

ASHRAE Meeting – San Antonio
TC 10.1 Custom Engineered Refrigeration Systems
Monday June 25, 2012 2:15 to 4:15 PM
Convention Center 006C, River Level

MINUTES

1. Call to Order by Vice Chair Don Fenton at 2:20pm
2. Self Introduction & Sign Roster - Members, Visitors, and Guests
3. Check for Quorum (9 voting members; 6 required)
4. *Daniel J Dettmers, Donald L Fenton, Wayne K Borrowman, Bruce L Griffith, Jim Caylor, Dennis I Halsey, Donald A Siller, Eric M Smith, Ronald P Vallort*
Quorum established at 6 of 9.
5. Changes and additions to Agenda
 - a) Additions:
 - i) Discussion of PES 1602 recommendations; PES had phone conference and need to vote on recommendations.
 - ii) Reaffirm TC10.1 scope.
6. Approval of Minutes from Chicago
 - a) Discussion of standards report
 - b) Motion to approve by Siller, seconded by Caylor. Motion passed 5-0-0 CNV.
7. Chairman's Report from Section 10 Chair Breakfast (By Don Fenton)
 - a) Reminder to take advantage of Chair and Vice-Chair training.
 - b) Change in Hightower award to simplify; person may be nominated even if another person from the same company is on the TC
 - c) Dallas program will have eight tracks, one of which is refrigeration. Contact for refrigeration track is Rob Risley.
 - d) ASHRAE rebranding: ASHRAE is now a single word. As a global organization the "American" word no longer applies.
 - e) Letter of appreciation from ASHRAE to employer is available.
 - f) Conference calls are being promoted for subcommittee work.
 - g) A new wiki has been established for ASHRAE terms: wiki.ashrae.org. Discussed checking on terms that were the same as Chapter 50. The wiki terms are tied to Standards. The wiki terms will be the authoritative source of definitions within ASHRAE. Discussed whether definitions should stay in Handbook, with most comments that they should.
8. Liaison Reports
 - a) Refrigeration Committee (Doug Scott)
 - 1) Updates on NIST/ASHRAE Refrigerants Conference, Refrigeration Sustainable Design Guide (which TC 10.1 co-sponsors) and the Refrigeration Commissioning Guide Special Project.

- 2) There is a need for more refrigeration presenters on the Distinguished Lecturers (DL) list.
- b) IIAR (Eric Smith)
 - 1) IIAR-1 – Definitions
 - 2) IIAR-3 – Recently renewed
 - 3) IIAR-2
 - a. Commenced work on Addendum B to address proper insulation of flanged connections.
 - b. Big issues in discussion:
 - i. Application in spaces such as processing areas
 - ii. Shunt tripping of electrical equipment
 - iii. Dilution tank size reduction or elimination vs. menu of options based on scenario, such as how to handle small skids or small rooms with ammonia equipment
 - 4) IIAR-5 – Almost ready to publish.
 - 5) In beginning stages:
 - a. IIAR-4 – Installation
 - b. IIAR-8 – Commissioning
- c) Other Liaison Reports and Announcements
 - 1) Standards – Bruce Griffith
 - a. 2L Ad Hoc Committee met. TPS-15 is to be changed. Residential applications were proposed to be removed; and deferred to UL. There is a proposal to remove ammonia with the reason being the difficulty of including ammonia and maintaining clarity with 2L refrigerants. IIAR-2 would need to become the primary standard and not reference ASHRAE Standard 15. Neither topic has been approved by ASHRAE.
 - b. Discussion:
 - i. Fenton: Is this an IIAR suggestion or consensus?
 - ii. Griffith: Ad Hoc committee, in the context of B2L, thought removing exceptions for ammonia would improve clarity. Would not affect other refrigerants in industrial systems.
 - iii. Siller: Concern with packaged ammonia systems.
 - iv. Griffith: One-at-a-time packaged systems would be under IIAR-2.
 - 2) Alternative Lower GWP Refrigerants MTG – Doug Scott
 - a. The MTG met on Sunday and discussed plans for research, with the initial focus being on chemistry and flammability levels. The definition of Low-GWP was discussed, with no specific level determined for what Low-GWP means. The interim report for AHRI-AREP testing of 38 refrigerants is due in July. A possible mini-conference was discussed, i.e. a Lower-GWP track.

9. Review of Action Items from Chicago

- a) Develop programs – ongoing
- b) Support sustainability – ongoing
- c) Increase research – ongoing

10. Subcommittee Reports

- a) Membership – Don Fenton
 - i) Voting members rolling off: Griffith, Borrowman, Siller

- ii) New voting members: Pearson, Young, Sluga
- b) Research – Tim Gwyn for David Wylie
 - i) 1513-WS – “Liquid/Vapor Separating Velocities for Industrial Refrigeration Systems”
Co-sponsored with TC 10.3; 10.3 is lead TC. No updates.
 - ii) 1448-RP – “Ventilation Requirements for Refrigeration Machinery Rooms” (TC 4.3)
(1) TC 4.3 gets final report tomorrow for approval.
 - iii) 1514-WS – “Thermal Energy Recovery from Industrial Refrigeration Systems”
Doug Scott will work with Tom and Wayne to finish work statement revisions and send to Chair for letter ballot.
 - iv) Tim passed our research ideas from subcommittee meeting and topics for future research were discussed.
- c) Program -- Wayne Borrowman
 - i) Previous two programs submitted by TC 10.1 were rejected.
 - ii) Scott to obtain new speakers and re-submit phase 2 of commercial refrigeration compressor ratings and system applications program (e.g. rated vs. actual and effect of superheat).
 - iii) Discussed program for R-22 conversion options for industrial systems (DX and recirculated). Bruce Badger has ideas but IAR would need to release rights to a program.
- d) Handbook -- John Sluga
 - i) Chapters:
 - (1) Liquid Overfeed Systems (4)
 - (2) Component Balancing in Refrigeration Systems (5)
 - (3) Secondary Coolants in Refrigeration Systems (13)
 - (4) Concrete Dams and Subsurface Soils (45)
 - (5) Refrigeration in the Chemical Industry (46)
 - (6) Terminology of Refrigeration (50)
 - (7) Cryogenics (47)
 - (8) Ultralow-Temp Refrigeration (48)
 - (9) Biomedical (49)
 - ii) Griffith has reviewed Chapters 13 and 46.
 - iii) Need to complete reviews by January. John will send his subcommittee report.
- e) Standards -- Bruce Griffith
 - i) Discussed status on standards.
 - ii) Bruce will send his report.

11. PES 1602 Recommendations

- a) Reviewed in executive session.

12. Old Business

- a) Objectives
 - i) MBO #1 – Develop programs
 - ii) MBO #2 – Support sustainability efforts
 - iii) MBO #3 – Increase research activities

- b) Web site is up to date.
- c) Promote Awards: Hightower, Milt Garland, Comfort Cooling Awards
- d) Refrigeration articles for ASHRAE Journal

13. New Business

- a) Reaffirmation of Committee Scope:
 - i) The scope of TC10.1 was reviewed. Griffith noted the scope description covers industrial heat pumping.
 - ii) Motion to reaffirm TC10.1 scope by made and seconded. Motion passed 5-0-0 CNV.

14. Next meeting January 28, 2013 in Dallas

15. Adjourn

Motion to adjourn: Moved and seconded. Unanimously passed.

TC 10.1

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