National Earthquake Hazards Reduction Program (NEHRP) Advisory Committee on Earthquake Hazards Reduction (ACEHR)

National Institute of Standards and Technology

Gaithersburg, MD September 23, 2019

Webinar Meeting Summary

Meeting Attendance

Advisory Committee Members

Glenn Rix, Chair Geosyntec Consultants, Inc

Lucy Arendt St. Norbert College
Jane Bullock Bullock & Haddow, LLC
Greg Deierlein Stanford University

Susan Dowty International Code Council

Nathan Gould ABS Consulting

Ryan Kersting Buehler & Buehler Structural Engineers, Inc.

Keith Koper University of Utah, Salt Lake City Lisa Grant-Ludwig University of California, Irvine

NEHRP Member-Agency Representatives and NIST Support

Howard Harary NIST/EL Director
Jason Averill NIST/EL/MSSD Chief

Luciana Astiz NSF Program Director, Division of Earth Sciences

Tina Faecke NIST/EL/MSSD, NEHRP Program and Management Analyst, and **Designated**

Federal Officer

Katherine Johnson NIST/EL/MSSD, Earthquake Risk Mitigation Policy Analyst

Steven McCabe NIST/EL/MSSD, NEHRP Director

Steve Potts NIST/EL/MSSD, NWIRP Program and Management Analyst

I. Opening

Faecke opened the meeting at 3:06 pm and conducted roll call, confirming the quorum requirement was satisfied. Rix affirmed the purpose of the meeting was to finalize and approve the ACEHR 2019 Biennial Report.

Rix said the only changes he made to the previous draft report and the version being reviewed during this meeting was a reorganization of the Appendix on New Knowledge and Technologies and the addition of an Executive Summary. Rix initiated discussions with the three formal recommendations, which he argued were the most important part of the report.

II. Draft Report Discussion

Recommendation #1: NIST, FEMA, NSF, USGS, and the Program Office, coordinating through the ICC, should ensure that adequate resources are devoted to developing the Strategic Plan required by the Act and should report to ACEHR on progress toward completing the Strategic Plan. ACEHR is committed to providing review comments on drafts of the Strategic Plan, when appropriate, for consideration by the agencies and Program Office.

The Committee readily agreed to the language in the first recommendation. Deierlein confirmed the term "NEHRP Office" replaced the term "NEHRP Secretariat" in previous reports. Rix said he would add a footnote to the first occurrence within the report.

Recommendation #2: NIST, FEMA, NSF, and USGS should take leadership roles in engaging with state and local agencies and professional organizations to foster consensus on issues related to development and implementation of functional recovery requirements.

Rix reported that he added this recommendation based on a suggestion from Deierlein. Bullock thought it was an excellent addition. She asked who would develop and implement "functional recovery requirements". Rix said the first step is for NIST and FEMA to convene the Committee of Experts. McCabe added that development and implementation must involve entities beyond the NEHRP agencies, such as The International Code Council (ICC), the State of California, and other federal agencies. Rix added the NEHRP agencies can play a leadership role in fostering consensus, and the ICC can play a significant role in bringing these organizations together. Bullock added there is a need to coordinate with Federal agencies, in addition to state and local agencies. There was a consensus to insert "Federal".

Koper had some concerns about the way functional recovery appeared to be emphasized and not balanced against other Program efforts in the report. Public Law (PL) 115-307 assigned functional recovery to NIST and FEMA but should be a recommendation for all four agencies. Deierlein challenged that suggestion, saying there's a lot of research that needs to be done for functional recovery, including defining the hazard level for functional recovery, and potentially developing a new set of hazard maps, all of which would be led by USGS. Koper was also concerned that the report would not engage the geophysics community, as they're interested in earthquake early warning (EEW), and the Advanced National Seismic System (ANSS) etc. and the report did not balance those topics against the emphasis on functional recovery. He recommended further that the Executive Summary say more about EEW and ANSS which were topics highlighted in PL 115-307.

<u>Recommendation #3:</u> ACEHR endorses the initiative from the Program Office to structure future ACEHR meetings in a manner that focuses on the implementation of the Strategic Plan at a programmatic rather than agency level and recommends that it be implemented as soon as practical.

The full Committee was in favor of this recommendation.

Appendix

Rix did not change any of the text in the body of the draft report but based on suggestions from Grant-Ludwig he reorganized the text and added section headings Bullock and Arendt concurred the social science section is a really important piece.

Executive Summary

Overall, the Committee liked the summary. Based on several comments from the Committee to highlight the technological advances, Rix revised the first sentence of the second paragraph by adding "technologies" to the other contributions.

Faecke suggested the Public Law 115-307 reference be changed to Public Law 108-360, as amended.

General Comments

Rix tried to highlight the numerous accomplishments of NEHRP over the years by citing various documents throughout the report. Rix will review the list of references to ensure it is inclusive.

Rix critiqued the 2009-2013 NEHRP Strategic Plan as having "no specific or measurable goals or objectives to ensure unified Program planning and agency interactions". Harary encouraged the ACEHR to continue to make such observations and recommendations so they can be addressed during the update.

Faecke suggested removal of "ICC" as an abbreviation for the Interagency Coordinating Committee to avoid possible misperception with the International Code Council.

III. Report Adoption

Bullock motioned to adopt the draft report in full, as modified. The motion was seconded by Arendt. Koper opposed, no-one abstained, and all other members voted in favor of adopting the report.

Rix will finish formatting the report and will formally submit it to Faecke by COB, Wednesday, September 25, 2019.

IV. Meeting Closure

Faecke adjourned the meeting at 4:34 pm.