

**ASHRAE TC 1.10 COMMITTEE MINUTES**  
**New York, NY**  
**Jan 21, 2014**

The TC 1.10 meeting was called to order by the Chair, Tim Wagner, at 3:39 PM.

1. Chair Tim Wagner welcomed all members and acknowledged the visitors.
2. Self-introductions were made by all present. TC 1.10 has 8 Voting Members of which 6 were present. Hence, a quorum was established.
3. Secretary Annette Dwyer read the TC 1.10 mission statement.

**Mission Statement:** TC 1.10 is concerned with cogeneration systems, their cycles, and components including heat recovery, energy conversion, and system integration. The systems provide both power (electric and/or shaft) and thermal energy (heating and/or cooling) and are variously known as cogeneration systems; trigeneration systems; combined heat and power (CHP); combined cooling, heating, and power (CCHP); and integrated energy systems (IES).

4. Copies of the draft minutes of the meeting held in Denver, CO were distributed to the attendees of the meeting. John Andrepont made motion to approve the minutes of the meeting (after correcting a minor typing error). The motion was seconded by Harold Smith and approved (6, 0, 2, CV).

5. **Subcommittee Reports**

a. **Programs:** Rich Sweetser

There were 10 presentations in the 3 part series called: "Efficient Technologies that are also Sustainable"

Estimated attendance at the sessions was 140-160 people. Seminar comments included that it was more of an intermediate level session.

Other Seminars were not approved.

Seattle Proposals:

There are 9 tracks: Conference specific tracks for Seattle are: conference-specific tracks include Geothermal Heat Pumps & Indoor Environment

Birrol suggested CHP coupled ground source heat pumps. There was little interest, so TC 1.10 chose to pass on this topic for Seattle.

TC 1.10 will not push for any programs in Seattle – there are not many significant installations in that area.

Motion by Rich Sweetser to co-sponsor with TC 8.3 a Seminar Titled: "Successfully applying Sorption technologies for Fun and Profit". Motion was 2<sup>nd</sup> by John Andrepont. Motion passed (6-0-2, CV)

Chicago Proposals:

Chicago will be the next TC 1.10 focus for the Programs: John Andrepont suggested CHP for mission critical. Conference papers are due in March, if anyone is interested.

Orlando Proposals:

Case study on Reedy Creek has CHP, TES, CTIC, and District Cooling. This is the facility that serves Disney World and would be an excellent overview of all of these systems.

b. **Research:** Dragos Paraschiv

Dragos attended the research meeting on Sunday and announced the following:

There are 62 active projects with \$10.8 million in possible funding. Although there were many applications for new RTARS, research money is still available.

There is a new RTAR application form.

#### TC 1.10 Research

CHP Design Guide Update:

Lucas reports that Rich Sweetser is the primary author and principle investigator. Furthermore the PMS met and voted to approve unanimously the changes/updates and the excel spreadsheet etool.

TC 1.10 needs to approve this also for it to move on to publication. A hard copy was passed around for all to review. Rich Sweetser highlighted the updates.

Next steps (once TC votes ) from here to Technical Publications. This may be published this summer or early fall by ASHRAE.

Motion by Harold to approve the recommendation of the PMS to submit the revisions/update and excel spreadsheet etool for publication. 2<sup>nd</sup> by John Andrepont. *Note: Rich Sweetser left the room during the voting process:*

Motion passes (5 (for) – 0 (against) – 1 abstaining, 2 absent, CV).

Discussion:

\*can the etool be worked into Lucas' course?

Geoff Bares moved that we have a Seminar Session in Chicago on the CHP design guide (pending publication date), 2<sup>nd</sup> by John Andrepont. Motion passes (5 - 0 – 1(abstaining), 2 absent, CV)

New application for CTIAC Design Guide:

CTIC – Dharam Punwani will prepare the RTAR for this and run it by Art Geisler of RAC and the CTIC committee. Someone needs to contact publishing to see how many had been sold.

#### **c. Handbook:**

Chapter7: Lucas Hyman will be the new chair for the Handbook Committee Chapter 7:

Due date for final revisions is in March of 2015. The TC should vote on this at the Jan 2015 meeting.

Lucas will work with Annette Dwyer (Handbook Liaison) to create a schedule of interim target dates.

Lucas called for volunteers for authors and reviewers: Committee members: Birol Kilkis, Tim Wagner, Marija Todorovic, Isaac Mahderekal. Rajesh Dixit will ask Dresser-Rand for input. Lucas will contact Chris Lyons from Solar turbines for input. CC: Annette Dwyer to be cc:'d on correspondence as TC handbook Liaison.

A general list of items to be reviewed include:

- Take out turbine inlet cooling and reference Chapter 8
- Add after treatment
- Expand Maintenance

- Cut back on steam turbines
- Update bibliography & reference
- Consider adding some text on Solar PV with thermal
- Bulk up the combustion turbine section
- Request Manufacturing review (solar turbines)
- Revise combustion turbine heat rate vs temp per CTIC Chapter
- Address loads
- Address any additions from the CHP design guide

Chapter 8: Dharam Punwani is the new chair for the Handbook Committee Chapter 8:

Due date for final revisions is in July of 2015. The TC should vote on this at the Jun 2015 meeting.

Dharam called for volunteers for authors and reviewers: Committee members: Rajesh Dixit, John Andrepont. Additionally, Geoff Bares, Tim Wagner volunteered to be reviewers.

Handbook Liaison Report by Annette Dwyer: Annette is the new Handbook Liaison for the 2016 Volume of the Systems and Equipment Volume for both Chapter 7 & 8. There is one(1) Handbook online subscription available per chapter for the Lead Author or Handbook subcommittee Chair – submit your name to your TC Handbook Liaison. Make sure you have your schedule and subcommittee meetings set up.

**d. CTIC Subcommittee**

**New meeting time:** CTIC subcommittee (Chapter 8) from 1:00 pm – 2 pm on TUESDAY.

Annette Dwyer reported that seven (7) members attended the subcommittee meeting

The CTIC Handbook (Chapter 8) was discussed above: There are no Programs. Research was discussed above and we will be pursuing action regarding the RTAR to update the CTIC Design Guide.

**e. Membership:** Tim Wagner

Tim Wagner reported that currently we have eight (8) voting members. Rosters are due tonight. After Seattle, Tim will roll off as Chair, Dharam will move to Chair, Annette will move to Vice Chair, Dragos has agreed to join as Secretary. All other subcommittee positions are staying the same.

One legacy of this committee is that the succession plan will be very smooth. Note: Jay Jaymerman and Riyaz Papar will also be present in Seattle.

Tim Wagner will be rolling off as a voting member. Annette will be rolling on as a voting member.

Biröl can roll on as a non-quorum member. Lucas's status will be investigated and corrected. Ersin Gercek was interested in being more involved in subcommittee meetings and also interested in becoming a voting member.

New visitors wishing to become corresponding members are asked to give your business card/contact information and ASHRAE number to Tim. We will update the email list.

Also, if you are interested in a future leadership role, please speak with the Chair.

**f) Web Site:** Dragos Paraschiv

Dragos reported that the TC 1.10 website was up to date. Please contact him with any suggestions for webpage contents.

Note: ASHRAE now published an excel version of the roster – this makes it easier to list TC members on the website, while staying within ASHRAE policy. ASHRAE policy is that only names and company affiliations be posted – no contact phone or emails are to be listed. (only ASHRAE alias as they apply)

Dragos asked to be informed if the voting member roster is corrected (aka Lucas' status to be confirmed)

**g) Honors & Awards:** Tim Wagner

Annette reported that GD Mather of TC 5.7 was awarded the George B. Hightower Award.

John Andrepont mentioned that there is a new award per section for the best TC.

**h) Standards:** Mark Davis

SPC 204 - Dave Kalensky will do a 1<sup>st</sup> draft by March of 2014 including the topics in the discussion about the content was good .

Expect the draft to be ready to review by Jan 2015. Allow 1 year for public review and expect to be fully complete Jan 2016.

The scope will be revised to limit the standard to 50 kW, or 300 kW thermal fuels limited to natural gas, propane and diesel.

Biogas is difficult to characterize, so for this first version of the standard, it is currently not included. This is open for future revisions.

**6. Chairman's Overview and Report:** Tim Wagner

News from the section meeting:

- Members are asked to review the code of ethics
- TC master calendar available on google
- A new MTG (multi-disciplinary task group) has been formed: Hot Climate Design Guide development - Chair: Frank Mills
- Another way to serve ASHRAE is to serve as a reviewer for CEC
- TAC presentations is available if you speak at a local chapter
- Update your bio to add your employment discipline
- Thank you letters to employers are available, submit your name to Tim Wagner
- Next meeting locations are: Seattle, Chicago, Atlanta, Orlando, St. Louis
- TC5.2 is looking of contributors and reviewers for the new Duct Design Guide

*A Remembrance of Abdi Zaltash was presented by Tim Wagner and a moment of silence was observed in his honor. Abdi passed away this year.*

**7. Old Business:**

Lucas Hyman instructed the CHP (advanced version) half day short course yesterday. It was very well received. About 40 people were in attendance.

John Andrepont reported on IDEA activities: See the attachment to this document for his report

8. **New Business:**

Jim Leidel (visitor) would like to propose and submit an RTAR for integrated designs for Analysis and Comparison of thermal activated cooling technologies for hot and humid climates:

Discussion followed and the group referred him to TC 8.3 and the new MTG: Hot Climate Design guide. However, the TC also asked to keep our TC informed so that we can provide possible support in the future (if applicable)

Meeting Times for Seattle Annual Conference: (Tuesday, July 1, 2014)

TC 1.10 Handbook, Chapter 7 12 – 1p.

CTIC subcommittee (Chapter 8) from 1:00 pm – 2 pm

TC 1.10 Handbook, Research, and Programs from 2:00 pm – 3:00 pm

TC 1.10 main meeting from 3:30 pm - 5 pm

CTIC subcommittee from 5 p.m – 6 p.m.

**Adjourn**

Rich Sweetser moved that the meeting be adjourned. Harold seconded the motion and it was unanimously approved by all present.

Minutes prepared and respectfully submitted by Annette Dwyer, TC 1.10 Secretary