ATC/BSSC REGIONAL TRAINING SEMINAR:
NEHRP GUIDELINES FOR THE SEISMIC REHABILITATION OF BUILDINGS
(FEMA 273)
Salt Lake City
November 19th and 20th, 1998

Program

Thursday, November 19, 1998, 1:00 p.m. - 7:00 p.m.

1.	**Introduction** Seminar purpose and agenda; guidelines development process and participants; seminar handouts; companion volumes	1:00 p.m.	Moderator: Newland Malmquist, SEAU
2.	**Issues in Seismic Rehabilitation** Seismic deficiencies, as exemplified in past earthquakes; nonlinear response of components and systems; need for nonlinear analysis, evaluation of example buildings, illustrating deficiencies; corrective measures; cost of rehabilitation.	1:15 p.m.	Lawrence Reaveley
3.	**Overview of the Guidelines—New Seismic Hazard Maps** Purpose; relation to other documents; signi-ficant new features—performance levels, rehabilitation objectives, systematic and simplified rehabilitation, and new analysis procedures; consideration of historic buildings; process flow chart; new hazard maps.	2:00 p.m.	William Holmes
Break		***2:45 p.m.***	
4.	**Simplified Rehabilitation—Overview and Example Applications** Brief overview; process and criteria for choosing simplified rehabilitation; determination and design of corrective measures; example applications.	3:00 p.m.	William Holmes
5.	**Systematic Rehabilitation—In-Depth Discussion** Process for choosing systematic rehabilitation; determination of seismic site hazards and as-built conditions; selection of rehabilitation objective; determination of rehabilitation strategy; selection of seismic elements; general design requirements; design verification; use of new technologies, such as seismic isolation and energy dissipation.	3:45 p.m.	Lawrence Reaveley
6.	**Structural Dynamics—Concepts and Basics for Implementation of Systematic Rehabilitation** Basics of structural dynamics, capacity and demand concepts; pushover analysis; simpler methods of analysis; loading combinations; soil yielding.	4:25 p.m.	Jack Moehle
Dinner		***5:10 p.m.***	
7.	**Systematic Rehabilitation—Modeling and Analysis** In-depth description of linear static, linear dynamic, nonlinear static, and nonlinear dynamic procedures; procedures selection criteria; use of knowledge factor; computer modeling issues; acceptance criteria.	5:40 p.m.	Jack Moehle

Friday, November 20, 1998, 1:00 p.m. - 7:00 p.m.

8.	**Day 2 Introduction** *Guidelines* status and future development (BSSC case studies, ASCE prestandard).	1:00 p.m.	Newland Malmquist
9.	**Systematic Rehabilitation—Foundations and Geotechnical Considerations** Identification of site soils and seismic hazards; mitigation of site seismic hazards; evaluation of foundation strength and stiffness; soil foundation rehabilitation.	1:10 p.m.	Lawrence Reaveley
10.	**Rehabilitation of Nonstructural Components** Procedural steps; interaction of structural and nonstructural components; analytical and prescriptive procedures; behavior of and acceptance criteria for various types of nonstructural components.	1:50 p.m.	Christopher Arnold
Break		***2:30 p.m.***	
11.	**Systematic Rehabilitation—Examples of Applications to Steel Buildings** Discussion of steel building types, project issues and scope using the process flow chart; initial considerations; historic building status and implications; determination of as-built conditions, including archaic conditions; selection of rehabilitation objective; confirmation of seismic deficiencies; selection of rehabilitation strategy; selection and application of analysis procedures; rehabilitation design development and verification using component acceptance criteria.	2:45 p.m.	Lawrence Reaveley
12.	**Systematic Rehabilitation—Examples of Applications to Masonry Buildings** Discussion parallel to that for steel buildings (see item 11 above).	3:45 p.m.	Daniel Abrams
Dinner		***4:30 p.m.***	
13.	**Systematic Rehabilitation—Examples of Applications to Concrete Buildings** Discussion parallel to that for steel buildings (see item 11 above).	5:00 p.m.	Jack Moehle
14.	**Systematic Rehabilitation—Examples of Applications to Wood Buildings** Discussion parallel to that for steel buildings (see item 11 above).	6:00 p.m.	John Coil

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