

ASHRAE Technical Committee 6.10

MINUTES January 26, 2016

1. Call to Order

Chair Tom Neill called the meeting to order on January 26, 2016, at approximately 3:35 pm. Participants were as follows:

Voting Members Present

Tom Neill, Chair
Larry Brand
Tom Butcher
Mehdi M Doura
Craig Grider
Jennifer Guerrero-Ferreira*
Diane Jakobs
Shamel Kassab
Aykut Yilmaz

* Joined during Item 6

Voting Members Not Present

George M. Kusterer
William Roy

Others Present

Michael Beisheim
Ben Bell-Walker
Luke M. Bingham
Will Kowald
Tim McNulty
Anuj Mistry
Harvey Sachs
Kumar Sivagnanam
Paul Sohler
Frank Stanonik
Julie Tucker
Cory Weiss

2. Introduction of Attendees

Members and guests introduced themselves.

3. Sign-in and Quorum Determination

Attendees were requested to sign-in (attached). The quorum requirement was met with 8 of 11 voting members in attendance.

4. Review and approval of the Orlando Agenda

Chair Tom Neill proposed a change to the Agenda to add an item to discuss biomass fuel issues after approval of the Atlanta meeting minutes. There was no objection to the change.

5. Review and approval of the Atlanta Minutes

Upon a motion by Tom Butcher, duly seconded by Diane Jakobs, the committee voted to approve the Atlanta minutes as distributed.

These draft minutes have not been approved and are not the official, approved record until approved by this committee.

MOTION PASSED. 8-0-0.

6. Discussion of Biomass Fuels

Julie Tucker, U.S. Forest Service (USFS), reported that her role in the USFS is to promote renewable energy programs. She noted that there is a surplus of biomass (“slash piles”) due to forest control strategies and a lack of uses for the undesirable parts of the trees (e.g. tree tops and limbs). Therefore, the USFS is interested in increasing the value of this as a biomass fuel so that there is incentive for it to be transported from forest sites and consumed for energy production. She reported that USFS is working with the Biomass Thermal Energy Council (BTEC) under a cooperative agreement to investigate any technical barriers to making biomass a viable commercial fuel, and BTEC is currently developing a commercial boiler efficiency test procedure. She noted that USFS also starting to engage more with the U.S. Department of Energy and other federal agencies interested in a renewable portfolio (e.g. General Services Administration, federal prisons).

The committee discussed several challenges to the acceptance of biomass fuels, including: lack of training of potential specifiers of biomass equipment; lack of efficiency test procedures; challenges in processing and transportation and; the standardization and heterogeneity of wood fuels.

7. Liaison Reports

A. Research (Harvey Sachs)

Harvey Sachs noted in his report that the committee has no research projects, proposed or active, at this time. He suggested that if the committee is interested in future research that it review the ASHRAE Research Strategic Plan 2010-2015 (current through 2018) this to see if there is a potential tie-in to this overarching ASHRAE strategy. He also reported that there are new online forms and processes for research projects and invited individuals that are working on RTARs or work statements to contact him for instructions and advice.

8. Handbook

Mehdi Doura reported the following items that he noted during a handbook training he had attended during the conference: the online version of handbook does not have any multi-year cycle deadlines and can be updated at any time; videos can be placed online but must be non-commercial; and there will be a new system to facilitate file sharing that will be available in the near future.

Doura reported that handbook chapters 31 and 35 (Systems and Equipment) had been submitted on time and were acknowledged by the cognizant ASHRAE Handbook committee, but the updates to chapter 35 were failed to be included in the next edition of that volume due to an error on its part.

Upon a motion by Jennifer Guerrero-Ferreira, duly seconded by Larry Brand, the committee voted to submit the already revised content of Chapter 35 to the online handbook.

MOTION PASSED. 9-0-0.

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Doura reported that there is a deadline for the committee to complete its revisions to Chapter 12 by April 2016. He reported that he has all the changes proposed by the Handbook Subcommittee and that he will compile and send changes to the committee for review and approval prior to that date.

9. Research

Chair Tom Neill reported that Bill Roy was unable to attend and would provide an update on research on his behalf.

A. Possible Future Projects

The committee discussed possible research projects:

1) Follow-up to RP1517 – Oscillations in combustion

It was noted that David Herrin or Bill Roy could write a proposal. It was noted that TC 6.6 was invited to contribute to developing a research project and Frank Myers offered to help.

ACTION: Tom Neill to contact these individuals to attempt to get an RTAR completed.

2) Unvented Combustion

The committee expressed no interest in research on this topic.

3) Wood pellet stoves

The committee expressed no interest in research on this topic.

4) Pellet storage

The committee expressed interest in research on this topic, but did not have a sense of the priority.

ACTION: Ben Bell-Walker agreed to draft an RTAR on this subject.

5) Improvements to test methods

Tom Butcher noted that there has been interest expressed in research on boiler jacket losses in SPCs 103 and 155P. Craig Grider suggested that flue gas sampling methods could be investigated for standards using flue loss efficiency methods, e.g. Standards 103 and 155P.

Craig Grider also suggested research on actual ultimate CO₂ values and its impact on

efficiency measurements, but after discussion the committee agreed research was not required for this.

6) Biodiesel

Aykut Yilmaz suggested there is much discussion surrounding higher blends of biodiesel in fuel oils and that their impacts on testing standards have not been fully evaluated.

ACTION: Aykut Yilmaz and Tom Butcher agreed to develop an RTAR on potential biodiesel research topics.

10. Web Site

Jennifer Guerrero-Ferreira reported the website has been revamped. She suggested using it as a sharing site for committee projects such as handbook with the Base Camp software that is being rolled out later this year. Tom Neill requested members to update their bios.

11. Programs

Tom Butcher reported that the committee's program in Orlando on biofuels was a success.

The committee discussed a program for St. Louis on biofuels as part of the renewable future, focusing on gas, liquid, and solid biofuels that would cover the latest technologies. Ben Bell-Walker agreed to find people who would be able to contribute. Other TCs like cogeneration systems and hydronics might be interested.

ACTION: Tom Butcher to develop a program with help from Larry Brand and Ben Bell-Walker.

A future conference paper session on renewable fuels was suggested by Tom Butcher. Possible topics could include biodiesel issues, biogas control strategies, and adaption for compatibility and reliability issues. The committee agreed that it would define papers for a conference paper session by St. Louis for Chicago 2018.

12. Standards

Various members reported on the progress of several ASHRAE test methods activities.

- A. ASHRAE 103 is almost complete. It has completed public review and the SPC has finished responding to the comments. It might be ready for vote on publication if the changes are considered editorial.
- B. Standard 118.2 is being edited to adopt the test methods developed by the U.S. Department of Energy.
- C. Standard 118.1 is in revision, adding coverage and testing for heat pump and flow-activated instantaneous water heaters.

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- D. TC 6.3 suggested that Standard 103 be separated for furnaces and boilers, and it is also discussing potential research on furnace cycling rates.

13. Membership

Chair Tom Neill reported that he reviewed the roster, corrected some information, and that he will be resubmitting it ASHRAE shortly.

14. Old Business

The committee discussed suggestions for the website. It was suggested that paper abstracts be added with links to the ASHRAE bookstore to download TC-sponsored research.

The committee discussed building membership of the committee. It was suggested that Young Engineers in ASHRAE (YEA) could be leveraged, and that a partnership with the American Society of Gas Engineers could be pursued.

15. New Business

There was no new business.

16. Next Meeting

The next meeting will be held at the ASHRAE 2016 Annual Conference, June 25 – 29, 2016, in St. Louis, MO.

17. Adjournment

The meeting was adjourned at approximately 5:40 p.m.

Respectfully Submitted,

Aykut Yilmaz
Secretary