

Appendix A

Workshop on Extreme Ground Motions at Yucca Mountain

BACKGROUND

Monday, August 23, 2004

- 0900 Tom Hanks: The Workshop on Extreme Ground Motion at Yucca Mountain
- 0920 Ivan Wong: Overview of the probabilistic seismic hazard analyses of Yucca Mountain
- 1000 Norm Abrahamson: Ground-Motion Methods and Results for the 1998 PSHA
- 1040 Break
- 1100 Gabriel Toro: Seismic Hazard De-Aggregation and Ground-Motion Sensitivities for Yucca Mountain
- 1140 Art McGarr/Leon Reiter: Bounds on PGV at the Yucca Mountain Repository Based on Earthquake Source Constraints/NWTRB Perspective on Extreme Ground Motions
- 1220 Lunch
- 1330 Norm Abrahamson/Julian Bommer: The PEGASOS Project, Methods and Results/The Use of Empirical Data, Numerical Simulation and Expert Judgment to Define Upper Bounds on Ground Motions: Insights from the PEGASOS Project
- 1430 Jerry King: Peak Ground Velocities for Seismic Events at Yucca Mountain, Nevada
- 1510 Break
- 1530 Charles Fairhurst and Mark Board: Fundamental Considerations Relating To The Strength of Rock
- 1630 Discussion

SOURCE EXCITATION

Tuesday, August 24, 2004

- 0830 D.J. Andrews: Deterministic Modeling of Physically-Limited Ground Motion
- 0910 Peter Cundall: Fully nonlinear modeling of dynamic transmission in rock
- 0950 Chris Scholz: Strength of Faults and Maximum Stress-Drops in Earthquakes
- 1030 Break
- 1050 Paul Somerville: Physical Constraints on Upper Bound Ground Motions
- 1130 Greg Beroza: A Stochastic Approach to Predicting Source Effects on Extreme Ground Motion
- 1210 Lunch
- 1300 John Anderson: Large-amplitude PGA's and PGV's, and arms stress drop variability
- 1340 Jim Dewey: *mb* vs *M_w* in the Search for High Stress-Drop Earthquakes

1420 Julian Bommer: Outliers in Strong-Motion Datasets

1440 Break

1500 Mark Zoback: Direct observations of stress magnitudes and stress drops at depth

1540 Art McGarr: Source properties of mining-induced seismicity

1620 Discussion

1900 Dinner at Il Fornaio

PROPAGATION AND TRANSMISSION

Wednesday, August 25, 2004

0830 Dave Buesch: Geologic Evidence for Limited Ground-Motion Damage in the Topopah Spring Tuff, Yucca Mountain, Nevada

0910 Joe Whelan/Dave McCallen : Petrographic Evidence of Past seismicity From Secondary Mineral Deposits in the Unsaturated Zone at Yucca Mountain Nevada

0950 Branko Damjanac: Rock mechanics analysis of absence of seismic damage in lithophysal units

1030 Break

1050 Bill Foxall: Extreme Ground Motion Recorded in the Near-Source Region of Underground Nuclear Explosions

1130 Jim Brune: Precarious rocks and precipitous slopes at Yucca Mountain

1210 Lunch

1300 John Stuckless: Caves, speleothems, and excavations in seismically active areas Potential geomorphology of large slip events near Yucca Mountain

1340 John Whitney: Character of faulting at Yucca Mountain, local and regional

1420 Dave Schwartz: Character of faulting in the Basin and Range Province

1500 Break

1520 Discussion: Recommendations for research