

**National Earthquake Hazards Reduction Program  
Advisory Committee on Earthquake Hazards Reduction  
National Institute of Standards and Technology  
Gaithersburg, Maryland  
June 12, 2015**

**Teleconference Meeting Summary**

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**Advisory Committee Members:**

Laurie Johnson, Chair	Laurie Johnson Consulting
Jane Bullock	Bullock & Haddow LLC
Craig Davis	Los Angeles Department of Water & Power
John Gillengerten	Consulting Structural Engineer
James Goltz	CA Emergency Management Agency
Nathan Gould	ABS Consulting
Lisa Grant-Ludwig	University of California, Irvine
Robert Herrmann	Saint Louis University
John Hooper	Magnusson Klemencic Associates
Ronald Lynn	Clark County (NV) Department of Development Services
Peter May	University of Washington
Jack Moehle**	University of California, Berkeley
Lori Peek	Colorado State University
Kenneth Stokoe**	University of Texas at Austin
Mary Lou Zoback**	Stanford University
Ralph Archuleta**	University of California, Santa Barbara; Ex-officio member of ACEHR as Chair of the U.S. Geological Survey (USGS) Scientific Earthquake Studies Advisory Committee (SESAC)

\*\* Not in attendance

**NEHRP ICC Member-Agency Representatives and NIST Support:**

Howard Harary	NIST, Engineering Laboratory (EL) Director and ACEHR Designated Federal Officer
Jason Averill	NIST, Chief, Materials and Structural Systems Division
Jack Hayes	NIST, NEHRP Director and ACEHR Alternate Designated Federal Officer
Ed Laatsch	FEMA, Chief, Building Science Branch
Joy Pauschke	NSF, Program Director, Engineering for Natural Hazards & Natural Hazards Engineering Research Infrastructure (NHERI)
Greg Anderson	NSF Program Director, EarthScope

William Leith	USGS, Senior Science Advisory for Earthquake and Geologic Hazards
Steve McCabe	NIST, NEHRP Deputy Director
Tina Faecke	NIST, NEHRP Secretariat
Felicia Johnson	NIST, NEHRP Secretariat

## **Summary of Discussions**

### **I. Review Meeting Goals and Agenda**

- a) Laurie Johnson, Chair of the Advisory Committee on Earthquake Hazards Reduction (ACEHR), welcomed attendees and asked Tina Faecke to call the roll of committee members and others in attendance.
- b) The purpose of the meeting was to review ACEHR's 2015 draft report on NEHRP effectiveness and receive general input from the ACEHR members. The draft report had previously been posted on the NEHRP web site and also displayed on a WebEx videoconferencing site accessed by the attendees. No real-time editing or wordsmithing was performed during this discussion.

### **II. Committee Review of Draft Recommendations**

The Chair led a section-by-section review of ACEHR's draft 2015 report on NEHRP effectiveness. ACEHR members decided at their April 9-10, 2015 meeting to submit a 2015 report in the comprehensive format used in 2008, 2010, and 2012, rather than in the shorter, interim format used in 2009, 2011, and 2013.

Committee members submitted drafts sections of the report to the NEHRP Office at NIST prior to the meeting. These submissions were then compiled into a single document for online viewing at the meeting. The Chair asked each of the section authors to join her in leading the committee through a review of each report section, focusing on the 20 ACEHR recommendations, and reviewed and approved or disapproved all comments or edits from the members during this discussion.

The Chair asked the committee for questions, comments, or suggestions related to the overall report and the consensus among the committee members in attendance was:

- to reduce the length of the overall draft report;
- to eliminate the redundancy;
- to identify clear "owners" for each recommendation; and,
- to ensure any directions or actions proposed by the committee are clear and implementable.

### ***Executive Summary Section***

The Chair will write this section once the committee's recommendations are settled and a revised draft resulting from this teleconference is developed.

### ***Introduction Section***

The Chair will embellish this section prior to the next teleconference. There was no discussion among the committee members on the text provided in this draft section.

### ***Important Developments since NEHRP's Enactment Section***

The consensus among the committee members in attendance was to reduce the text in this section and ensure its consistency with the *Emerging Trends and New Developments* appendix. The Chair will work with Jim Goltz to ensure consistency.

### ***Program Effectiveness and Needs Section***

#### **A. Future Directions for NEHRP**

Jack Hayes commented that in this and other sections of the report, it would be helpful to NEHRP if ACEHR would clarify whether the activities recommended should be undertaken in addition to or in lieu of current program efforts.

The committee focused on the two recommendations in this section and the consensus was to reverse the order of them so that the second one which is tied to the NEHRP reauthorization comes first. For the authorization recommendation, the members discussed trying to find a way to deal with the funding issues in the supporting text instead of in the specific recommendation. The members agreed that "Congress" should also be identified as well as other specific owners for each recommendation.

#### **B. Management, Coordination and Implementation of NEHRP**

##### **- Subsection on NEHRP Program Office**

The committee discussed moving up *Recommendation 5* from the FEMA section to the NEHRP Program Office section to emphasize that the building rating system is a topic that requires collaboration and coordination among all of the agencies (from research to implementation). The 2013 ACEHR report also included a recommendation to develop and implement a building performance rating system that can stimulate mitigation activities. Jack Hayes reminded the committee members about FEMA's response to ACEHR on the 2013 recommendation.

##### **- Subsection on Interagency Coordinating Committee (ICC)**

Committee members made an edit to both recommendations under this section to better define the NIST Director, as Chair of the ICC, as the owner for the recommendations.

##### **- Subsection on FEMA**

During the FEMA section discussion, the committee members considered distinguishing the recommendations based upon FEMA's missions (mitigation, state earthquake program, lifelines, and Hazus). An edit was made to FEMA *Recommendation 1* saying "reinvigorate" instead of "reinvest" efforts into their mitigation mission, and several members suggested changing the dollar figures to percentages. *Recommendation 2* was slightly modified to say "FEMA return to

a directly-funded...”. *Recommendations 3 and 4* were accepted by the members without change. *Recommendation 5* will be moved out of this section and into the NEHRP Program Office section (as noted above).

- Subsection on NIST

The assigned authors were asked to enhance the supporting text for *Recommendation 1* to give more direction on what the practicing engineers need. Members discussed that the Technical Briefs developed by the Applied Technology Council, under contract with NIST, may not be known to outside audiences which is a small part of what NIST does in terms of outreach. In response to this discussion, Jack Hayes offered to email a list of NEHRP/NIST reports and projects to the members following this meeting.

For *Recommendation 2*, the members agreed to provide more clarification on which specific research areas NIST needs to focus on less if other research areas identified by ACEHR are to be undertaken. Jack Hayes commented that it would be helpful to NIST if ACEHR would clarify what “geotechnical areas” should be increased for in-house and external research.

- Subsection on NSF

The consensus of the committee members for the first recommendation in this section was to revise the wording to reduce the emphasis on budgeting/accounting and increase the focus on the need to be more forward-looking and collaborative with the other agencies in setting targets and tracking what is NEHRP-related. *Recommendations 2, 3, and 4* were accepted by the members without change.

- Subsection on USGS

The consensus among the committee members in attendance was to keep the substance but reduce the volume of the introductory text in this section.

Robert Herrmann offered to revise *Recommendation 1* to emphasize that USGS work with NSF to ensure an effective transfer of the 160 new seismic monitoring stations and ensure that they will be maintained in the future. Lisa Grant-Ludwig and Robert Herrmann offered to revise *Recommendation 2* to say “operate an earthquake early warning system for the most seismically active regions” instead of “all seismically active regions”. The committee discussed reducing the length of the supporting test for *Recommendation 3* and strengthening the supporting text for *Recommendation 4*; however, both recommendations were accepted without change.

Concern was expressed by the members regarding the appropriateness of *Recommendation 5*. The committee discussed the operational earthquake forecasting issues and Lisa Grant-Ludwig offered to talk with Ralph Archuleta about SESAC recommendations. If she couldn’t acquire enough information about this issue and if it wasn’t addressed in the 2014 SESAC report, then the consensus was to strike this recommendation from the report. The members considered deleting or “downgrading” this recommendation and just including it in the evaluation/introduction to the USGS section or in the new trends/development section. Craig Davis offered to help work on this.

C. Appendix – Emerging Trends and New Developments

Jim Goltz will edit this section to remove redundancy and ensure consistency with the big themes in the opening sections.

**III. Public Input Period**

No members of the public registered with the NEHRP Office to provide input for this teleconference meeting, nor did any members of the public join the teleconference.

**IV. Adjournment**

The Chair asked the lead authors for each section of the draft report to email their revised final sections based on the day's discussion to her with a copy to Tina Faecke no later than July 17, 2015. She also asked the members to email any suggestions for additional text for the Appendix section to James Goltz.

The Chair asked Tina Faecke to poll the committee members on available dates for a follow-up conference call in August. She then adjourned the meeting at 3:17 p.m. EDT.