

State of California  
Seismic Safety Commission

Memo

To: Seismic Safety Commissioners

From: Henry Reyes, Staff Structural Engineer  
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Subject: Fire Following Earthquakes – Phase II  
Project Title: *Coordinated Planning and Preparedness for  
Fires Following Earthquakes*

**Background**

Fire following earthquake (FFE) is a significant problem in California. To address this problem, Charles Scawthorn of the Pacific Earthquake Engineering Research Center (UC Berkeley) will review the PEER project Year 1 finding that the capacity of many cities vis-à-vis the demands that multiple simultaneous post-earthquake fires will place on those supplies is poorly understood. PEER identified three measures to improve this situation: Development of a standardized California portable water supply system (PWSS); possible development of a saltwater high pressure system for the Los Angeles Metropolitan Area (Los Angeles and Orange counties), to be used in conjunction with the PWSS; and development and deployment of neighborhood equipment container caches, for use by NERT, CERT and other volunteers, to enhance their currently very limited post-disaster firefighting capability. Year 2 of the project has developed draft performance target goals for post-earthquake firefighting water supply. The goals have several key elements: (1) quantify each jurisdictions' fire and water demands given a major earthquake, (2) develop a Fire Following Earthquake Water Supply Plan (the "Plan") which specifies how post-earthquake firefighting will be conducted, including specifics as to post-earthquake water sources and conveyance; (3) exercise of the Plan, and (4) publication of quantitative estimates of the burnt areas given the Plan's implementation. PEER is currently working with key water and fire agencies to refine these goals.

**Progress Update**

PEER started work on the project on January 1, 2012. Conducting the study for PEER is Dr. Charles Scawthorn, a visiting scholar at PEER, as the lead researcher. End date is June 30, 2013.

Dr. Scawthorn will present a progress update on the project