



ACI Committee 376

Concrete Structures for Refrigerated Liquefied Gas (RLG) Containment

Agenda

Sunday, March 26, 2006

8:30 AM – 2:00 PM

Westin Charlotte Hotel GRAND BALLROOM A

4:00 PM – 5:00 PM

Convention Center 211B

Monday, March 26, 2006

1:00 PM – 6:00 PM

Convention Center 206A

Charlotte, NC

1. **CALL TO ORDER and APPROVAL OF AGENDA** (approx. 10 min.)
2. **INTRODUCTIONS** (approx. 15 min.)
3. **APPROVAL OF MINUTES** (approx. 15 min.)
Minutes of the Kansas City meeting from November 2, 2005.
4. **ANNOUNCEMENTS** (approx. 20 min.)
 - A) **Upcoming Events:** ACI Spring - Charlotte Sessions and SP on "Concrete Containment Structures for Cryogenic Liquids: Current Needs and Recent Developments."
 - B) **FUTURE TECHNICAL SESSIONS:** Suggestions

Alan Hatfield: “*Design and Construction of LNG Full Containment Concrete Tanks in the US Market*,” Denver 2006.

- C) **Review of Committee Policies:** Requirements for voting members – 2 missed-votes limit (*ACI Technical Committee Manual, paragraph 1.8*).

5. TASK GROUP STATUS AND REPORTS

- A) Recap of Task Group membership (please see Appendix B).
- B) Recap of balloting procedures: Letter Ballot Summary (*ACI Technical Committee Manual, paragraph 4.3.7 and 4.5*).
- C) Report from Task Group chairs on draft sections and Letter Ballot results.

Chapter 1 – General Pawski (*approx. 20 min.*)
 The chapter is currently being developed. The chapter outlines the scope of the document and provides definitions. The remaining work includes matching listed definitions with what is actually used in other chapters. This requires the other chapters to be essentially in their final form. These tasks were assigned during the Kansas City meeting. Their status will be reviewed during the Charlotte meeting.

BREAK approx. 10:00 to 10:15 A.M.

Chapter 2 – Materials and Tests Berner (*approx. 5 min.*)
 The chapter has been completed, balloted and approved. The Committee Chair needs to make sure that ACI is notified of the approval of this chapter.

Chapter 3 – Design loads Krstulovic (*approx. 5 min.*)
 The chapter has been completed and re-balloted. The major part of the chapter has been approved. The ballot received 19 affirmative votes, 6 affirmative votes with comments, one negative vote, and 1 abstained vote. Five voting Members failed to vote on this ballot. The ballot met all the ACI requirements. Comments are presently being addressed and corresponding paragraphs will be re-balloted in the near future.

Chapter 4 – Minimum Performance Criteria Krstulovic (*approx. 90 min.*)
 The chapter has been completed and re-balloted. The major part of the chapter has been approved. Two latest re-ballots were recently completed: (1) paragraph 4.1.1, and (2) the rest of the chapter.
 1) The first ballot received 19 affirmative votes, 2 affirmative votes with comments, one negative vote, and 4 abstained votes. Six voting Members failed to vote on this ballot. The ballot satisfied all the ACI requirements.
 2) The second ballot received 16 affirmative votes, 7 affirmative votes with comments, no negative votes, and 4 abstained votes. Five voting Members failed to vote on this ballot. The ballot satisfied all the ACI requirements. Comments will be **reviewed and voted** on during the Charlotte meeting.

Break approx. 11:00 to 11:05 A.M.

Chapter 5 – Load factors and strength reduction factors Krstulovic (*approx. 0 min.*)
 The chapter is being developed. Voting on this chapter is pending approval of Chapter 4.

BREAK approx. 12:00 to 12:30 A.M.

Chapter 6 – Analysis and Design Hoptay and Praveen (*approx. 30 min*)
 Chapter 6 has been recently balloted. Some comments and questions have been provided as a part of the balloting process. The issues should be relatively easy to address and, most probably, should not warrant any changes in the seismic sections.

Chapter 7 – Detailing Rushing (*approx. 5 min*)
 The chapter is currently being developed.

Break approx. 1:15 to 1:20 P.M.

Chapter 8 – Foundations Allen (*approx. 5 min*)

The task group has completed approximately 50% of the chapter.

Chapter 9 – ConstructionMash (*approx. 5 min*)

The chapter is currently being developed.

Chapter 10 – CommissioningHatfield (*approx. 40 min*)

The chapter has been balloted. 4 members have provided additional comments. The latest comments and ballot results be reviewed and, if necessary, **voted on** during the ACI 376 committee meeting.

Intermission and **CHANGE of ROOMS**

2:00 to 4:00 P.M.

Appendix B – Offshore GBSHjortset (*approx. 20 min.*)

The appendix has been completed and balloted. A total of 16 affirmative votes, of which 7 were with comments, and 1 negative vote with comments were received. 9 members abstained from voting and 6 members did not vote. Comments are presently being addressed and corresponding paragraphs will be re-balloted in the near future.

6. LIAISON REPORTS**7. NEW BUSINESS****8. ADJOURNMENT**

Respectfully submitted,
Neven Krstulovic
Chairman, ACI 376

cc: D. W. Falconer (*TAC Secretary and Managing Director of Engineering*)
M. McInerney
C. S. Hanskat (*TAC Contact Member*)

Appendix I: Task Group Assignments

Task Gr.	CHAPTER	Allen	Arvedlund	Berner	Blackman	Carino	Douglas	Geigel	Hanskat	Harger	Hatfield	Hjortset	BP	Hoffmann	Hoptay	Howe	Jiang	Krstulovic	Legatos	Lewis	Malhotra	Mash	Mast	Meier	Outtrim	Pawski	Rajan	Rushing	Schupack	Sullivan	Tanner	Thompson	Wu	Yao	Totals	
01	1, A											X							X							X										4
02	/											X		X				X	X							X			X						6	
03	2			X					X	X			X	X				X	X			X					X			X				X	11	
04	3, 4, 5	X							X	X		X	X				X	X	X			X				X		X					X		12	
05	6 Eq								X	X		X			X		X	X			X					X								X	10	
06	7								X			X					X	X			X							X						X	7	
07	8	X										X			X				X			X				X				X	X	X	X	10		
08	9								X	X	X								X			X			X	X			X	X	X			10		
09	10										X							X				X					X							4		
10	11																	X	X															2		
11	B											X				X								X									X	4		
12	-												X					X																X	2	
TOTAL		2							5	4	2	7	2	3	2		4	6	11			5			2	6	2	3		6		3	2	5		

X = Task Group "Chair"

TASK GROUP LEGEND:

- 01 = General [including Scope; Definitions; Types of tanks (Appendix A)]
- 02 = Literature search & other resources
- 03 = Materials & tests (including corrosion protection)
- 04 = Design loads; Load factors & strength reduction factors; Performance criteria
- 05 = Analysis and design
- 06 = Detailing
- 07 = Foundations
- 08 = Construction
- 09 = Commissioning
- 10 = Bibliography
- 11 = Appendix B - Offshore structures (GBS)
- 12 = NFPA Liaison