

## Ground Motion Hazard in Stable Continental Regions

Special Session at SMiRT 2013



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### SMiRT Special Session: Ground Motion Hazard in SCR

- **International**
- **Characterization of seismic sources  
in Central & Eastern US (CEUS)**
- **NGA-East**

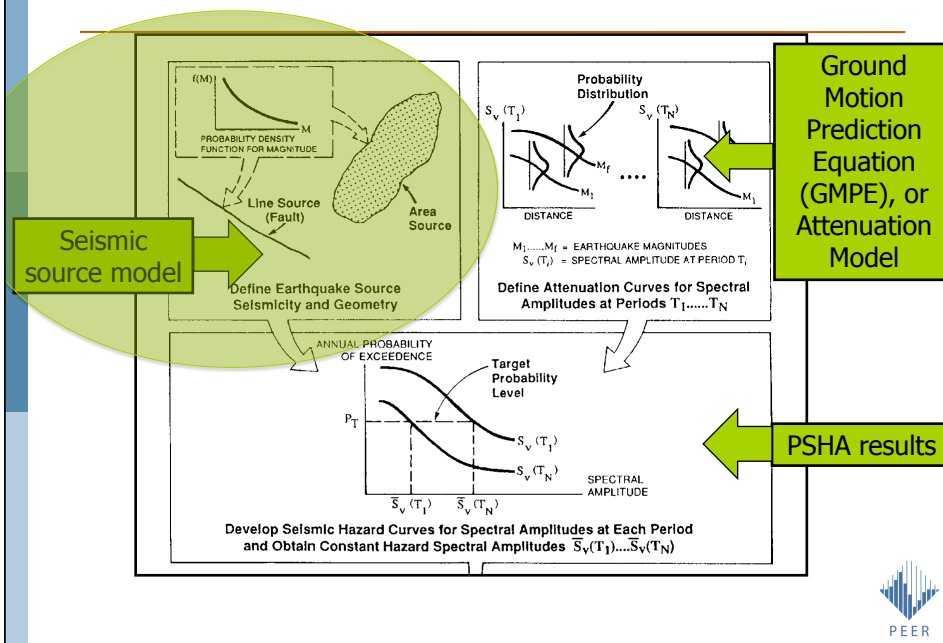


## International Presentation

- Lessons learned from the seismic hazard assessment of NPPs in Switzerland
  - Dr. Philippe Renault
  - Swissnuclear
  - Consistent with “SSHAC Level 4” process



## Probabilistic Seismic Hazard Analysis (PSHA)

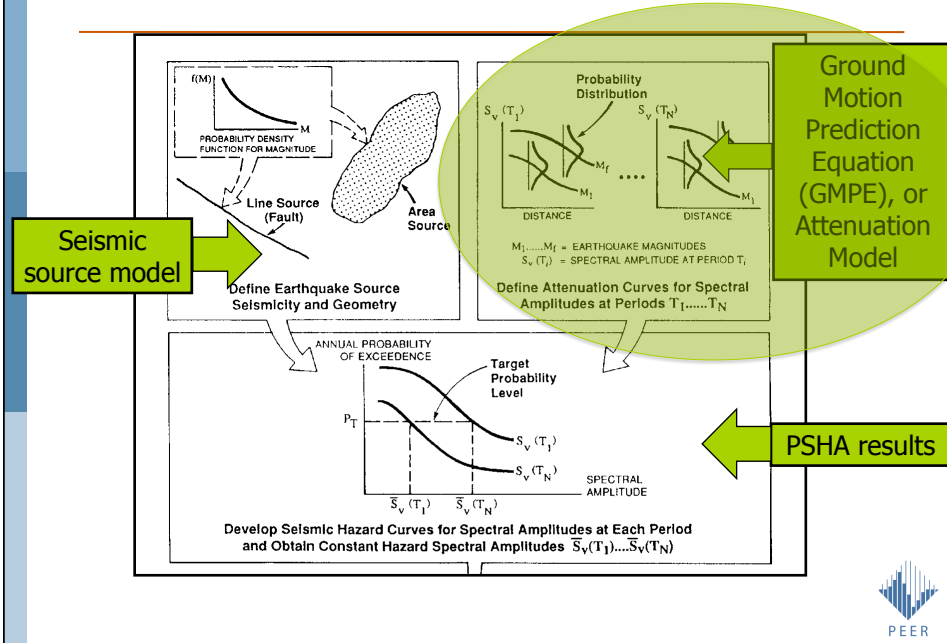


## Seismic source characterization in CEUS

- Larry Salomone and Kevin Coppersmith
- SSHAC Level 3 project
- Funded by:
  - Electric Power Research Institute (EPRI)
  - US Nuclear Regulatory Commission (NRC)
  - US Department of Energy (DOE)

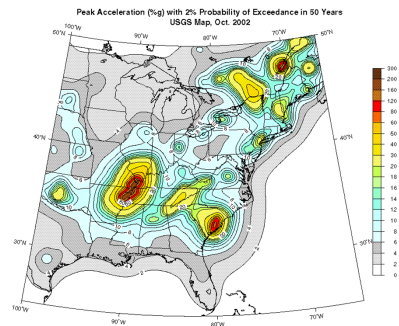


## Probabilistic Seismic Hazard Analysis (PSHA)



## NGA-East

- Goal: To develop next generation Ground Motion Prediction Equations (GMPEs) for Central & Eastern US
- Sponsored by: **NRC, EPRI, USGS, DOE**
- Coordinated by: **PEER**



## NGA-East

- Several speakers to cover various aspects of the project
  - Christine Goulet
  - Norm Abrahamson
  - Chris Cramer
  - Albert Kottke
  - Walter Mooney
  - Martin Chapman
  - Rob Graves
- NGA-East is a SSHAC Level 3 project



## SSHAC process

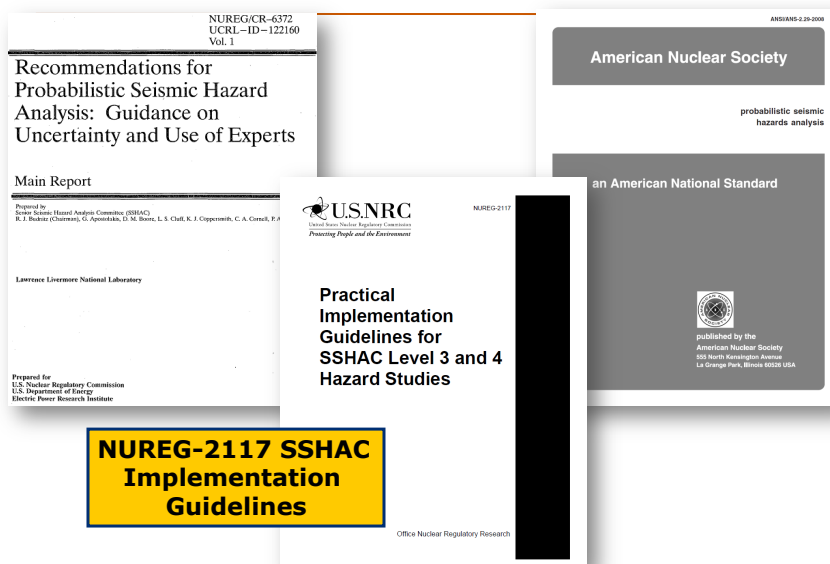
- Procedures defined by the **Senior Seismic Hazard Analysis Committee (SSHAC)**
- The goal is to represent the **center, body, and range** of technically defensible interpretations

Courtesy: Kevin Coppersmith

- Level 3 & Level 4
- Both CEUS Seismic Source Characterization and NGA-East are SSHAC Level 3 projects



## SSHAC Guidelines and Guidance



Courtesy: Kevin Coppersmith



## **Finally, at the last segment of the Special Session**

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- We will have a panel discussion on all issues covered during the day

**THANK YOU!**

