

2008 ASHRAE WINTER MEETING  
New York, NY

TC8.11 Unitary and Room Air Conditioners and Heat Pumps  
Monday, Jan 21, 2008  
4:15 – 6:30 PM  
Location: New York Hilton, Capri Room

Prepared by Don Schuster – Secretary TC 8.11 5/12/08

1. Call to order @ 4:20 pm
2. Introductions were made
3. Determination of Quorum

Siva Gopalnarayanan

Voting Members/Officers in attendance

Siva Gopalnarayanan	Chair
Dutch Uselton	Vice-Chair
Steve Hancock	Research
Byron Horak	
Ramez Afify	Handbook
Vance Payne	
Lorenzo Cremaschi	
Mike Woodford	
JB Singh	

Quorum established 9 of 11 voting members at beginning of meeting.

29 total in attendance

4. Announcements

a. TC8 Breakfast

Update membership – 2 voting members are left out of Roster.

Discussion on the requirement for all ASHRAE presentations be recorded.

There are objections to speakers required to be recorded. Many speakers are refusing to sign permission to record the presentation. The reason cited is that the material presented often has not gone through a peer reviewing thus should not be used as reference material.

**Proposal for TC 8.11 Chair to compose a short 1 paragraph letter in opposition to required recording of sessions stating that some of the best speakers will not present if the session is recorded. Dutch Uselton proposed the motion and Vance Payne 2ed. Motion passed (8-0-0 CNV)**

Standards – SPC 37 status needs to be re-affirmed or updated shortly

- b. TG 8.VRF update (Ramez Afify) Meeting to be held Tuesday (1/22/08) at 3:15pm. The TG was organized at long beach meeting.
- c. RP1274 update – (Vance Payne) Rooftop monitoring draft of final report draft submitted. No Cost extension requested Saturday. 75 Units needed repaired, but repairs only performed on 36 units. TC 8.11 is co-sponsor.

d. Salt Lake City theme: Benchmarking: The Current Standard of Care. Example buildings should be rated like cars are in mpg etc.

5. Agenda additions All  
None

6. Liaison reports Liaisons

Vin Gupta – TC8 Section Head

Introduced himself and discussed the following:

Roster Update – very important item, there are 99 TC committees, especially need providing all the information including membership number. Need to purge CM not attending meetings and must have a Chair, Vice Chair and ALL chair.

Webmaster – need a website and it needs to be kept current.

Task assignments – all CMs should be active and assigned a task, not mandatory. After 2ed or third meeting they should be assigned to subcommittee and/or activities after they figure out their area of interest and/or ability.

Feedback on new requirements for seminars: This TC already addressed under 4.a above. Summary is:

2 week advance uploading requirements – No concerns from TC 8.11.  
Recording is an issue currently being discussed in PAC.  
Feedback to TC8 Section Head is that we will lose the best presenters. TAC can make adjustments, they have in the past.

No other Liaisons present

7. Approval of minutes from Long Beach Siva Gopalnarayanan

Dutch Useton made the motion, Byron Horak seconded  
**Approved With no corrections (8-0-0 CNV)**

8. Membership/Roster Siva Gopalnarayanan

Roster corrections: Need to add the following voting members  
Vance Payne.  
Mike Woodford

New officers

Vance Payne for Secretary – beginning July 2008  
Byron Horak to Vice-chair – beginning July 2008  
Don Schuster Chair - beginning July 2008  
Lorenzo Cremaschi is incoming Handbook Chair - July 2008  
Eckert Groll is to roll back-on as voting member in July 2008.

Only voting member rolling off is Chair, Siva Gopalnarayanan

9. Subcommittee reports

a. Programs Siva Gopalnarayanan

Program subcommittee meeting

New York Seminar

Part load performance of Unitary equipment Seminar 70

On Wednesday here in New York

Chair: Dutch Useton

3 Speakers

Hugh Henderson

Jianjun Xia

Chris Bellshaw (Daiken)

The forum, "After SEER, What?" missed the deadline and did not make the New York presentation list. Brian Dougherty was planned as chair.

Discussion on future meetings

Priority for future presentation

1. Seminar on the California Public Utility Commission's big and bold initiatives pertaining to residential air conditioning - chair Greg Rosenquist  
Uncertain if Greg has a minimum number of speakers
2. Transaction session on Part-Load Performance – not enough information to move forward on.
3. Forum on After SEER, What? Plan for Chicago?
4. Seminar on design aspects of small duct high velocity system – Craig Messmer to present, Ramez to chair
5. Seminar on impact and issues of R-22 phase-out after 2010? For Chicago
6. Seminar on sizing of heat pumps - multistage, or variable capacity heat pumps. Eckert Groll can present if ASHRAE changes recording policy – Ramez to contact TG 8.VRF. Clark Bullard U of Ill – Chicago?
7. Seminar on real world conditions for unitary system operation

Rusty Tharp – test conditions don't match real world operation. If a system is rated 20% better, will it be 29% better performance at real world conditions.

Other attendee – 95/75 is not realistic. He would like multiple outdoor conditions. (Mark Berman – Davis Energy can provide comparative conditions vs ARI and contribute to a seminar)

Purdue and TAMU, Trane all have outdoor test conditions.

This could tie into "after SEER what?" This could fit into the benchmarking theme.

Good for Salt Lake City

Salt Lake City

Seminar: "Design aspects of small duct high velocity systems" Chair by Ramez Afify - Priority 1

Seminar: "Cold Weather Heat Pump Sizing – including Multi-stage and Variable Speed Systems" – Chair Siva Gopalnarayanan – Priority 2

**A motion was made as listed above with listed priorities by Steve Hancock with second by Lorenzo Cremaschi. The motion was approved for priority 1 in Salt Lake City (8-0-0 CNV).**

Chicago

The following was proposed for Chicago but not acted upon. The full committee plans to vote on this in Salt Lake City:

Seminar: Real World Conditions involving affects of "After SEER, What?"

Seminar: Effects of R-22 equipment phase out

b. Research

S. Hancock

Activities:

No active research

3 Work Statements in works

Compact indoor test setup

Heating and cooling load-hour Update

Heat pump charging during heating Season

IEA HP consortium to update everyone else on the variously activities going on in IEA 6 universities participating (**See IEA HP Conference.pdf and IEAHPP Report.pdf attachments**)

New research ideas

1. (On deck) developing compressor map format for variable speed compressors
2. Developing standards on intelligent systems
3. Comparison of multiple evaporator mini-splits
4. HVAC PF effect on electrical demand
5. HVAC control systems for Net Zero building – issue with latent load
6. Development of an applied SEER rating system - Installed MPG system
7. Update on Steady State compressor map – 10 coefficient map was created where condensing temperatures were higher than today.
8. How representative are the current ratings compared to real world applications (ESP, DB, WB etc) more of a Seminar.

Recommended we check with TG 8.1 for co-sponsorship

Discussion on regional SEER ratings, does this need research? How can ratings be done to represent regional climates. Proctor performed research on hot and dry climate. Ratings changed based on the test conditions but is a 15 SEER the same percentage better performing at the same conditions as a 13 SEER. This could be a precursor to changing Standard 37. This will be evaluated next research subcommittee meeting.

Requested co-sponsorship for RP1532 – unsolicited proposal by EC BERK bring 6 of 30 and top 5 were studied: Development of a 2 stage heat pump and evaluating appropriate compressor design. Proposal was sent to TC 8.1 and AHRI also. Vote can be postponed to Salt Lake City. Steve Hancock is to get more information. Reported by Eckhard Groll

Letter ballot is to be submitted for RTAR prior to Salt Lake City.

c. Handbook

R. Afify

New chapters submitted 47 & 48.

Need reviewers for Chapter 1 of Applications due for publication in 2011. Systems and equipment chapters 47 and 48 next publication in 2011

Every viewer should have access to ASHRAE central to review

d. Standards

B. Dougherty

**Std 16-1983 (RA 99)** *MOT for Rating Room Air Conditioners and Packaged Terminal Air Conditioners*

SPC Chair: Mark Paquette

SPC Liaison: Eli Howard

Standards 16 and 58 are being combined into one standard with the number designation being 16. Standards Project Committee (SPC), *MOT for Rating Room Air Conditioners and Packaged Terminal Air Conditioners/Heat Pumps* met on Tuesday, January 22 from 8:00 am to noon. The SPC plans to add guidance for evaluating the uncertainty of the reported ratings.

**Std 37-2005** *MOT for Rating Electrically Driven Unitary Air-Conditioning and Heat Pump Equipment*

The current version of Standard 37 received ANSI approval on March 11, 2005 and is now available for purchase. ASHRAE Standards Committee asks that TC 8.11 begin discussions on whether the current standard should be revised, reaffirmed, or withdrawn. ASHRAE staff have reviewed the standard and identified several references that should be updated. Some of the reference updates could be handled as part of a reaffirmation while others could only be implemented as part of a revision. Comments on whether this standard needs further updating are sought. TC 8.11 plans to further discuss the R/RA/W vote at its next meeting in Salt Lake City.

**Std 58-1986 (RA 99)** *MOT for Rating Room Air Conditioner and Packaged Terminal Air Conditioner Heating Capacity*

See discussion provided above under Std 16-1983 (RA99).

**Std 116-1995R (RA 05)** *MOT for Rating Seasonal Efficiency of Unitary Air Conditioners and Heat Pumps*

SPC Chair: David Tree

SPC Liaison: Carol Marriott

The revised draft of Standard 116 was released for a 45-day public review that ran from September 14 to October 29, 2007. Several comments were received. The comments were organized with each one being assigned to a member of the SPC. The comments and the proposed responses were discussed at the January 21, 2007 meeting of SPC 95.

**Std 137-1995 (RA 2004)** *MOT for Efficiency of Space-Conditioning/Water Heating Appliances that Include a Desuperheater Water Heater*

Lead TC: 6.6 (Service Water Heating)

Co-cognizant TC: 8.11

TC 6.6 has recommended that Standard 137 be reaffirmed. Brian Dougherty corresponded with members of TC 6.6 prior to the New York City meeting to let them know about the interest expressed at the TC 8.11 Long Beach meeting for revising Standard 137 and expanding its scope to cover the new generation of integrated heat pump designs. TC 6.6 has asked that TC 8.11 further summarize its reasons for supporting a revision of Standard 137 so that TC 6.6 may consider changing its recommendation. At its New York City meeting, five TC 8.11 attendees expressed interest in serving on an eventual SPC 137. Brian Dougherty will follow up with TC 6.6 and ASHRAE headquarters on how to best proceed.

**Canvass Ballots - None**

e. Web site

D. Nutter

Website is complete and up to date.  
Nothing is in the "member's only" area.  
TC 8.11 membership is available under "my ASHRAE" area.

10. Old Business  
None

Siva Gopalnarayanan

11. New Business

Siva Gopalnarayanan

Purdue compressor conference in July (See Purdue Announcement.pdf)

12. Adjourn

**Motion to adjourn by Ramez Afify and seconded by Byron Horak. Motion passed (10-0-0 CV) at 6:32 pm.**