MINUTES OF MEETING

Technical Committee on Multiple Burner Boilers

Entergy
New Orleans, LA

I. Attendance:

Principal Members/Staff:
Mike Walz, Technical Committee Chair, Burns & McDonnell Engineering Co., MO
Denise Beach, NFPA, MA
Barry Basile, Babcock Power, MA (Voting Alternate)
Frank Bennett, NRG Energy, Inc., MD
John Bollinger, Babcock & Wilcox Company, OH
Dale Dressel, Solutia Incorporated, MO
John Eibl, The DuPont Company, Inc., TN
Robert Eng, Hitachi Power Systems America Ltd., NJ
Dale Evely, Southern Company Services, AL
K. Joe Frazier, Salt River Project, AZ (via teleconference, 2/27 only)
Gordon Gaetke, The Dow Chemical Company, TX (via teleconference)
David King, American Electric Power Service, OH
Daniel Lee, ABB Incorporated, OH
W. Scott Matz, Invensys Process Systems, TX
John O’Rourke, ALSTOM Power Inc., CT
Michael Polagye, FM Global, MA
Thomas Russell, Honeywell, Inc., TX
Jimmie Schexnayder, Entergy Corporation, LA
Celso Schmidt, UTC, TX
Bill Smith, Exothermic Engineering LLC, MO
Franklin Switzer, S-afe, Inc., IN
Joseph Vavrek, Sargent & Lundy, LLC, IL
Henry Wong, URS Corporation E&C, NJ
Harold (Skip) Yates, HRY, Inc. Boiler Systems Consulting, MI
Allan Zadiraka, OH (via teleconference)

Alternates:
David Dexter, The Dow Chemical Company, LA
James Franks, XL Global Asset Protection Services, TN
Jack Lehman, Exothermic Engineering LLC, NE
Daniel May, Burns & McDonnell Engineering Company, MO
Jeff Parker, Salt River Project, AZ
Carlos Santos Jr., Invensys Foxboro Systems, TX
John Stevens, HF Controls Corporation, TX
Guests:
D. Paul Cannon, Hurst Technologies
Tyler Dorsner, Fuel Tech, Inc.
Steven Graf, Emerson Process Management
Sinming Kwong, Emerson Process Management
James Walawender, Black & Veatch
Christy Williams, Entergy Services

II. Minutes of Meeting:

1. Call to order. The meeting was called to order at 8:05 am on Feb. 26, 2013.

2. Introduction. The Committee members and guests introduced themselves and identified their affiliation.

3. Minutes Approval. The minutes from the May 2012 meeting were approved as written.

4. NFPA Staff Report. The NFPA Staff Liaison reviewed the new document revision process and tools, including the new terminology, the revision cycle timeline, and the online public input submittal process. (Attachment A) NFPA Staff reminded the committee that committee actions related to document revisions and public input will be available in the First Draft Report, which will be posted on the NFPA 85 document information page no later than Sept. 6, 2013.

5. Old Business.
   A. Reburn Injection Rate. The committee reviewed 6.6.5.2.2.2, 6.7.5.2.2.2, and 6.8.5.2.2.2 and created a First Revision to clarify the text.
   B. Referenced Documents in Fundamentals Chapters. Mr. Switzer will review the documents referenced in mandatory text in subsection 6.6.2. Mr. Switzer reported that he had recently obtained the 2012 editions of ASME B31.1 and B31.3. Mr. Switzer will review these documents and report back to the committee in the Second Draft meeting. Franklin will review ASTM documents when he visits NFPA headquarters. Mr. Switzer reported that he did not identify any issues with other documents referenced in NFPA 85.
   C. Consistency with Fundamentals Task Group. The task group met via teleconference and submitted many public inputs to chapters 4 and 6. Many of the public inputs to chapter 4 were incorporated into First Revisions by the Fundamentals committee. The MBB committee should confirm that the changes were made and take appropriate action in chapter 6. The Fundamentals committee has requested a task group be established by the correlating committee to review the use of interlock systems, safety interlocks, etc. The task group members are D. Lee (chair); R. Eng; J. Frazier; and J. Schexnayder. The task group was discharged with thanks.
   D. Open-flow Air Path Task Group. The scope of the task group is to review 6.5.3.2 for clarity and correctness. The task group reviewed the combined gas path where two or more boilers shared a flue gas path. Chair D. May submitted several public inputs for consideration by the MBB committee. The need for combined flue gas paths could expand if environmental regulations move further toward carbon capture. The task group members
are D. May (chair); D. Evely; J. Frazier; J. O'Rourke; and H. Wong. (J. Fehr also participated.) The task group was discharged with thanks.

E. **Design Pressures Task Group.** The scope of the task group is to review section 6.5 and its subparagraphs to determine how the head developed by booster fans in series with ID fans should be addressed. The task group looked at how the various combinations of fans affect boiler/furnace design and considered how NFPA 85 should respond to that. Task group chairman B. Smith submitted several public inputs for consideration by the committee. The task group also came up with other questions, including the following:

i. Current applications have fan capabilities up to 80 in., but the duct work is addressed only in the annex as a consideration. Is it time to establish structural requirements for the duct work?

ii. Does the committee need to review 35 in. limitation to reflect current designs/practices?

iii. The fan requirement is based on “cold, dense air”. Is that a realistic requirement, or should the code reflect typical ambient conditions.

The task group will continue to discuss these new questions for further consideration in the Second Draft meeting. The task group members are B. Smith (chair); D. Evely; J. Frazier; K. Gamble; D. King; J. Lehman; H. Wong; and A. Zadiraka.

F. **Annexes B and C (Supervised Manual Systems).** The committee discussed the use and continued need for these annexes, which are not actively maintained by the committee. The annexes address interlocks that are designed to operate with operator supervision. Mr. Dressel reviewed NFPA 87 and does not see any opportunity for incorporating these annexes into NFPA 87. Mr. Dressel reported that these annexes are used by some chemical and petrochemical companies, and that this information is not covered in any other NFPA document. Therefore, Mr. Dressel recommends that the committee maintain the annexes. Mr. Zadiraka reported that supervised manual systems are being installed because they are recognized in the annex. It was noted that the introductory text to each annex specifically states that it is not applicable to new constructions. A task group was established to discuss this issue further. The task group members are: D. Dressel (chair); J. Eibl; S. Yates; and A. Zadiraka.

G. **MFT Task Group.** The scope of the task group is to address the following questions: Should the FD fans remain on upon loss of ID’s & MFT for implosion protection? Should the FD fans remain on upon ID fan runaway? Should closing of natural gas fuel valve be delayed for implosion protection? Task group chairman Yates submitted several public inputs for consideration by the committee. The mandatory text PIs address several scenarios related to these questions. The task group members are: S. Yates (chair); F. Bennett; D. Dressel; J. Frazier; D. King; S. Kwong; S. Matz; and T. Russell. The task group was discharged with thanks.

6. **New Business**

A. **Create First Revision of Chapter 6.** The committee reviewed the public input and other requests and created First Revisions in chapter 6 and related annex text.

B. **Review BCS-FUN actions.** The committee briefly discussed Fundamentals actions of interest.
7. **Plasma Arc Igniter.** The committee briefly discussed the use of plasma arc igniters, indicating awareness of some installations or planned installations outside of the US. Mr. Yates reported that he has not been able to reach the manufacturer who submitted the initial request. The classification for such an igniter has not been determined, but may be a class 3 special. Bill Smith will be working on a project overseas incorporating plasma arc igniters on coal-fired multiple burner boiler. Mr. Yates and Mr. Smith will report at the Second Draft meeting in January.

8. **Other Items.** There were no other items to discuss.


10. **Adjournment.** The meeting adjourned at 3:55 p.m. on Feb. 27, 2013.
Attachment A: NFPA Staff Presentation
Welcome TC on
Heat Recovery Steam Generators
Feb 28-Mar 1, 2013
Entergy, New Orleans, LA

At this and all NFPA committee meetings we are concerned with your safety. If the fire alarm sounds, please proceed to an exit.

Use of tape recorders or other means capable of reproducing verbatim transcriptions of this or any NFPA meeting is not permitted.

Guests
- All guests are required to sign in and identify their affiliations.
- Participation is limited to those individuals who have previously requested of the chair time to address the committee on a particular subject or individuals who wish to speak to Public Input they have submitted.
- Guest chairs are located around the room as a courtesy.

Members categorized in ANY interest category who have been retained to represent the interests of ANOTHER interest category (with respect to a specific issue or issues that are to be addressed by a TC/CC) shall declare those interests to the committee and refrain from voting on any Public Input, Comment, or other matter relating to those issues.
NFPA First Draft Meetings
New Process

• General Procedures
  ➢ Follow Robert’s Rules of Order.
  ➢ Discussion requires a motion.

NFPA First Draft Meetings

• Motions for Ending Debate Previous Question or “Call the Question”
  ➢ Not in order when another has the floor
  ➢ Requires a second
  ➢ This motion is not debatable and DOES NOT automatically stop debate
  ➢ A 2/3 affirmative vote will immediately close debate and return to the original motion on the floor. Less than 2/3 will allow debate to continue.

NFPA First Draft Meetings

• Committee member actions:
  ➢ Member addresses the chair.
  ➢ Receives recognition from the chair.
  ➢ Introduces the motion.
  ➢ Another member seconds the motion.

NFPA First Draft Meetings

• Committee chair actions:
  ➢ States the motion.
  ➢ Calls for discussion.
  ➢ Ensures all issues have been heard.
  ➢ Takes the vote.
  ➢ Announces the result of the vote.
New Process Overview

- Still basically 4 steps:
  - First Draft (Report on Proposals)
  - Second Draft (Report on Comments)
  - NITMAM/CAM
  - Issuance

- NEW opportunities to skip steps:
  - If no public comments are received, the committee can request immediate issuance
  - NITMAMs will only be certified based on public comments.

NFPA First Draft Meetings
New Process – What’s New?

- Changes in Terms:

<table>
<thead>
<tr>
<th>New Term</th>
<th>Old Term</th>
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<td>First Draft Meeting</td>
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<td>Committee Input</td>
<td>“Trial Balloon” (or later, FR that fails ballot)</td>
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<td>Committee Statement (CS)</td>
<td>Committee Statement</td>
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**Flowchart**

The New NFPA Standards Development Process
– Input Stage Req §4.3
NEW Committee Actions and Motions:

- Resolve Public Input
- Create a First Revision
- Create a Committee Input (Trial Balloon)

• Resolve a Public Input (PI)
  - Committee develops a Committee Statement (CS) to respond (resolve) a Public Input.
  - Committee must clearly indicate reasons for not accepting the recommendation in CS and/or point to a relevant First Revision
  - PI does not get balloted

• Create a First Revision (FR)
  - Committee wants to make a change to a current section or add new text.
  - Committee develops a Committee Statement (CS) substantiating the change. (do not refer to PI as the reason)
  - Ensure any associated PIs get a committee response, often simply referring to the relevant FR.
  - Each FR gets balloted

• Create a Committee Input (Trial Balloon)
  - Committee wants to receive Public Comment on a topic but not ready to incorporate it into the draft
  - Need to have a Committee Statement
  - Does not get balloted
Committee Statements (Substantiation):
- All Public Input must have a Committee Statement
- Must include a valid technical reason
- No vague references to “intent”
- Explain how the submitter’s substantiation is inadequate

Formal voting
- Voting during meeting is used to establish a sense of agreement (simple majority)
- Secured by letter ballot (2/3 agreement)
- Only the results of the formal ballot determine the official position of the committee on the First Draft

Ballots are on the First Revisions (FR) ONLY
- Public Input and Committee Input not balloted
- Reference materials are available:
  - First Draft, PI, CI, CS, etc

Ballot form allows you to vote:
- Affirmative on all FR
- Affirmative on all FR with exceptions specifically noted

Ballot form provides a column for affirmative with comment
- Note: This box only needs to be checked if there is an accompanying comment.

Reject or abstain requires a reason.
First Draft New Process

- Initial ballot
- Circulation of negatives and comments
- Members may change votes during circulation
- First Revision that fails letter ballot becomes Committee Input (CI) – just like the trial balloon version of CI – so as to solicit Public Comment

Balloting
- Ballots will be an online format
- Alternates are strongly encouraged to return ballots

NFPA First Draft Meetings

- No New Material after the Public Input Stage
- What constitutes new material is to some extent a judgment call
- Online submittal of comments through Terra

NFPA New Process Overview

- Comment phase works similar to old process
- HOWEVER, comments that do not contain specific action will no longer be accepted
  - NO – “Reverse committee action”
  - NO – “I agree with the committee action”
  - NO – “Use submitter’s original material”
- No new material after the Public Input Stage
  - What constitutes new material is to some extent a judgment call
- NITMAMs will be certified ONLY on comments
  - “Nitmammers” must participate in the entire process
**Patent:** Disclosures of essential patent claims should be made by the patent holder, but others may also notify NFPA if they believe that a proposed or existing NFPA standard includes an essential patent claim.

**Antitrust:** The single most important provision—Federal law prohibits contracts, combinations, or conspiracies which unreasonably restrain trade or commerce. *Section 1 of the Sherman Act*

### Activities Disapproved by the Courts
- Packing meetings
- Hiding commercial interest throwing the committees out of balance
- No final decision-making authority to unbalanced Task Groups; include all interested parties.
- Hiding scientific or technical information from committees

### Doc Info Pages
- Document scope
- Current/Previous Edition information
- Issued TIAs, Fls and Errata
- Archived revision information
- Standard Council Decisions
- Articles and Reports
- Read only document

### Next Edition
- Meetings and Ballots
- ROP/ROC or First Draft Report and Second Draft Report
- NITMAM and Standard Council Decisions
- Submission of Public Input/Comment
- Private TC info
- Ballot circulations, informational ballots and other committee info

### Technical Committee
- Committee name, responsibility and scope
- Staff liaison
- Committee list
- Private committee contact information
- Current committee documents in PDF format
- Committees seeking members and committee online application

### NFPA First Draft Meetings
**Thank you for participating!**

**Any questions?**