

# API Ballot Summary Sheet

3/22/2005

**Ballot: 16-05: 650-598, Appendix E-Seismic Design of Storage Tanks**

**AMS ID: 618**

**Start Date:** 1/24/05

**Closing Date:** 3/14/05

**Associate:** Roland Goodman

**Coordinator:** Valeen Young

**Proposal:**

## Vote Results

<u>Voter</u>	<u>Company</u>	<u>Comments</u>	<u>Vote Results</u>			
			<u>Affirmative</u>	<u>Negative</u>	<u>Abstain</u>	<u>Did Not Vote</u>
134629	Nelson Acosta	HMT Inspection	No	X		
131617	Joel Andreani	Equity Engineering Group, Inc., The	No	X		
38921	Robert Annett	Alyeska Pipeline	No			X
73074	Ronald Bailey	American Tank & Vessel, Inc.	No	X		
136219	Mark Baker	Baker Consulting Group, Inc.	No	X		
142888	Chris Bashor	Minnesota Pollution Control Agency	No	X		
134681	Ernie Blanchard	IMC-Phosphates	No	X		
109375	Jerry Boldra		No			X
22200	Dan Boley	DJA Inspection Services	No	X		
134782	Steve Caruthers	Tank Consultants, Inc.	No			X
7127	Earl Crochet	Kinder Morgan	Yes		X	
142685	Domingo de Para	ExxonMobil	No	X		
133403	Jeffrey DeArmond	BP p.l.c. Whiting Refinery	No	X		
146748	Terry Delong	Terasen Pipelines (USA) Inc.	No			X
135965	Kenneth Erdmann	Matrix Service Company	Yes	X		
105011	David Flight	Dow Chemical Company	No			X
134870	Laurence Foster	Marathon Ashland Petroleum LLC	No	X		
134880	John Fumbanks	Pond and Company Inc.	No			X
115033	Alan Geis	Colonial Pipeline Company	No	X		
83689	Ty Hagen	Hagen Engineering International, Inc.	No	X		
136619	Robert Hendrix	Voridian Engineering & Construction	Yes	X		
70596	Marty Herlevic	James Machine Works, Inc.	No	X		
93133	Randy Kissell	TGB Partnership	Yes	X		
81918	Manfred Lengsfeld		No			X
135014	John Lieb	Tank Industry Consultants, Inc.	No	X		
136274	Thomas Lorentz	AEC Engineering, Inc.	Yes		X	
135072	Francis Maitland	Quense LLC	No	X		

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78399	David Martin	Conservatek Industries, Inc.	No	X		
113545	James McBride	Petrex, Inc.	Yes		X	
139045	Craig Meier	ConocoPhillips	No			X
137255	Carl Mikkola	Enbridge Energy Partners. L.P.	Yes	X		
131185	Douglas Miller	Chicago Bridge & Iron Company(CB&I)	No	X		
69609	Bhana Mistry	TIW Steel Platework	No	X		
83736	John Mooney		No	X		
92212	George Morovich	TEMCOR	No	X		
136286	Philip Myers	ChevronTexaco Corporation	No	X		
132210	David Nasab	Kellogg Brown & Root	No	X		
82544	John Oleyar	HMT, Inc.	No			X
5193	Richard Pinegar	Cargill Inc.	No	X		
102412	Roy Ralph	Petro-Canada	No			X
135169	Michael Richardson	International Paper	Yes		X	
73744	Bruce Roberts		No	X		
101360	Marilyn Shores	Sunoco Logistics	Yes		X	
126019	Larry Speaks	Mass Technology Corporation	No	X		
134314	Tearle Taylor	Flint Hills Resources	No	X		
134325	Donald Thain	Shell Global Solutions (US) Inc.	No			X
145034	Leith Watkins	Explorer Pipeline Company	No	X		
145896	Alan Watson	A.R. Watson, USA	No	X		
132209	Richard Whipple	Fluor, Inc.	No			X

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	<u>Affirmative</u>	<u>Negative</u>	<u>Abstain</u>	<u>Did Not Vote</u>
<b>Balloting Totals:</b>	<b>32</b>	<b>1</b>	<b>4</b>	<b>12</b>

<b>Total Responses:</b>	<b>37</b>			
<b>Total Ballots:</b>	<b>49</b>			
<b>Response Rate :</b>	<b>65%</b>		Must be > 50%	
<b>Approval Rate:</b>	<b>97%</b>		Must be > 67%	
<b>Consensus:</b>	<b>YES</b>			

**API Template for Ballot Comments and Resolution**

Ballot ID: 618	Date: March 22, 2005	Document: <b>Ballot 16-05: 650-598</b>
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#	(1) Voter/ Commenter	(2) Company	(3) Section No. (e.g. 3.1)	(4) Type of comment	(5) Comment (justification for change)	(6) Proposed Change	(7) Comment Resolution
1	Carl Mikkola	Enbridge Energy Partners. L.P.		Technical	This is a new process.	To help the user of this appendix, I recommend that an example problem be included in the appendix.	
2	Thomas Lorentz	AEC Engineering, Inc.	Commentary	Technical	I will vote affirmative the proposed Appendix E - when the commentary is included in the ballot.	Please include the very important commentary for ballot.	
3	Robert Hendrix	Voridian Engineering & Construction	E.1	Editorial	Since ASCE 7 comes in a number of editions, it seems appropriate to acknowledge the earliest version of ASCE 7 that the methodology of this appendix parallels.		
4	Robert Hendrix	Voridian Engineering & Construction	E.1 Scope and E.6.2	Technical	Are we absolutely certain that by specifically asserting that Appendix E is ASD that it is compatible with the previously adopted load combinations that were derived from Strength Design load combinations and "adjusted" to historical tank design practice by a correlation factor? I fear the appearance of mixing apples and oranges. Kissel and Myers explanation of the new load combinations suggested that the ASCE strength design seismic load as about 1.5 times the current Appendix E allowable stress seismic load. The approved load combination was "adjusted" for (1.5)(.7E) and rounded off to 1E. Do we still think that the factor is 1.5 larger than the "new" Appendix E loads? The ASD load combinations prohibits increasing the allowables such as is done in E.6.2 and E.6.2.1.2. Is it OK to seave such a statement in Appendix E? Where have we shown that "such an increase is justified by structural behavior caused by rate or duration of the load?" ASCE 7-02 2.4.1		

**NOTE** Columns 1, 2, 4, 6 are compulsory.

API electronic balloting commenting template/version 2002-12

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#	(1) Voter/ Commenter	(2) Company	(3) Section No. (e.g. 3.1)	(4) Type of comment	(5) Comment (justification for change)	(6) Proposed Change	(7) Comment Resolution
5	Randy Kissell	TGB Partnership	E.2.2	Technical	In each of the following, change "specified snow load" and "roof specified snow load" to "design snow load" in order to be consistent with the terminology of the load combination ballot as passed:  wrs Roof load acting on the shell, including 10% of the specified snow load  Wr Total weight of fixed tank roof including framing, knuckles, any permanent attachments and 10% of the roof specified snow load  Wrs Roof load acting on the tank shell including 10% of the roof specified snow load		
6	Robert Hendrix	Voridian Engineering & Construction	E.6.1.2.1 Line 20	Editorial	Equation number seems to be missing "...D/H by using Equations (20) through ()." "		
7	Randy Kissell	TGB Partnership	E.6.1.2.2	Editorial	Change 1.3333 to 1.333 in 2 places to be consistent with its use elsewhere.		
8	Robert Hendrix	Voridian Engineering & Construction	E.6.1.3 Line 26	Editorial	add 'v' to 'ertical' to make "...vertical ground motion....."		
9	Robert Hendrix	Voridian Engineering & Construction	E.6.2.1.2	Technical	This section does not clearly indicate what is to be done about mechanical anchorage that is placed on a tank for reasons other than seismic load. If internal pressure, wind, or the combination thereof has led to mechanical anchorage but seismic design would not have required such anchorage, must the tank now be considered anchored for seismic purposes and the anchorage checked or modified according to this Appendix?		

**NOTE** Columns 1, 2, 4, 6 are compulsory.

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)
#	Voter/ Commenter	Company	Section No. (e.g. 3.1)	Type of comment	Comment (justification for change)	Proposed Change	Comment Resolution
10	Kenneth Erdmann	Matrix Service Company	E7.1.2	Technical	My earlier comment on anchor diameter has not been addressed.	The corrosion allowance is not added to an anchor strap minimum t but is to a bolt minimum diameter. The bolt should be 1" minimum with a specified minimum CA similar to the strap. Adding CA to the bolt diameter is conservative.	
11	Marilyn Shores	Sunoco Logistics	Entire	Other	Even though I have set in on several discussions of this document, it is still too technical for the user community to fully comprehend. Maybe I am selling us short on this, so for this reason, I abstain.		
12	Michael Richardson	International Paper	General	Technical	I am very uncomfortable with this material and feel very inadequate voting on something such as this.		

**NOTE** Columns 1, 2, 4, 6 are compulsory.

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