

MEETING LOG DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Meeting of the ANSI Z21.13 Boiler Technical Advisory Group

PLACE: Hilton Orlando Bonnet Creek, Orlando, Florida

MEETING DATE: September 29, 2010

LOG ENTRY SOURCE: Ronald A. Jordan

ENTRY DATE: October 14, 2010

COMMISSION ATTENDEES:

Ronald A. Jordan, ESEE

NON-COMMISSION ATTENDEES:

-Attendance list attached -

MEETING SUMMARY:

Staff attended the ANSI Z21.13 Boiler Technical Advisory Group (TAG) meeting to monitor developments in the standards for gas boilers. Following is a synopsis of the items covered on the agenda and the action taken by the boiler TAG:

Item 1. Approval of Minutes of the October 20, 2009 Meeting of the Joint Gas-Fired Boiler TAG

The minutes from the October 20, 2009 TAG meeting were considered and approved.

Item 2. Review of the Joint Gas Boiler Tag Membership

The TAG members and guest were presented with an updated list of TAG members.

Item 3. Consider Comments Received on Proposed Revisions to the Standard For Gas-Fired Low Pressure Steam and Hot Water Boilers, Z21.13-~~CSA~~ 4.9

The purpose of the proposed revisions was to provide coverage that previously did not exist, for boilers utilizing automatic step-rate or automatic modulating controls while operating at minimum input rating. This coverage permits the removal of the 20% minimum input limitation, which some TAG members believe is design restrictive and limits certification of new technology. Boilers that do not utilize automatic step-rate or automatic modulating controls would not be affected by this proposal and would continue to use the existing standard coverage.

Boilers within scope (i.e. automatic step-rate or automatic modulating controlled units) of the proposal would be required to not produce in excess of 0.1% (i.e. 1000 ppm) CO (air-free) under the test conditions. The primary sections of ANSI Z21.13 affected by the proposed revision are:

CPSA 600(1) CLEARED for PUBLIC
NO MFRS PRVT LBLS OR PRODUCTS IDENTIFIED
EXCEPTED BY: PETITION RULEMAKING ADMIN. PRCDG
WITH PORTIONS REMOVED: _____

- Section 2.24 Blocked Vent Test for Boilers Equipped With Forced or Induced Draft Burners and Without Draft Hoods or Regulators
- Section 2.26 Direct vent Systems
- Section 2.29, Condensate Disposal System(s)

There was significant discussion about this proposal since (1) the proposed CO emission level, 0.1% (or 1,000 ppm) was significantly higher than the current standard of 0.04% (or 400 ppm); and (2) concerns about the use of an equivalent CO concentration and confusion associated with the equation used to calculate the equivalent CO. Staff raised concerns about why the current CO emission standard of 0.04% wasn't used. A TAG member indicated that it was difficult for boilers operating at their minimum input rate under the vent blockage test conditions to pass the test. The TAG member stated that under the test provisions, if its CO emissions reached the 0.1% limit, the boiler would have to shut-off after 15 minutes and then go into lockout and not restart automatically. The TAG worked to clarify the rationale and wording of proposal, as well as the equivalent CO equation during the course of the meeting. The TAG voted on and approved the proposal and the secretariat will provide the clarifications to TAG members at a later date.

Item 4. Consider Comments Received on Proposed Revisions to the Standard for Gas-Fired Low Pressure Steam and Hot Water Boilers, Z21.13•CSA 4.9

Various revisions were proposed for Sections 1.1, 1.11, 1.23, 1.34, 2.2, 2.11, 2.19, and Exhibits D, E, F, and G of the standard. A motion was made to send the proposals and rationales to the ANSI Z21/83 TC for approval. The motion was approved.

Item 5. Consider the Actions of the National Fuel Gas Code Regarding Low Water Cutoffs for Boilers

The NFGC and model/local building codes require boilers to cutoff in response to low water. The TAG voted on and established a WG to explore how best to handle this issue.

Item 6. Consider Adopting a New Harmonized Standard for Gas-Fired Humidifiers

The TAG opted to request manufacturers of gas-fired humidifiers to get involved.

Item 7. Review Required Labels and Markings Under the Instructions and Marking Sections of the Gas Boiler Standard, Z21.13•CSA 4.9

The TAG was asked if they wanted to make any revisions to warnings and labels using revised graphics symbols provided in ANSI Z535. The TAG considered this request as info only.

Item 8. Consider Recommending Proposed Revisions to Z21.13•CSA 4.9 to the Z21/83 Committee for Approval

The TAG considered this Item. A motion was made to accept this Item "As Is" and send it back to the ANSI Z21/83 TC. The TAG voted on and approved the motion.

The meeting was adjourned at 5:00 pm.

ANSI Z21.13 Gas Boiler TAG Attendance List, September 29, 2010.

Members Present or Represented

Frank Myers (Chairman), PVI Industries
James Bedford, Beckett Gas
Rupesh Savadekar (Alternate), Beckett Gas
Paul Cabot, AGA
Kevin Carlisle, Karl Dungs, Inc.
Zenon Fraczkowski
Andy Gould, Union Energy
Travis Hardin, UL
Shamel Kassab, A.O. Smith
Darrell Schuh (Alternate), A.O. Smith
Jeff Kleiss, Weil-McLain
Bruce Mickelson, Honeywell
Marc Neufcourt, AHRI
Frank Stanonik (Alternate), AHRI
John Overall, Union Gas
John Rathbun (rep. Ed Angelone), National Grid
Neil Rolph, Lochinvar
Paul Sohler, Crown Boiler
Cory Weiss, Field Controls
James York, Rinnai

CSA Staff

Bob Stack, CSA Standards

Guests

John Chicoine, Mestek
John Gorman, CSA International
Kevin Madill, Direct Energy
Rich Simons, Honeywell
Wayne Spencer, AHRI
Phillip Stephens, HTP
Bob Vlasic, Union Gas
Alan Wainwright, Direct Energy
Matt Wilber, Crane Engineering