### National Earthquake Hazards Reduction Program Advisory Committee on Earthquake Hazards Reduction National Institute of Standards and Technology Gaithersburg, Maryland January 5, 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
Thomas O'Rourke*	Cornell University
Paul Somerville	URS Corporation
Susan Tubbesing	Earthquake Engineering Research Institute
Anne vonWeller	Chief Building Official, Murray City, Utah
Yumei Wang	Oregon Department of Geology and Mineral Industries
Sharon Wood	University of Texas at Austin
Brent Woodworth	Global Crisis Services, Inc.
Mark Zoback*	Stanford University (SESAC ex-officio liaison)

\*not in attendance

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

Shyam Sunder	NIST, Building and Fire Research Laboratory Director, ACEHR Designated Federal Official
Jack Hayes	NIST, NEHRP Director
John Filson	NEHRP Secretariat
David Applegate	USGS
Joy Pauschke	NSF
Tina Faecke	NIST, NEHRP Secretariat
Brian Garrett	NEHRP Secretariat

# **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 at 1:00 p.m. eastern time and outlined his agenda for the meeting.

## II. Roll Call

Tina Faecke identified the ACEHR members, NEHRP member-agency representatives, and support staff who were participating by telephone. Some, but not all, of the attendees were able to connect to the accompanying NIST WEBEX session via the Internet to view the document under discussion and the edits inserted during the session by Faecke. The document, which had been distributed to the committee and posted on the NEHRP Web site in advance of the meeting, comprised a cover letter addressed to NIST Director Patrick Gallagher and an accompanying draft white paper entitled, "Achieving National Disaster Resilience through Local, Regional, and National Activities." Poland drafted this document using statements that he had solicited and received from multiple ACEHR members. The NEHRP Secretariat organized these statements into a single, 19-page compilation that had also been distributed to committee members.

### **III. Cover Letter**

Shyam Sunder noted that the draft document had been reviewed by the legal staff at NIST, who expressed concern about the wording of the cover letter. Given that ACEHR's chartered role is to advise the chair of the NEHRP Interagency Coordinating Committee (NIST Director Gallagher), the legal staff indicated that it would not be appropriate for the committee to ask Dr. Gallagher to act as an ACEHR liaison to the White House Office on Resilience. However, ACEHR could advise Dr. Gallagher of the synergistic benefits that may accrue from collaboration between NEHRP and the Office on Resilience, and offer the white paper as ACEHR's thoughts on potential areas for collaborative policy making. Poland said that he would work with NIST to revise the cover letter in a way that addresses these concerns. One committee member suggested that perhaps some of the language used in the letter could be moved into the white paper.

#### **IV. White Paper**

#### Overall Impressions of the Paper's Organization, Completeness, and Level of Detail

Poland began the discussion about the draft white paper by asking attendees for any general comments they might have. One member suggested that the paper contains too much technical jargon and observed that it confounds earthquake resilience and disaster resilience. Other members agreed that an effort should be made to strip out jargon and use plain English throughout the paper. There also appeared to be a consensus that, as much as possible, the broader term "disaster resilience" should be used. In addition, a member noted that the nouns

"resilience" and "resiliency" are both used in the paper and suggested that it may be better to use one or the other.

Several members acknowledged the difficulty of picking and choosing among the large amount of good information contained in the compilation of members' statements. They praised the job that Poland had done in distilling this compilation into the 3½-page draft white paper. There was general agreement that Poland had selected the right kinds of information, in the correct amounts, to include in the paper. Members liked the focus on recommended actions in the final section of the paper. Some felt that the paper's introduction could be strengthened by making it more "punchy" or hard-edged (e.g., by noting that a devastating earthquake could have a worse impact than did Hurricane Katrina). Poland asked Jonathan Bray to draft a revised introduction for review by the committee, and to try to retain the language about how U.S. communities generally are quite resilient to most natural disasters.

One member sought clarification on what the committee is asking for through this white paper. Poland responded that the paper is aimed at a federal audience, specifically the White House Office on Resilience, and therefore the bulleted items in the final section of the paper are intended to convey what ACEHR would like to see the federal government pursue at the national level.

A member suggested emphasizing that efforts to strengthen resilience need to be integrated into the activities of all federal agencies, not just the activities of the four NEHRP agencies. It was also suggested that the paper articulate the importance of fostering information sharing and collaboration across agencies in the pursuit of disaster resilience. Another member cautioned that the paper seems to suggest that currently, communities in the United States either are or are not disaster resilient, when in reality all communities are resilient to varying degrees.

#### **Revisions to the Final Section on Recommended Actions**

Following up on the suggestion about the importance of agency collaboration, the committee added the following draft bullet: "Foster cross-agency communication, collaboration, and coordination on community resiliency programs."

Several members cited the following clause as being particularly important: "a line item at a level comparable to that used for research needs to be added to the President's budget." It was decided that the sentence containing this language should be moved to the beginning of the bullet in which it resided.

An attendee suggested that the committee consider and clarify NEHRP's relationship to or role in the recommended actions. For example, do these actions fall within the program's current portfolio of activities, or would they expand the work of the program? Poland stated that all of the actions are related to the work of NEHRP, and that the revised introduction needs to make that clear.

Several topics were identified as receiving sufficient attention in earlier sections of the paper but not enough attention in the final section on recommended actions. These included (1) strengthening adoption and enforcement of up-to-date building codes, (2) mitigating existing

dangerous or "killer" buildings, and (3) increasing the resilience of lifelines. Members discussed whether these activities should be addressed in new or existing bullets. It was decided that lifelines should be addressed in a new bullet as follows: "Promote and incentivize resilient and reliable lifeline services during extreme conditions to maintain critical services and our quality of life." The committee felt that, in regard to building codes and dangerous buildings, the most significant role that the federal government could play would be in incentivizing action among state and local governments and the private sector. It was therefore decided to incorporate these topics into the first bullet, which advocates the provision of "increased and targeted incentives."

There was some discussion about the distinction between killer buildings and dangerous buildings and which of these characterizations should be used in the paper. Most of the attendees agreed that, because the buildings most urgently in need of mitigation are those that are prone to collapse (killer buildings), as opposed to those associated with incidental life-safety concerns, the more emotive term "killer buildings" should be used.

The committee deleted some existing language and rejected some suggested language as being redundant (e.g., additional language about public education, an existing bullet about requiring mitigation in exchange for disaster assistance), too esoteric (e.g., new language about refocusing codes from life-safety to performance-based standards), or too specific or detailed (e.g., additional language about extending the National Flood Insurance Program's community rating system to earthquakes and other hazards). In regard to the specificity of the language included in the recommended actions, most members felt that it should remain relatively general and that the inclusion of specific policy recommendations was not appropriate, both because such recommendations could not be addressed comprehensively in a paper of this size, and because the intent of this paper is simply to initiate an ongoing dialogue with White House resilience staff, in the course of which specifics can later be addressed.

A member suggested that the bullet asking for a study on the costs and benefits of investments in resilience should acknowledge the 2005 study conducted by the Multihazard Mitigation Council (MMC). At Poland's request, Brent Woodworth revised this bullet to request both a study on private-sector investments in resilience, which would complement the MMC's study on public-sector investments, and a study on public- and private-sector investments in the resilience of critical infrastructure and lifelines.

Several members suggested that the final bullet, regarding federal interaction with individual states, be made more specific or forceful. In response, the committee inserted several revisions developed by Walter Arabasz.

#### Revisions to the Section on the Current Status of Disaster Resilience

Members supported the revisions to this section that had been suggested in advance of the meeting by Anne vonWeller. Several other minor revisions were also suggested by various members to fine tune the language in this section, and were inserted into the draft.

# V. Adjournment

Poland asked that the NEHRP Secretariat insert into the white paper all of the edits made by the committee at this meeting, then distribute the resulting version to the committee. He requested that members review this version and submit any further revisions to him (cpoland@degenkolb.com) and Tina Faecke (tina.faecke@nist.gov) within a week. Poland and Faecke will then prepare a final draft for review by the committee and determine whether another conference call is warranted. Poland also noted that he would revise the cover letter as discussed and forward a new version of the letter to Faecke.

Regarding the timing of ACEHR's next face-to-face meeting, which will focus on the committee's annual report to the director of NIST, Faecke reported that the majority of members have indicated that they are available for March 15 and 16. Michael Lindell and Brent Woodworth added that these dates would also work for them, and Anne vonWeller said that these dates may work for her, too. The meeting will be held in the vicinity of Washington, D.C., but the specific location is yet to be determined due to the unavailability of NIST meeting space on those dates.