National Earthquake Hazards Reduction Program Advisory Committee on Earthquake Hazards Reduction

National Institute of Standards and Technology
Gaithersburg, Maryland
December 21, 2010

Conference Call Meeting Summary

Advisory Committee Members:

Chris Poland, Chair Degenkolb Engineers
Walter Arabasz University of Utah
James Beavers* University of Tennessee

Jonathan Bray University of California, Berkeley

Richard Eisner* Fritz Institute

James Harris J. R. Harris and Company

John Hooper Magnusson Klemencic Associates

Michael Lindell* Texas A&M University

Jack Moehle* University of California, Berkeley

Thomas O'Rourke Cornell University

Susan Tubbesing Earthquake Engineering Research Institute
Anne vonWeller Chief Building Official, Murray City, Utah

Yumei Wang Oregon Department of Geology and Mineral Industries

Brent Woodworth Global Crisis Services, Inc.

Mark Zoback Stanford University (SESAC ex-officio liaison)

NEHRP Member-Agency Representatives and NIST Support:

Charles Romine NIST, Acting Deputy Director

Shyam Sunder NIST, Engineering Laboratory Director,

ACEHR Designated Federal Official

Jack Hayes, Jr. NIST, NEHRP Director

David Applegate USGS

Tina Faecke NIST, NEHRP Secretariat
John Filson USGS, NEHRP Secretariat
Brian Garrett BRI Consulting Group

Summary of Discussions

I. Call to Order

Chris Poland, chair of the Advisory Committee on Earthquake Hazards Reduction (ACEHR), welcomed attendees to the conference-call meeting and reviewed the purpose of the session. At its last meeting in November, the committee decided to develop a written statement intended for

^{*}not in attendance

broad dissemination in connection with the upcoming bicentennial anniversary of the New Madrid earthquakes of 1811–12. The main points to be covered in the statement were outlined at the November meeting, and ACEHR members were assigned to prepare initial draft paragraphs about these points. Poland then worked with Jack Moehle to compile and edit the paragraphs into a draft statement that the committee could review and finalize during this conference call.

Tina Faecke conducted a roll call of committee members, and other attendees identified themselves. Shyam Sunder introduced Charles Romine, the acting Associate Director for NIST's Laboratory Programs, who will be liaising with ACEHR as the Principal Deputy of NIST Director Patrick Gallagher. Romine briefly described his background, which includes work at the Oak Ridge National Laboratory, the White House Office of Science and Technology Policy, and the NIST Information Technology Laboratory.

II. Committee Review of Draft New Madrid Bicentennial Statement

Poland asked the committee for their general comments on the draft statement, which was displayed for attendees via WebEx online conferencing technology. There was general agreement that Poland and Moehle had done an excellent job of combining the paragraphs drafted by members into a coherent whole that conveyed the message outlined by the committee in November.

The draft statement was comprised of two introductory paragraphs, eight numbered sections, and two closing paragraphs. Several members expressed concerns about the tone and content of the closing paragraphs. After considerable discussion, the committee moved the second-to-last paragraph forward, making it part of section 1, and replaced the final sentence of the last paragraph, in order to end the statement on a positive note.

Discussion followed about the appropriate audience for the statement. Sunder noted that, in accordance with the committee's charter, ACEHR findings and recommendations must be addressed to the director of NIST, who chairs the NEHRP Interagency Coordinating Committee (ICC). However, in forwarding the statement to the NIST director, ACEHR can explain that the statement is intended not only for the NEHRP agencies but also for broad dissemination among the earthquake-risk-reduction interests in the United States. The committee can also send copies of the statement to other specific addressees and present the statement at the New Madrid bicentennial observances.

Poland next led the committee through a detailed, top-to-bottom review of the draft statement. Individual ACEHR members had submitted review comments to Tina Faecke at NIST with a copy to the ACEHR chair in advance of the meeting, and these comments were incorporated into the posted draft document prior to the conference call. One member had submitted a revised version of the first paragraph, which was accepted by the committee. There was some debate about how explicitly the size of the investments that NEHRP has made in earth science and earthquake engineering should be characterized in the second paragraph, and the committee decided to describe this amount as "significant." Members also revised the final sentence of the second paragraph that introduced the numbered sections.

The committee combined two of the numbered sections that both dealt with building codes, reducing the total number of sections from eight to seven. In addition, several numbered sections were reordered, and several suggested revisions were debated, with some rejected and others accepted by the committee. In response to a member's suggestion, the lead-in sentence in each numbered section was recast into the active voice.

Members discussed how to describe the benefits and implications of the new, risk-targeted seismic design maps found in the American Society of Civil Engineers ASCE/SEI 7-10 standard. Although they agreed that these maps currently provide the best available measures of anticipated seismic risk, they also agreed that further consideration of the best use of these maps is warranted. The maps will be refined as additional data (e.g., cost-benefit data relating to seismic design) become available and as acceptable levels of risk are discussed and established by earthquake and design professionals in the New Madrid region.

After Poland made a final call for additional comments and none were forthcoming, the revised statement was accepted as final by the committee. There was general consensus that this session had succeeded in making improvements to a good initial draft document.

III. Adjournment

Before adjourning the conference call, Poland asked Sunder for advice on what should be included in the cover (transmittal) letter that will accompany the statement when it is sent to NIST Director Gallagher. Sunder advised that, on behalf of the committee, Poland could relate how the statement came about and inform Gallagher that the findings and recommendations in the statement are intended not only for distribution to the NEHRP agencies, but also for broad dissemination by those agencies to the earthquake community. He also advised that Poland could offer to discuss the statement at the next ICC meeting, and could work through the NEHRP Secretariat to arrange for distribution and/or presentation of the statement at the New Madrid bicentennial kickoff on February 11, 2011.

A member asked whether the statement could be sent to the New Madrid-area design and geoscience professionals who made presentations to ACEHR at its November meeting. Sunder replied that these and other regional professionals are likely to be included in the NEHRP listsery, one of the channels through which NIST will disseminate the statement. The committee can also ask the NEHRP Secretariat to send copies of the statement to specified recipients.

Poland stated that he would draft a cover letter for review by Sunder. Romine thanked the members for their careful editing and their understanding of the sensitivities involved in the issues covered by this statement. Poland then adjourned the call, wishing happy holidays to all.