

## Minutes

### 2014 ASHRAE Winter Meeting New York, NY

#### TC8.11 Unitary and Room Air Conditioners and Heat Pumps Monday, January 20, 2014 4:15 – 6:30 PM Location: Clinton room, Second floor, Hilton (H2)

#### Sponsored Program

Monday, January 20, 9:45 a.m. – 10:45 a.m., Regent room  
**Technical Paper Session 5: *Advanced Residential HVAC System Studies: Humidity Control Options, Solar PV Integration, and Multi-Function Integration***  
Chair: Van D. Baxter, P.E.

#### Minutes

1. Call to order Payne
  - a. Meeting was called to order at 4:15 p.m.
2. Introductions All
  - a. Introductions were made.
3. Determination of a quorum Payne
  - a. Quorum was met. 12 of 12 voting members present
4. Announcements and Highlights Payne
  - a. ASHRAE wants one workshop per track
  - b. Conference paper abstracts due Mar 24
  - c. Technical papers due April 14
  - d. Tracks
    - i. large buildings
    - ii. life safety
    - iii. design and safety of water systems
    - iv. hosp. design and codes
  - e. ASHRAE
  - f. new ASHRAE feature: master calendar on google calendar. To add a new calendar use techservices1791@gmail.com
  - g. new task groups multidisciplinary task groups
  - h. hot climate design guide - looking for TC 8.11 representation. Please contact Vance.
  - i. looking for reviewers for papers. Vance will pass along to CEC. There are about 100 people. Van and Dutch helped last time.
  - j. Seminar and workshop seminar training.
  - k. ASHRAE is encourage workshops - cross between seminar and forum.
  - l. program focus in Seattle
    - i. indoor environment
    - ii. ground source HP
    - iii. installation, operation, and maintenance of existing buildings
    - iv. refrigeration
    - v. stds guidelines and codes
    - vi. professional skills
  - m. Chicago
    - i. deadlines
      1. Jul 7 - written papers due

2. Apr 14 - technical papers due
3. Mar 24 - conference abstracts for Chicago
- ii. Tracks
  1. Systems and equip
  2. fundamentals/ applications
  3. industrial
  4. large buildings
  5. energy safety
  6. hosp. design and codes
- n. Up-coming workshops
  - i. May - Montreal, 11th Int'l HP conference. [iea2014.org](http://iea2014.org)  
Van to send information on the conference to Craig and Vance

From TC Chairs Breakfast Meeting

Payne

Full report of announcements is attached.



SH Breakfast  
Handout DENVER 20:

5. Agenda additions
  - a. None brought forward.

All
6. Liaison reports (as they arrive)
  - a. Steve Duda: TAC representative Technical activities committee oversee section
  8. [sh8@ashrae.net](mailto:sh8@ashrae.net). Announcements:
    - i. Steve was elected to the Fellows college.
    - ii. this is a roster update meeting -
    - iii. new this year - outstanding TC award - for the whole section body  
First award to be awarded Jan 2015. points for timely minutes, reporting, website, etc.

Liaisons
7. Approval of Minutes from Denver
 

Messmer

Motion by Yun Ho. Seconded by Van Baxter. PASSED unanimously 11-0-1 (chairman abstained).
8. Membership/Roster
 

Payne

  - a. Vance will roll off in June, he will not be in Seattle b/c his wife is having a child in June
  - b. Don - rolling off
  - c. Eric – will not roll off because he will take over as Chair
  - d. Kevin Mercer volunteered to join
9. Subcommittee reports
  - a. Programs
 

Kevin Mercer

    - i. New York (this meeting) we had one program (listed above)
    - ii. Feb 13 is deadline for Seattle seminar abstracts
    - iii. April is deadline for Chicago conference papers
    - iv. New ideas:
      1. New regional standards. Need presenters from:
        - Government
        - Industry (AHRI)
        - User (ACCA)

- Plan for Chicago; Rusty and Huang (emerson) will help Kevin to define the topic; Maybe have a manufacturer view point on how regional stds will impact product design (how to meet them)
2. Integrated multi-function heat pumps.
    - Daikin - altherma maybe?
    - new std ASHRAE 206 - maybe explain it in a seminar - Wayne Reedy
    - ORNI has done research on this - Van might be able to pull together a seminar or paper
    - interest in this but no action until companies have reviewed 206
  3. Impact of fault detection on unitary products
    - Vance - show the energy and dollar value to different faults (TXV size, charge, climate zones, air maldistribution)
    - Hugh - also has a potential paper
    - both could write conference papers.
    - cosponsored by TC 7.5 (Huang)
    - charge units at low ambient (Chad), Title 24 requires that the condenser be blocked if below 55 F, then check in the Spring.
    - consider for Chicago
  4. TC 7.6 (Janice) cosponsor a seminar
    - Load-based lab testing
    - Possible presenters: Jim Brown with Purdue?, Robert Dagus? (PGand E). Reid Hart knows these individuals and will reach out to them
  5. Dutch mentioned a seminar on A2L refrigerants.
    - Possible presenters
      - i. Arkema
      - ii. Van
      - iii. Rusty can get someone from Beckett
      - iv. Brian Rodgers (UL) can give a seminar
    - "An update on A2L refrigerants"
    - Dutch was interested in the stds for safety and getting them approved. What is the status of such codes?
    - Reach out to the safety standards to participate in this seminar.
    - EN 378 already addresses this but it is different than the US standards.
    - TC 3.1 is working on a standard for this very item.
    - UL has 3 people working on the safety stds for A2L and A3L refrigerants

The full programs subcommittee report is included below:



TC8 11 Program  
Subcommittee Minute

- b. Research Don Schuster
  - i. General information from research breakfast
    1. There are 62 active RP for 10.8 Million \$.
    2. There is some excess funds
    3. At the 2013 annual RAC. 10 tentative projects, 6 RPs active, 10 complete?
  - ii. Ongoing research

1. Completed RP1581 - accepted and paid for. Need a final vote. It was send via email on 10/22. Don to send the results of the email vote so it can be included in the minutes.  
APPROVED 10-0-2 via email as of May 2014
2. RP1608 – load based method of test for light commercial rooftop units. For example economizers, variable speed drives, and other control strategies. Six bids were accepted. awarded to OSU  
There will be a performance meeting (PMS meeting). working to finalize the schedule. There will be another meeting in April of the committee.
- iii. No work statements in progress.
- iv. no proposed RTARs in the works
- v. Cosponsored projects
  1. TRP 1645 Research for accelerated corrosion of microchannel HXrs. Cosponsored by TC 8.4 Contract has been approved but has been announced who.
  2. TRP 1705 - investigation of air side fouling. Cosponsored by TC 8.4. Workstatement has been conditionally approved. Needs corrections on the number of samples. Hugh has volunteered to be on the review committee.
- vi. Research ideas. 8 pending work statements
  1. Cd was eliminated from our list. hope that SPC 37 will address this in the next revision
  2. Modeling of refrigerant charge.
  3. ASHRAE 37 and 116. Chad: maybe we can roll how to charge a system into this project
  4. Sampling and mixing of temp devices
  5. Dewpoint specifications
  6. Nozzle chamber evaluations
  7. Damper box validation
  8. Barometric pressure evaluation
  9. Thermal mass impact on cyclic testing
  10. Request from others:
    - TC 8.10 Cosponsor an RTAR to dev. residential latent load requirements. Is there interest in this? Decision to put on hold or decline
    - fom Hung: repeatability of testing EC motors and variable speed blowers. put on the list for discussion later.

The full research subcommittee report is included below:



TC 811 Research  
Report from New Yo

- c. Handbook
  - i. Applications Chapter 1. (Dutch) All the reviewers have submitted comments. References were corrected. New section on communicating controls. Dutch is now in contact with the proper person who can update us on whether the draft has been received. Van will review the next draft probably in late 2014.
  - ii. Systems chapters 49 and 50 (Ray).  
Ray attended the handbook training. By next meeting we need to have all the comments and a draft.
    1. Ch 49 reviewers: Eric, Chad Bowers, Don, Ted Duffy, Kevin Mercer

2. Ch 50 reviewers: Ted, Craig, Clint, (Vance will give a few names), (Rusty will also give a name - John Duffey)

d. Standards

Chris Stone

Chris Stone provided an update on the standards relevant to TC 8.11. The following is a short list:

- i. Std 16, 58, 37, 116, 137, 206
- ii. Std 206 was published and released in November - multipurpose heat pumps
- iii. std 16 (std is being phased into std 16) - room air conditioners, updated, by end of this Jan meeting will be ready to submit, adding a psych room.
- iv. plan is to combine stds 37 and 116.
- v. std 137- methods of testing water heating appliance of desuperheater. This was merged into 206 and ready to be withdrawn
- vi. 41.1 was published
- vii. 41.3 and 41.6 are revised and public reviewed, in process of being formatted.
- viii. a New SPC for method of calculating moist air properties.meeting is Tuesday morning. Ray is chair of the committee.
- ix. ISO has some activity with aC standards, WG1. Bob Brown is the chair. Next meeting Feb 10, 2014.
- x. This meeting we have to vote to reaffirm the current version of Std. 16 so that we don't lose our ANSI approval. It will continue to be merged with Std. 58. The SPC can vote. The TC does not need to.
- xi. WG1 for 15253 is meeting at AHRI in Feb

The full report is included below.



Std\_Report\_Jan20\_2  
014\_TC811.docx

e. Web site

Darin Nutter

Darin reported that the website is fully current and there are no problems to report.

Website is <http://tc811.ashraetcs.org/index.html>.

10. Old Business

- a. None

11. New Business

- a. Rusty: Std 15 is safety std for primarily commercial products. UL 1995 refers to Std 15 but there is no residential products in Std 15. The Std 15 committee suggests that we have an addendum Std 15.2 for example to focus on residential products. Rusty is the only residential person on the Std 15 committee.
- b. Do we want to create a new SPC 15.2 for residential safety? We would have to suggest a chair and have at least four members.
- c. Hung says no one has stepped up to lead this standard. ASHRAE 15, UL 1995, who is responsible? Chad said he would chair the meeting.
- d. Because Vance is stepping down. Eric will become Chair and Craig will become Vice Chair.
- e. Need a new secretary. Dane has volunteered. Effective July 1, 2015 (after the next meeting)

12. Adjourn

Motion to adjourn by Don Schuster, seconded by Rusty Tharp. PASSED unanimously