



U.S. NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

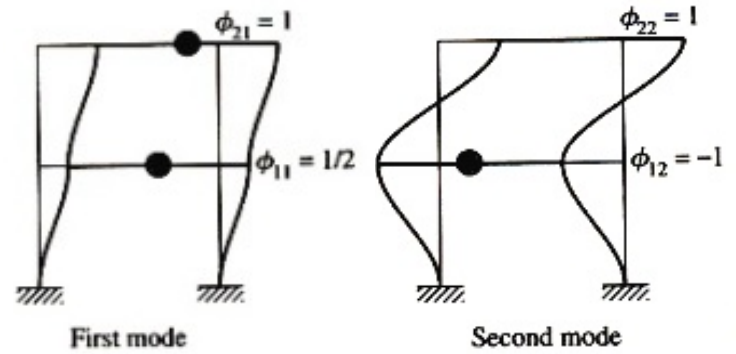
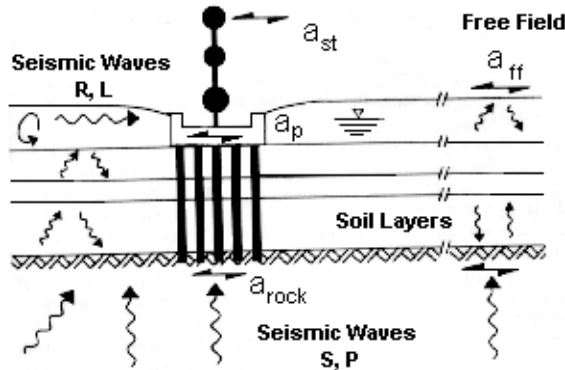
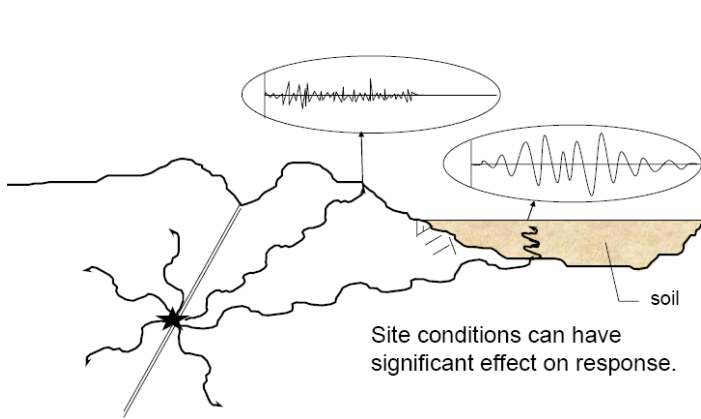
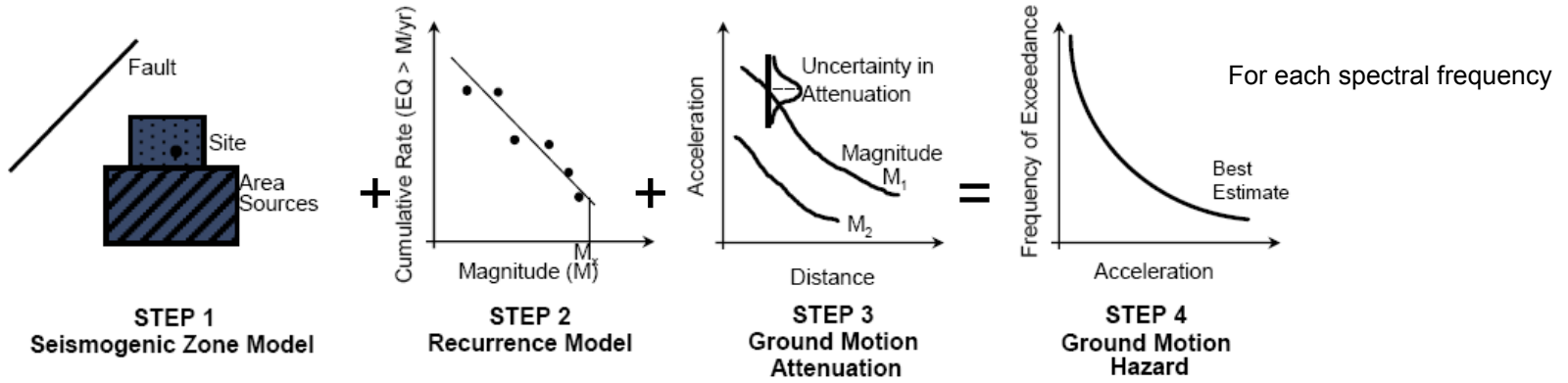
Current Research Programs and Initiatives Related to Siting

RIC Conference
New Reactor Siting Safety Review Panel
March 2008

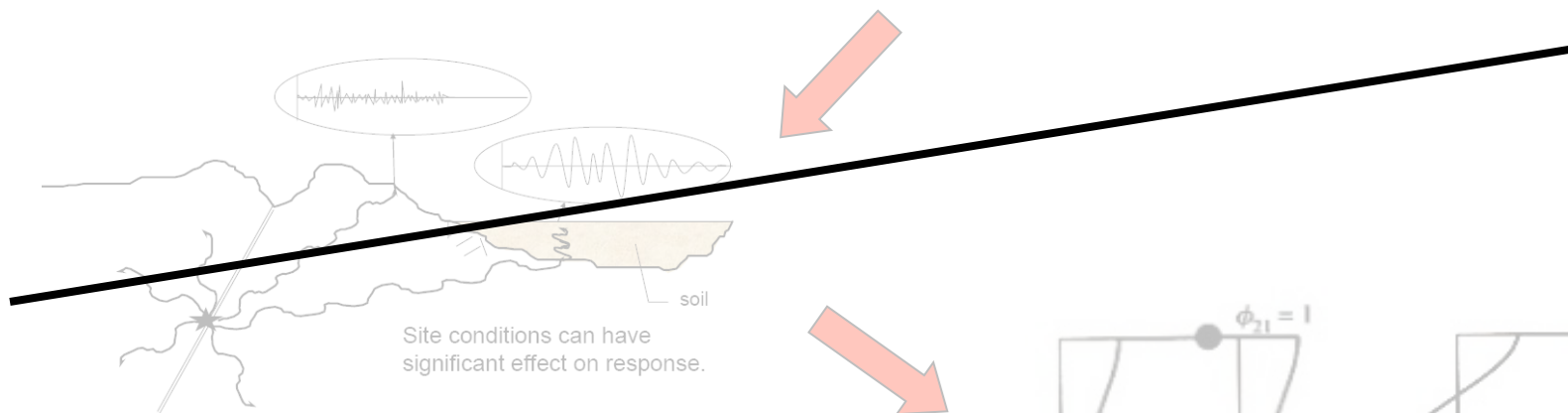
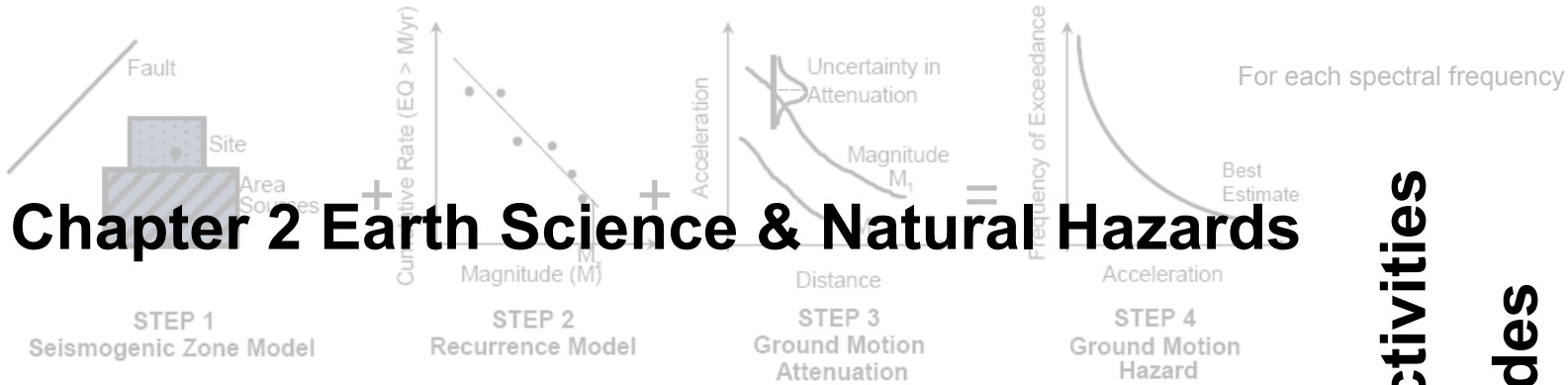
- Publicly available research plan
- Targeted on regulatory needs
 - Developed with NRO, NRR & NMSS
 - Efforts in many research areas to be coordinated with industry
- Developed to both push forward the science and the level of regulatory stability
- Incorporation of performance-based approaches

Program Overview

- Both short- and long-term topics
- Systematic & integrated approach
- Cost effective
- Highest Quality

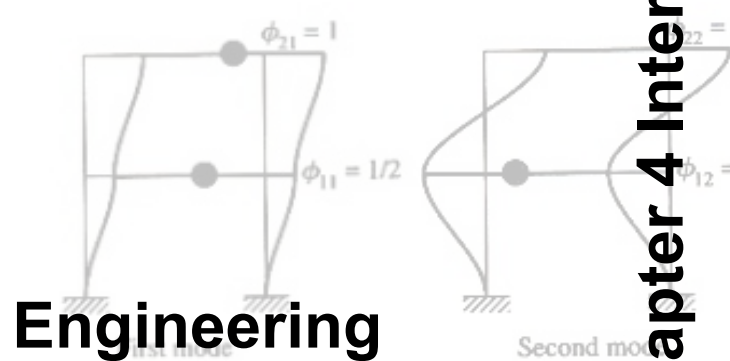
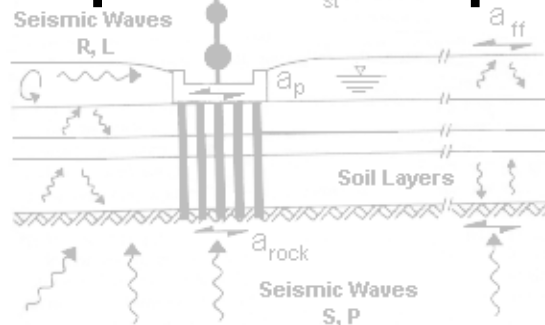


Chapter 2 Earth Science & Natural Hazards



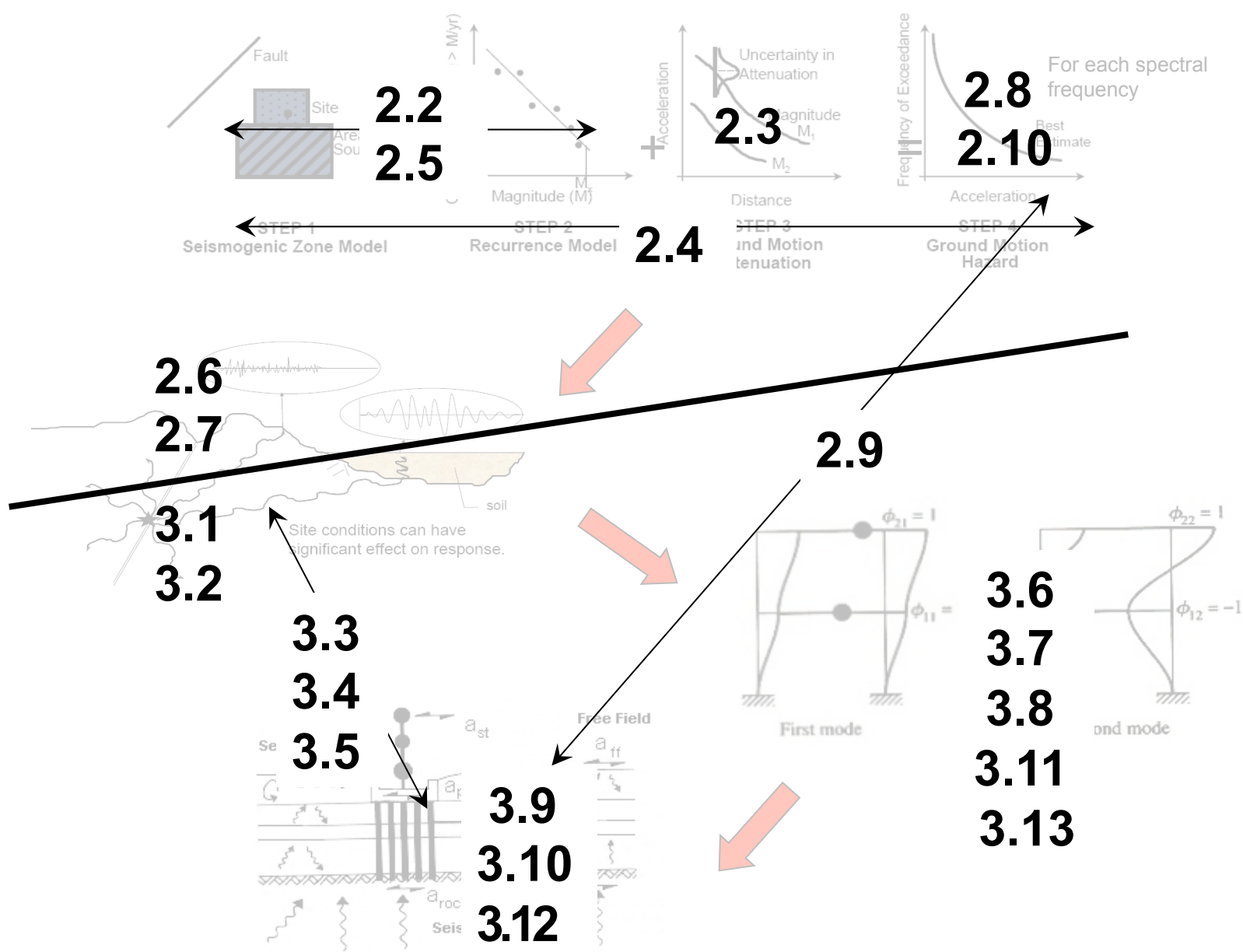
Site conditions can have significant effect on response.

Chapter 3 Earthquake Engineering



Chapter 4 International Activities

Chapter 5 Regulatory Guides



Short, medium and long term projects

Integrated Planning for Multidisciplinary work

Opportunities for Collaboration

- EPRI database update
- NGA-East ground motion prediction relations updates
- Investigation of seismic sources in the CEUS
- SSHAC practical application workshops



- Continued tsunami source development with USGS
- First Phase USGS report available to public
- Continued development of modeling capabilities with USGS and NOAA

Other Siting Topics

- Update of Meteorological Topics
 - Tornados
 - Hurricane surge and wind speed
 - Precipitation
- Update of Regulatory Guide 1.59 on flooding assessment
 - Tsunami
 - Flooding assessment methods
 - Meteorological information

1.100 Electrical & Mechanical

1.122 Floor Design Spectra

1.12 Seismic Instruments-Plants

3.17 Seismic Instruments-Waste Facilities

1.59 Flooding