



UNR EERI Student Chapter Presents

2009 EERI Distinguished Lecture

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***The State of the Practice of seismic Hazard Analysis:
From the Good to the Bad***

Abstract:

The presentation will review the state of the practice of seismic hazard analysis and development of design time histories. The practice of seismic hazard analysis varies tremendously from poor to very good. The large variability in practice is not simply a reflection of project budgets; a large variation exists for similar scale projects. Although the basic methodology for seismic hazard analysis has been well established, there remains widespread misunderstanding of the basic concepts that contribute to poor practice. Some of the most common misunderstandings and common aspects of bad practice will be described. The aspects of good practice that should be expected for low-end and high-end studies will be summarized.

For the development of design time histories, the state of the practice is more variable than for seismic hazard analysis. Key aspects such as how representative time histories are selected and how they are modified (by scaling or by spectral matching) vary tremendously based on the opinions of the project participants or reviewers. In most cases, these opinions are based "comfort" level rather than objective technical criteria. Examples showing the large range of quality of current practice will be shown. The state of the practice for developing time histories will not improve until objective quantitative criteria are developed to judge the appropriateness of non-stationary aspects of the proposed time histories for the particular project.

**When : Friday May 29th @ 11:00 am
HREL 109 Pizza will be served**