

State of California
Seismic Safety Commission

Memo

To: Seismic Safety Commissioners

From: **Richard McCarthy**
Seismic Safety Commission
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Date: May 2, 2016

Subject: Update on the Napa Earthquake Research Project

Background

The project was approved by the Commission at the meeting of October 9, 2014 in San Francisco.

Dr. Laurie Johnson, PEER, was assigned as the principal assistant researcher for the project and contracting was finally completed and work began in mid-July 2015.

Project Brief and Status Update: The Pacific Earthquake Engineering Research Center (PEER) has worked cooperatively with a wide variety of organizations, companies and governmental entities over the past six months to synthesize and analyze observations and studies resulting from the South Napa earthquake. The intent of this work is not to develop a compendium of all information known about the South Napa earthquake but to convey specific findings and identify recommended actions to be considered by the California Seismic Safety Commission, as well as other governmental and private sector entities, to better prepare for and mitigate earthquake hazards and risks in California. Particular attention has been given to identifying:

- Success stories where current policies worked well and as intended;
- Best practices implemented before and following the South Napa earthquake that might be considered for adoption by other jurisdictions and organizations;

- Issues related to existing policies and mitigation practices that were not as successful as desired and where further refinement may be needed;
- Issues that were previously unanticipated and where new policies might be developed; and
- Research and other studies that might be needed to develop, assess, and validate new policies and practices.

PEER was also asked to review relevant and transferable lessons from other recent earthquakes that have occurred in California, Japan, New Zealand and elsewhere in recent years and to also consider how scientific, engineering and technological advances of the last few decades affected emergency response and recovery following the 2014 South Napa earthquake, including (but not limited to) earthquake detection and notification, disaster damage assessment, seismic performance standards for structures and infrastructure, and recovery coordination and management.

While waiting for contract approval, preliminary work was undertaken in early 2015 to gather documents and develop a working list of relevant policy topics. In late July, PEER met with a small group from the CSSC and reviewed a working list of potential policy topics, documents and other informational resources, contacts, and report format. PEER then conducted a series of interviews with federal and state agencies involved in response and recovery following the 2014 South Napa earthquake to gather additional insights and refine the policy topics. PEER also analyzed an array of documents collected including: post-earthquake reconnaissance reports; more in-depth post-earthquake investigations of geotechnical issues, as well as infrastructure, structural and non-structural performance; after-action reports prepared by federal, state and local agencies and lifeline operators; local government meeting minutes and program documentation; and newspaper accounts.

The Commission held a workshop on March 9, 2016 to discuss

and review draft recommendations to be included in the final report. Dr. Johnson incorporated the Commission's recommendations into the report along with the draft findings.

Recommendation

A copy of the Final Draft is provided for the Commission's review. Dr. Johnson will present her summary to the Commission at the May 12 meeting. Staff recommends that the Commissioners review and provide comments on the final draft and be ready to identify 3 priority recommendations from the final 10 included in the report. Staff recommends that the Commission give its direction to the staff and approve the report.