ACI SUBCOMMITTEE 350-E MEETING AGENDA

TO: J. ARDAHL (VICE-CHAIR) S. CLOSE C. GENTRY C. HANSKAT K. HARVEY

K. JACOBSON

D. KOHL N. LEGATOS S. MARQUES D. MCCARTHY (SECRETARY) L. MRAZEK N. PRACHAND

S. SACHDEV

FROM: RAMON LUCERO

DATE: MONDAY NOVEMBER 06, 2006

LOCATION: ADAM'S MARK HOTEL, DENVER, CO, ROOM: DIRECTORS F

TIME: 1:00 PM – 6:30 PM

1. <u>CALL TO ORDER</u>

- a) Subcommittee Roster and Attendance
- b) Approval of North Carolina Meeting Minutes
- c) Correspondence

2. OLD BUSINESS

- a) Continue review of suggested deletions and relocations needed to incorporate the circular wire and strand wrapped pre-stressed concrete appendix into the main body of the Code (Proposals by Sal marques and Steve Close)
- b) Updates to Chapters 16 19 of current ACI 350.XX based on revisions done in ACI 318-05
- c) It is not clear that the "cracking load" is not the same as the load which causes "Mcr", which is defined on page 91, lines 18-19 as "moment causing flexural cracking at section due to externally applied loads". (See also equation (11-11), page 95.) This is because the "cracking load" includes "fd", the "stress due to unfactored dead load, at extreme fiber of section where tensile stress is caused by externally applied loads", which is not an "external load", and is not included in Mcr.

Erroneously using Mcr instead of (Mcr + Md) for the "cracking load" is unconservative.

Suggestion: Add an equation, phi x Mn is greater or equal to 1.2(Mcr + Md), where Md is defined as the moment resulting from fd.

- d) Add at the end of the sentence on page 252, line 13: "Relief valves must be of such design as to close tight when the hydrostatic pressure is relieved in order to prevent pollution of the groundwater."
- e) Revise minimum thickness for monolithic concrete and shotcrete, as well as for pre-cast concrete, to be consistent with Section 19.2.7. Also, clarify whether the 2 inch thickness for the outer shell of a ribbed dome only applies to un-reinforced elements otherwise increase this thickness.

Reason: A dome roof is a shell and should meet the code requirements already defined for shells. The code should not have inconsistencies for similar elements covered in different sections. For ribbed domes, I feel that 2 inches is too thin to provide adequate corrosion protection if the section is reinforced.

f) Revise required concrete cover at reinforcement in shells/domes to be consistent with Section 7.7.

Reason: A dome roof is a shell and should meet the code requirements already defined for shells. The code should not have inconsistencies for similar elements covered in different sections.

g) Revise minimum cover for membrane slabs to be the same as specified for slabs on grade.

Reason: In my opinion, 1" cover is too low for slabs in EECS.

- h) In Appendix section G.3.1: Replace "4 in" with "5 ³/₄ in". Concrete cast on earth requires a minimum of 3 in. of cover (7.7.1(a)) under the reinforcement and another 2 in. of cover (7.7.1(b)) over it.
- i) In Appendix section G.3.1: Replace "5 in" with "5 1/4 in". See section 7.7.3.1
- j) In Appendix Section G.3.1: Replace "6 in" with "7 in". See section 7.6.2

3. <u>NEW BUSINESS</u>

- a) Balloting procedure.
- b) List of major changes between ACI 350-01 and the new ACI 350-06 by end of the year.
- c) Nick has requested to become a Consulting Member

4. <u>REPORTS</u>

a) Prepare report for Wednesday's session of the full 350 Committee

5. <u>ADJOURN</u>