ATC-72

Proceedings of Workshop on Tall Building Seismic Design and Analysis Issues

Prepared by

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in collaboration with

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Preface

In October 2006, the Applied Technology Council (ATC) began work on a contract assisting the Pacific Earthquake Engineering Research Center (PEER) in developing guidelines for the seismic design of tall buildings as part of the PEER Tall Buildings Initiative. The purpose of this work was to prepare recommended guidelines for modeling the behavior of tall building structural systems and acceptance values for use in seismic design. Shortly thereafter, ATC secured additional funding on behalf of PEER from the Federal Emergency Management Agency (FEMA), through the Building Seismic Safety Council (BSSC) of the National Institute of Building Sciences, to conduct a workshop in support of this effort. This additional funding was allocated to the specific task of identifying and prioritizing seismic design and analytical challenges related to tall buildings, which were to be addressed by the eventual recommended guidelines.

The purpose of the *Workshop on Tall Building Seismic Design and Analysis Issues* was to solicit the opinions and collective recommendations of leading practitioners, regulators, and researchers actively involved in design, permitting, and construction of tall buildings. The outcome of this workshop is a prioritized list of the most important tall building modeling and acceptance criteria issues needing resolution, based on the discussion of the multi-disciplinary stakeholders in attendance. This list will be used as the basis for future work in developing recommended guidelines for tall building design as part of the PEER Tall Buildings Initiative.

ATC gratefully acknowledges the work of the PEER/ATC-72 Task 7 Project Core Group, including Jim Malley, Greg Deierlein, Helmut Krawinkler, Joe Maffei, Mehran Pourzanjani, and John Wallace, for their efforts in planning and conducting this workshop. The affiliations of these individuals are included in the list of Workshop Participants provided in Appendix A.

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Table of Contents

Pro	eface		iii
Lis	st of Fig	gures	vii
Lis	st of Tal	bles	ix
1.	INTRO	ODUCTION	1
	1.1	General	1
		Pacific Earthquake Engineering Research Center Tall	
		Buildings Initiative	2
		Issues in Tall Building Design	
	1.4	Workshop Purpose	5
2.	PRE-V	WORKSHOP ACTIVITIES	7
		Workshop Planning	
		Development of PEER Task 7 Scope of Work	
	2.3	Identification and Invitation of Workshop Participants	8
	2.4	Collection of Pre-Workshop Issues	8
3.	WOR	KSHOP PROGRAM	9
		Workshop Format and Agenda	
		Workshop Description	
4.	WOR	KSHOP FINDINGS AND CONCLUSIONS	13
	4.1	Breakout Group 1 Report on Foundation Modeling/Base	
		Transfer Issues	13
		Breakout Group 2 Report on Capacity Design Issues	
		Breakout Group 3 Report on General Structural Issues	
		Breakout Group 4 Report on Shear Wall Issues	
		Prioritization of Issues	
	4.6	Use of Workshop Findings and Conclusions	17
Αŀ	PENDI	X A WORKSHOP PARTICIPANTS	19
Αŀ	PENDI	X B PLENARY PRESENTATIONS	23
Αŗ	plied T	echnology Council Projects and Report Information	63
Ar	plied T	echnology Council Directors	83

List of Figures

Figure 3-1	Agenda - Workshop on Tall Building Seismic Design	
_	and Analysis Issues, January 30, 2007, San Francisco,	
	California 11	

List of Tables

Table 4-1	Highest Priority Tall Building Modeling and Acceptance Criteria Needs	.16
Table 4-2	Intermediate Priority Tall Building Modeling and Acceptance Criteria Needs	.17
Table 4-3	Lower Priority Tall Building Modeling and Acceptance Criteria Needs	.18