in favor.

**Executive Director Report – Patti Sutch**

The financial review of WSSPC's fiscal year ending November 30, 2006 had a slight loss of \$8000, including depreciation of \$2316. Patti stressed that it was important to have a conference to provide another source of income to pay for items not covered by the FEMA Cooperative Agreement.

WSSPC has another source of outside income which is from Affiliate members. Seven members have joined in 2007 for a total income of \$3,000.00.

The Newsletters, due to a number of circumstances, have been delayed but are now in production. Once the FEMA work plan requirements are fulfilled, we can change to an online format with an annual report containing policy recommendations, financial information and state agency reports.

Approximately \$84,000 on FEMA Grant 2006 was billed through January (6 months) and the semi-annual report was submitted to FEMA.

The income and expense statement for the first two months of the current WSSPC fiscal year shows expenses of \$31,324 and income of \$33,528.

The USGS grant of \$10,000 for the 2007 conference was successfully applied for on [www.grants.gov](http://www.grants.gov). Patti is seeking part time help for conference planning.

#### **DHS/FEMA Report – Ed Laatsch**

Under the new NEHRP reauthorization and change to the National Institute of Standards and Technology as lead agency, the biennial report to Congress will now be required annually. WSSPC will continue to report to FEMA.

DHS has selected 10 large catastrophic exercises to run, 2 exercises a year for 5 years, at \$20M. In addition there are several planning initiatives that will be coordinated with states and local agencies – for example, New Madrid and Pacific Northwest earthquake initiatives, and a Category 5 hurricane in Miami.

USGS received major funding to do a multi-hazard initiative in southern California, including looking at Cajon Pass lifelines issues. FEMA also contributed.

HAZUS™ inputs from wind and flood are temporarily on hold. Bugs in the Earthquake module are being fixed.

FEMA's regional offices are preparing a report on the U.S. Federal Response Plan for Senator Boxer and Congress.

FEMA has been able to maintain full funding for the consortia. In addition, money directed to FEMA is fenced off this year from Homeland Security. Operating funds have increased by \$225 Million. By March 31, FEMA has to re-organize and bring in 800 preparedness staff. The Earthquake Program is hiring two people to bring the total staff to five. Larry Hultengren will be taking over some of Anita Vollmer's and Elizabeth Lemersal's duties.

Preparedness grants are returning to FEMA. The FEMA Director is now an Administrator, which elevates his position just under the Deputy Secretary of Homeland Security. He will report directly to the President.

FEMA's role in tsunami mitigation is limited to the development of the tsunami shelter guide. Program money is available through the National Oceanographic and Atmospheric Administration, although tsunami planning activities can be included in Pre-Disaster Mitigation grants.

## **BREAK**

### **DHS/FEMA Building Science Activities – Mike Mahoney**

A project through the Applied Technology Council (ATC) will provide guidelines for performance based seismic design that provides a better level of performance than life safety of buildings. To assess new buildings, ATC has redefined building performance in terms of acceptable monetary damage, down time for the building after an earthquake, and potential casualties. To do this they are developing a sophisticated assessment software package that will tell if the building design will survive. The terminology will coincide with HAZUS™. There will be a demonstration project workshop in June, but the final product is 4-5 years away from release.

*NEHRP-Recommended Provisions* is a translation document that takes research results from NIST, NSF, etc., and takes it into the codes or ASCE-7 design requirements every 5-6 years. This is the second year of the 5-year cycle. The USGS National Seismic Hazards Map probabilities are used until near the fault where a deterministic model is used to approximate the near-fault motions. Their goal is to prepare a map that predicts the risk of collapse of a building, using a uniform fragility.

The 2006 International Building Code is now adopted by 49 states (including California). FEMA provides training as part of code adoption process, and speakers to testify at code hearings.

FEMA also conducts training through the National Earthquake Technical Assistance Program (NETAP) Program run by Cathleen Carlisle.

FEMA will have a booth at the 2007 ICC-WSSPC Conference and will also consider sending the NEHRP booth.

### **DHS/FEMA Publications – Anita Vollmer**

Anita Vollmer passed out copies of the new FEMA publications catalog and FEMA 232. The *Homebuilder's Guide to Earthquake-Resistant Design and Construction* (FEMA 232) is an update of an older document. It follows the International Residential Code (IRC) and provides above-code recommendations, such as to increase shear wall area. (Note: map on pages 6-7 uses zones).

Anita commented that they are reviewing the NEHRP report to figure out what mitigation can do to contribute to response planning. Outreach is important. Jay Wilson asked if there is an emphasis on pre-disaster planning being tied into recovery planning? Changes in the attenuation curves being factored into the national maps, decreasing ground motions by up to 30% in some places, would have the effect to decrease code requirements. Obviously, this is a concern in many places and will be monitored. In some parts of the country the risk is underemphasized, as in Colorado.

LUNCH

**DHS/FEMA Report – Deb Ingram**

The Mitigation Division was re-aligned last year into the Risk Analysis, Risk Reduction and Risk Insurance branches.

All of the grants programs – Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance Program (FMA), National Flood Insurance Program (NFIP), Repetitive Flood Claims, and a new Severe Repetitive Loss Program – are now together with the advantage that they can be presented as a portfolio.

This is the fourth year of the PDM-competitive grants; \$100 Million is available to award. Flood, earthquake, and wind are the top grant recipients.

Jon Price commented that detailed earthquake hazard mapping that can be used in county planning and city zoning is not science that the USGS will fund, nor does it meet FEMA funding requirements. In terms of risk reduction, however, it is significant.

**USGS Earthquake Program Report – David Applegate**

The President's budget request includes funding for a multi-hazard demonstration project in southern California. The first year project is to create a scenario of the southern San Andreas fault, along with secondary hazards that would include triggered landslides, wildfire, and dam failure. The USGS Director has given his commitment as well. FY08 funding requests are the same as in FY07.

The Advanced National Seismic System (ANSS) budget doubled from \$4 to \$8 Million as a result of tsunami monitoring, but there has been no increase since FY07 and in FY08 there is less support for new instruments. New stations focus on structural monitoring; only through NSF's EarthScope were they able to complete installation of the backbone stations (they are trying to achieve uniform coverage, not be located where there is the most risk. USGS intends to provide long-term operations and maintenance). They still need to strengthen urban monitoring and need to make progress on structural instrumentation; however, progress is slowing down.

In 2002 the Scientific Earthquake Studies Advisory Committee (SESAC) of the USGS was created. Vicki McConnell and John Parrish serve on the committee (Jon Price just rotated off). On the advice of SESAC, the USGS reestablished the National Earthquake Prediction Evaluation Council (NEPEC) in 2006. NEPEC will review the preparation of the national seismic hazards maps.

A recent article in the Seattle Post-Intelligencer reported on tremor events being investigated in the Pacific Northwest. Slow earthquakes have occurred over a 14-month cycle over the past 10 years. Is it building up to a large earthquake? The Geological Survey of Canada announced an increased probability of a magnitude 9 event. A NEPEC workshop in May 2007 will try to understand the issues.

*Protecting your Family from Earthquakes – the Seven Steps to Earthquake Safety*, USGS General Information Product 42, is now published in Spanish, Korean, Vietnamese, and Chinese.

Jeff Lusk is involved in providing support for the multi-hazard initiative for southern California. The project is leveraged with other agencies involved with the Dare to Prepare campaign.

New attenuation relationships are being developed with the Building Seismic Safety Council (BSSC) of the National Institute of Building Sciences (NIBS), and the challenge is how to incorporate the latest scientific understanding into the national seismic hazards maps and prevent yo-yoing of building code design standards. Three of five maps are developed; USGS is presenting the maps in May and planning workshops for early next year, leading up to code adoption in 2012.

A decision was made to support research for the development of early warning algorithms, in a three-year effort involving Caltech, Southern California Earthquake Center, and Berkeley. The goal is to operate it in real-time. Questions remain --What are the policy implications? How will the warnings be used?

PAGER (Prompt Assessment of Global Earthquakes for Response) in September 2007 will launch integrated HAZUS™ with ShakeMap and world population information as a tool for the relief community.

John Parrish added that the USGS and California Geological Survey are collaborating on a National Center for Engineering Strong Motion Data with a website hosted at [www.quake.ca.gov/ncesmd](http://www.quake.ca.gov/ncesmd).

### **2007 Conference – Patti Sutch**

Plans to send out a “Save the Date” postcard for the 2007 annual conference are underway and a first draft mockup was presented for comments.

### **BREAK**

### **Review of WSSPC Committees and Chairs – Allis**

Tsunami Hazard Mitigation Committee – George Crawford has resigned as Chair of the committee. The Board discussed the need for the committee and concluded that, even though the new National Tsunami Program codified representation from the WSSPC states, there is still a need for the committee. The WSSPC tsunami committee should continue to advocate for Pacific coastal states and territories, support tsunami mitigation, develop policy statements, and impact funding issues through the consortia.

In addition, it is important to keep the focus on issues specific to the Pacific Northwest states – namely the Cascadia subduction zone. WSSPC policy could keep focus on near-source tsunamis using GPS and onshore moment tensor data. DART buoys won't help.

**MOTION:** To appoint John Parrish as Chair of the Tsunami Hazard Mitigation Committee (Vince Matthews).

**SECOND:** John Parrish.

**VOTE:** Unanimously in favor.

Jay Wilson will continue on the committee and John Parrish will invite Jim Goltz (California), Maiclaire Bolton (British Columbia) and possibly someone from the Canadian Geological Survey to participate on the committee. John will report back to the Board.

**Policy Recommendations Status – Board**

PR 07-4: *Seismic Provisions in the International Building Code*

**MOTION:** To send out PR 07-4 to the membership as presented by committee for a 60-day comment period (Vince Matthews).

**SECOND:** John Parrish.

**VOTE:** Unanimously in favor.

Mike Mahoney left.

PR 07-5: *Basin and Range Province Earthquake Working Group(s)*

**MOTION:** No motion.

The Board unanimously approved to send PR 07-5 to the WSSPC members.

PR 07-3: *Post-Earthquake Technical Clearinghouses*

Discussion: Ask the Basin & Range Province Committee to review it. The second and third sentences in the policy statement are really implementation actions and should be moved to that section. Every state ought to have a plan for a clearinghouse.

**MOTION:** No Motion.

The Board unanimously approved to send PR 07-3 to the WSSPC members.

David Applegate and Ed Laatsch left.

**Seismic Safety Commissions Meeting - Dick McCarthy on speakerphone**

At the Reno conference the goal of the commissions meeting is to improve working relationships, identify their status, major challenges, how to better share information, projects, legislation, and what has succeeded and failed.

The meeting is proposed for Wednesday afternoon October 3 with a working lunch. In April 2008 representatives from other commissions and councils can be invited through NESEC and CUSEC. The full Nevada and Utah commissions are meeting jointly in May for the first time.

The California Commission has \$6.7 Million for earthquake projects received from a settlement, which Dick would like to encumber for commission research. Dick will provide details later this spring.

A \$600-700K proposal of California OES is to conduct a social science research survey on the effectiveness of preparedness.

PR 07-XX (Renumbered as PR 07-6): *Post-Earthquake Information Management System*

Discussion will be deferred until tomorrow.

PR 04-6: Priorities for Applied Research on Earthquake Hazards

Let it lapse.

Meeting was adjourned until tomorrow.

**March 9, 2007**

**Present:**

Rick Allis, Utah Geological Survey

Jim Goltz, California Governor's Office of Emergency Services

Jack Hayes, National Institute of Standards and Technology

Vince Matthews, Colorado Geological Survey

Jon Price, Nevada Bureau of Mines and Geology

Patti Sutch, WSSPC

Jay Wilson, Oregon Emergency Management

**Call to Order and Introductions – Rick Allis**

All present introduced themselves.

**National Earthquake Hazards Reduction Program (NEHRP) Report – Jack Hayes**

The last reauthorization of NEHRP has driven events of the past year and half and in the 14 months since Jack Hayes became the NEHRP Director. The new Interagency Coordinating Committee (ICC), consisting of the Office of Science and Technology Policy (OSTP), Office of Management and Budget (OMB), and the 4 NEHRP agencies, met three times in the past year. The inclusion of OSTP on the ICC gave visibility of NEHRP to the Executive branch. The Committee is chaired by NIST Director Bill Jeffrey.

Already there is proof of positive outcomes –

1. Formerly agency representatives were not empowered to commit to anything. Now issues can be brought to the agency leaders and decisions that need to be made for the benefit of the program can be expedited.
2. The reauthorization mandated that a new advisory board be set up: Advisory Committee for Earthquake Hazards Reduction (ACEHR). Ninety (90) people were nominated for 15 positions on the committee. Different technical and geographical areas, state and local government, private sector are represented. The first meeting is in May at NIST.

ICC asked the ACEHR to come up with an organized set of priorities that can go into the Strategic Plan. A GAP analysis was performed on the plan. They looked at after action reports from Katrina but not much resulted from that because NEHRP is focused on mitigation.

The Strategic Plan will go through FY09, and then be overhauled in FY2010. John Filson and Ugo Morelli are helping him with the plan.

They want to complete ANSS, but there are not many opportunities to keep it going, and it may run out in 2008.

The state grants program is not healthy with DHS/FEMA – most of state grants have gone to terrorism rather than hazards. There are grants for existing buildings to evaluate or retrofit, but engineers find that building owners won't pay for anything without a mandate. They are looking at the social science to see what gets people to do mitigate.

Performance-based seismic design (PBSD) is not supported by a lot of research. Basic and applied research is needed.

The Strategic Plan will call for the creation of a post-earthquake data repository of reconnaissance information. NEES is starting that but they also want a repository maintained by practitioners.

NIST has had no earthquake research for 8 years and they are trying to get that re-started. NIST is supposed to supply the applied research. The NEHRP portion of the NIST budget is \$800K this year. The FY08 budget proposed is \$5.5M.

NSF has reduced funding to the Earthquake Engineering Research Institute (EERI), cutting their budget in half for academic studies of earthquakes. EERI will need to be selective about which earthquakes will have investigative teams. NSF's funding for the three engineering centers will end this fiscal year, making NEES their primary focus now.

Congress requires an annual report now; the report will be smaller and less flashy than the biennial report and will report the current and proposed NEHRP budget.

NEHRP legislation requires a coordinated budget each year. There is no growth in the NEHRP budget from FY07 to FY08. The NIST budget is \$125M in FY08; most growth will occur in the NEES operations and maintenance budget which is 40% of the total NEHRP budget.

Another priority of NEHRP is to have good scenarios around the country which could be used to educate people about earthquakes in urban areas. They plan to have a workshop on scenario development. Scenarios in California linking HAZUS and ShakeMap have driven exercises. The substantial number of scenarios on websites gets people's attention.

This summer they will have guidelines and standards to feed into building codes. Default values from HAZUS™, when they are low, don't drive spending on mitigation. Smaller states that use default inventories need to encourage local governments to collect the data on their building inventories.

Applications of earthquake early warning require parallel development of engineering and social science. It goes back to having robust seismic networks.

Pre-disaster recovery planning – NEHRP could give communities a road map for recovery. At the Cannon Beach forum, mitigation and recovery were tied in to land use planning and economic development.

## **Review of Final Agenda Items – Rick Allis**

2007 Reno Conference Opening  
2008 National Earthquake Conference Profit Sharing  
Policy Recommendations  
Final Strategic Plan  
New Business

### **2007 Reno Conference Opening – Board**

The opening session would include the NEHRP agency heads. Jack Hayes asked for a letter requesting his participation. Travel is a challenge, especially at that time of year, and he would like help on that. NSF also has very low budgets (about \$6000) for travel.

With further discussion, it was decided to switch the morning and afternoon session on the first day, so that the NEHRP agency heads would speak to the combined WSSPC-International Code Council audience. Mark Peterson could start off the morning technical session, followed by an EarthScope presentation.

### **2008 National Earthquake Conference Profit Sharing – Patti Sutch**

**MOTION:** To propose a 50-30-10-10 (CREW-WSSPC-CUSEC-NESEC) profit split for the 2008 National Earthquake Conference (Vince Matthews).

**SECOND:** Jay Wilson.

**VOTE:** Unanimously in favor.

### **Policy Recommendations - Board**

May 18 deadline to return comments to Patti

Draft PR 07-01 and 07-2 accepted, send out to members as is, new Tsunami Committee Chair will update (needs an Assessment Section).

Draft PR 07-3 accepted, Board suggests that second and third sentence be moved to the Facilitation and Communication section, send out to members.

Draft PR 07-4 accepted, send out to members (needs an Assessment section).

Draft PR 07-5 accepted, send out to members.

PR 04-6 and 04-7 let lapse.

Comments on PR 04-6 – Jack Hayes said it would be valuable to hold off until the NEHRP Strategic Plan is out and re-up the policy recommendation with revisions as appropriate in 2008.

Comments on PR 04-7 – The new Seismic Hazards Maps are coming out and the USGS has fulfilled the policy recommendation by putting explanations on their maps. The third paragraph is very relevant as to the need to not decrease standards. There is a concern about policy implications when new information may decrease the current standards. When the maps are final in 2008-09, the policy recommendation should be re-evaluated.

PR 07-XX (now numbered PR 07-6) accepted, send out to members (needs an Assessment section).

### **BREAK**

### **New Business – Patti Sutch**

Miguel Cruz from the Centers for Disease Control would like to make a presentation to the WSSPC Board about the work they are doing. The Board requested that Patti invite Miguel Cruz to the WSSPC Board meeting in June.

**Final Strategic Plan – Rick Allis**

The Board agreed to the final Strategic Plan as presented, with a question about the Board's decision to drop membership in National Emergency Management Agency (NEMA).

**MOTION:** To request a NEMA report twice a year from NEMA members on the WSSPC Board (Jim Goltz).

**SECOND:** Vince Matthews.

**VOTE:** Unanimously in favor.

The meeting was adjourned.

Respectfully submitted,

Patricia L. Sutch  
WSSPC Secretary