

Minutes of ASHRAE Technical Committee 10.01
Dallas, Texas Meeting – Adams Mark City View 8
Monday, January 29, 2007

1 Call to order by Chairman Bruce Griffith at 2:15 p.m.

2 Self Introduction and Roster Sign-in

The Chairman requested self-introduction of members, corresponding members and guests. All present were asked to sign the roster. There were 30 in attendance.

A minute of silence was observed in memory and honor of Ron Cole.

3 Quorum Call

A quorum was established with 10 of 12 voting members present.

4 Approval of Minutes from Quebec City meeting (June 26, 2006)

A motion was made by Jim Shepherd to approve the minutes as submitted. The motion was seconded by Bob Burdick and passed unanimously.

5 Chairman's Report

Seminar compensation changes were announced, including no compensation for seminar chairs.

Natural ventilation was discussed, in context of zero energy design.

Additional ASHRAE research is needed. There is a surplus of funds; \$3.8 million is currently available. Four RTARs were submitted for the entire society and no work statements were submitted. RAC has changed the time allowed for research: two years are allowed from approval, from the first RTAR, and two years are allowed for completion.

The Handbook is lacking information on CO₂ refrigeration. Discussion:

- Bob Burdick recalls a new committee was to be formed to produce a Handbook section on CO₂. John Topliss stated he and Ron Cole worked on a prospective chapter for natural refrigerants, which may involve TC 10.01 or 10.3, and asked for volunteers to develop a framework. Kent Anderson noted IIAR has information to contribute (e.g. system practices), and indicated Gene Troy will help.
- John Sluga advised 10.3 had discussed a planned effort on a CO₂ chapter by Gordon Struder, Todd Jekel and Dennis Halsey; to have worked with Ron Cole.
- Pega Hrnjak stated interest. Andy Pearson was noted as a resource with good information.
- John Topliss said he will lead this effort, to include a framework definition by the Long Beach meeting.

TAC has asked for consideration of merging sections 10.01, 10.3 and 10.8 and possibly 10.01. Discussion:

- Extensive discussion of possible rationale, advantages and disadvantages concluded that there would be no material advantage to merging TC sections. There were no positive comments in support of this action.
- Kent Anderson noted importance of accurate rosters of committee memberships, along with timely distribution by ASHRAE via email.

Committee membership: All voting and corresponding TC members must be assigned to a subcommittee.

TC 10.01 MBOs. MBO to keep web site up to date. Discussion:

- Concerning posting seminars on web site, Todd Jekel was uncertain whether we can put presentations on web site and who should have access, but was willing to do so if they get used. Don Siller and Bob Burdick think programs should be available to any ASHRAE member.

6 Liaison Report

The Refrigeration Committee Report was provided by Charlie Klockner.

There were three submissions for the Milt Garland award and none were accepted. The committee voted to allow the application to contain up to ten pages. Comfort cooling projects are not suitable; projects must be for refrigeration. Outreach to other organizations to promote the award was encouraged. Discussion:

- Communication to the following associations will be made by the individuals noted: IIAR (Kent Anderson), IIR (Don Cleland), RETA (John Sluga) and IARW (Ron Vallort).

The refrigeration cocktail party funds may be used for a refrigeration webinar.

A resolution was passed to send a message to TAC to rescind the speaker compensation policy. Discussion:

- A motion was made by Bob Burdick and seconded by Todd Jekel to send the following message to the board: "TC 10.01 recommends the board rescind the recently passed policy to reduce compensation for speakers and organizers because it would adversely affect ASHRAE's ability to maintain quality programs". The motion was passed unanimously.

Refrigeration articles are needed for the Journal.

The Refrigeration Committee noted the need to revitalize refrigeration at a regional and chapter level and voted to recommend each chapter or region designate a contact person (for refrigeration). Discussion:

- Ron Vallort noted that most regions already have a designated refrigeration person. Dan Dettmers commented there is no one defined to contact for refrigeration; he just wants to know who to contact.

Other Refrigeration Committee items covered in Chairman's Report.

7 Subcommittee Reports

7.1 Membership (Don Fenton)

Current voting members rolling off this year include Bruce Griffith, Jim Shepherd and Don Siller. Additional current voting members are Joe Buck, Bob Burdick, Don Cleland, Don

Fenton, Dennis Halsey, Doug Scott, Gordon Struder, Scott Smith and Ron Vallort. Members rolling on include Kent Anderson, Charlie Klockner, John Sluga and John Topliss. Incoming secretary after Long Beach will be Gordon Struder.

7.2 Research (Todd Jekel)

The Proposal Evaluation Subcommittee (PES) has made a recommendation on the Two Phase Flow project. TC 10.01 approval requires closed session of voting members.

Todd reported on the research brainstorming session undertaken at a combined meeting of several TC 10 research subcommittees on Sunday.

After discussion of Todd's recommendations, the following four topics were identified as most promising for support by TC 10.01 and ranked in priority order:

1. Liquid vapor separation using CFD
2. Heat recovery from refrigeration systems
3. Liquid vapor separation using experimental testing
4. Effects of liquid overfeed rates at design and part load

John Topliss suggested single vs. two-stage comparison of energy use, consistent with emphasis on sustainable design.

RTARs are needed for the prioritized research projects. Heat recovery RTAR will be developed by Don Cleland, Doug Riendl and Doug Scott. Responsibility for the liquid vapor separation RTAR was discussed but not concluded.

7.3 Program (Dan Dettmers)

Dan Dettmers reported on the program subcommittee meeting. TC 10.01 will sponsor a Seminar at the Long Beach meeting addressing Refrigeration System Operating Techniques, with presentations by Doug Riendl, Wayne Borrowman and Doug Scott.

7.4 Handbook (John Topliss)

Discussion on CO₂ refrigeration additions to the Handbook occurred during Chairman's Report.

7.5 Standards (Joe Pillis, reported by Bruce Griffith)

SSPC-15 met and approved Addendum C, which will be published in six months. Addendum D modifications are being worked on, concerning relief device issues.

Bruce mentioned ISO 5149 draft standard and collaboration efforts. Next meeting concerning ISO 5149 is in the Spring.

8 Old Business

FAQs get 1,700 web hits a month. FAQ 25 needs updated. TC10.01 needs to review and advise Steve Hammerling. Bruce will circulate electronically to members for comments.

George Hightower Award: Send recommendations to Bruce Griffith.

Milt Garland Award: Discussion noted above.

MBOs were discussed above. Bruce Griffith noted we are on track with MBOs.

- MBO #1 – Long range research plan

- MBO #2 – Chapter in Refrigeration handbook on CO2 as a refrigerant
- MBO #3 – Continue updating TC10.01 website
- MBO #4 – Sustainability of industrial refrigeration systems through energy efficiency and research.

9 New Business

No new business

10 Announcements

Seminar 20 – The Use of Natural Refrigerants in Water Chilling

Seminar 55 – Energy Efficient Refrigerated Storage and Transport System Design

Transactions 10 – Advances in Energy Saving Technologies for Commercial Refrigeration Equipment and Systems.

11 Adjournment

A motion was made to adjourn to closed session to review the PES recommendation on the Two Phase Flow research project. The motion was seconded and passed unanimously.

Meeting adjourned at 4:15 p.m.

Respectfully submitted,

Doug Scott

Secretary