

# EERI Seminar on Next Generation Attenuation (NGA) Models

Online registration will be available by mid-July.

Save the date!

**Oakland: September 2 ▪ Seattle: September 3 ▪ Salt Lake City: September 10 ▪ Los Angeles: September 11**

.7 CEUs (Continuing Education Units) will be awarded to participants upon completion of the seminar.

A permanent record of CEU credits will be maintained at the EERI office.

An EERI Technical Seminar funded by FEMA

**WHO SHOULD ATTEND:** Both structural and geotechnical engineers interested in the implications for engineering practice of the recently developed next generation attenuation (NGA) models

The NGA models were developed during the NGA Relations Project initiated by the Pacific Earthquake Engineering Research (PEER) Center in 2003. The project was conducted over a five-year period to update the ground motion predictive equations (GMPEs) for shallow crustal earthquakes in the western United States and similar active tectonic regions. The expansion of the strong motion database for large earthquakes at near-field distances provided an opportunity to significantly improve previous ground

motion models. The NGA database can be used in many earthquake research and applications projects. The NGA models have been used in the draft 2007 USGS National Hazard Maps. The use of these models has resulted in significant decreases in the hazard maps as well as in site-specific studies. Although these models are considered a significant advancement in ground motion prediction, their use has been controversial. The results of the NGA Program are combining with other efforts by the Building Seismic Safety Council in the NEHRP Provisions update to be completed this year. This NEHRP update will impact seismic design code and standards development likely resulting in significant changes to future editions of the seismic demand requirements of ASCE 7.

## PRELIMINARY PROGRAM

### Overview of NGA

*Yousef Bozorgnia, Pacific Earthquake Engineering Research Center (PEER)*

### USGS National Seismic Hazard Maps

*Mark Petersen, U.S. Geological Survey*

### Using USGS Hazard Maps for ASCE-7 Seismic Design

*Charles Kircher, Kircher & Associates*

### USGS Risk-Based Maps

*Nicolas Luco U.S. Geological Survey*

### Example Application of NGA Models in Practice: Bay Area Rapid Transit (BART)

*Norman Abrahamson, Pacific Gas & Electric Company*

### Example Application of NGA Models in Practice: Building Sites

*Ivan Wong, Paul Somerville, or C.B. Crouse, URS Corporation*

### Example Application of NGA Models in Practice: Loss Estimation

*Mohsen Rahnema, Risk Management Solutions*

### Panel Discussion

*Panel Discussion with above speakers*

### Design Ground Motion Library (DGML) Package

*Robert Youngs, AMEC Geomatrix*

### Using and Comparing NGA Models: A New Excel File of Models

*Norman Abrahamson, PG&E*

### Ongoing and Future Tasks in NGA Program

*Yousef Bozorgnia, PEER*

### Panel Discussion

*Q&A and Panel Discussion with above speakers*

## SEMINAR LOCATIONS

### Wednesday, September 2, Oakland 8 am-5 pm

Jewett Ballroom, Marriott Oakland City Center, 1001 Broadway, Oakland, CA 94607

### Thursday, September 3, Seattle, 8 am-5 pm

Regency Ballroom, Hyatt Regency Bellevue, 900 Bellevue Way NE, Bellevue, WA 98004-4272

### Thursday, September 10, Salt Lake City, 8 am-5 pm

Alpine Ballroom, Hilton Salt Lake City Center, 255 South West Temple, Salt Lake City, Utah, 84101

### Friday, September 11, Los Angeles, 8 am-5 pm

Meridian Ballroom Level, Marriott Los Angeles Airport, 5855 West Century Blvd., Los Angeles, CA 90045

### Seminar Organizing Committee

Yousef Bozorgnia, Pacific Earthquake Engineering Research Center

James Malley, Degenkolb Engineers

Ron Mayes, Simpson Gumpertz & Heger, Inc.