The TC 1.10 meeting was called to order by the Chair, Dharam Punwani, at 3:31 PM.

1. Chair Dharam Punwani welcomed all members and acknowledged the guests.

2. Self-introductions were made by all present. TC 1.10 has 9 Voting Members of which 8 were present. Hence, a quorum was established.

3. Secretary Dragos Paraschiv 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 Seattle, WA were distributed to the attendees of the meeting. John Andrepont made a motion to approve the minutes of the meeting (with the corrections noted by John Andrepont and Richard Sweetser). The motion was seconded by Lucas Hyman and approved (8, 0, 0, 1, CV).

5. Ms. Annette Dwyer, ASHRAE Handbook Liaison attended the meeting. Annette informed that the final CHP chapter was due on March 14, 2015 and the final chapter for CTIC was due on July 23, 2015.

6. **Subcommittee Reports**
   a. **Standards – SPC204P:** Mark Davis requested to report first, since he needs to leave the meeting early.

      Mark reported that the draft of the standard was discussed in the subcommittee meeting with the intent to distribute the draft document for subcommittee review in advance of the Annual meeting in June, 2015. The intent is to submit the standard for public review at the 2016 Winter meeting.

   b. **Programs:** Rich Sweetser

      **Chicago Program:**

      Seminar 26, “Microgrids, Resilience and CHP: Implications for the Future of Building Design and Retrofit”, was attended by over 200 people, who showed high interest and participated well in discussions. The seminar presenters were Richard Sweetser and Geariod Foley.

      **Atlanta Proposals:**

      The subcommittee recommended not to submit a program proposal for the 2015 Annual meeting.

      **Orlando Proposals:**

      TC 6.2 intends to submit a program proposal for a District Energy Seminar and our committee can be a co-sponsor since some of the case studies include CHP (for example Reedy Creek). A vote on the program proposal is needed at the Annual meeting in June.

   c. **Research:** Dragos Paraschiv
Dragos attended the research meeting on Monday and announced the following:

There are 59 active research projects with $11 million in total value.

At the Chicago meeting, RAC evaluated 4 RTARs (3 accepted with comments, 1 rejected with comments), 8WSs (5 conditionally accepted, 2 returned with comments, 2 rejected with comments).

RAC is soliciting concerns and suggestions that can increase the research process efficiency for proper utilization of ASHRAE research funds and volunteer time.

**TC 1.10 Research**

**CHP Design Guide Update:**

The final contractor evaluation performance form needs to be submitted to ASHRAE for project close-out. The new guide will be presented after publication at one of the next ASHRAE meetings.

**New CTIC Design Guide:**

The RTAR discussed at the meeting in Seattle was reviewed with Art Geisler, Research Liaisons. John Andrepont, TC1.10 liaison with TC6.2 and TC6.9 facilitated support from these two TCs that will co-sponsor the RTAR. A vote will be taken during the CTIC subcommittee report.

d. **Handbook:** Lucas Hyman

**Chapter 7: Lucas Hyman**

ASHRAE due date for final submission is March 14, 2015. Comments and revisions were discussed during the subcommittee meeting and it was recommended to approve the content of the chapter with the exception of the section on Economic Evaluation, which will be voted through an email ballot after this meeting. The intent of the subcommittee is to revise this section to be consistent with the new CHP Design guide.

Harold Smith made a motion to approve Chapter 7 except the Economic Evaluation section, with the changes discussed by the subcommittee. The motion was seconded by Annette Dwyer and approved (8, 0, 0, 1, CV).

**Chapter 8: Dharam Punwani**

ASHRAE due date for final submission is in July 23, 2015. The TC should vote on this at the Jun 2015 meeting. Bibliography needs to be updated (with support from John Andrepont) and previously discussed changes will be incorporated for TC members review and approval.

e. **CTIC Subcommittee:** Annette Dwyer

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

Annette Dwyer reported that 10 members attended the subcommittee meeting

The CTIC Handbook (Chapter 8) is discusses above.

There are no Programs planned.

**Research:** CTIC Design Guide Update RTAR was discussed and submitted for TC1.10 approval. Harold Smith made a motion to approve the RTAR as discussed by the CTIC subcommittee. The motion was seconded by Annette Dwyer. Discussions: Riyaz Papar asked if the amount of $75,000 is sufficient for the scope of work. The new CHP Design Guide authors noted that the amount is in line with the funding for that project. Annette Dwyer noted that $5,000 cofunding will be available from the Turbine Inlet Cooling Association. The motion was approved (8, 0, 0, 1, CV).
f. **Membership:** Dharam Punwani

Dharam Punwani reported that currently we have nine (9) voting members. On June 30, 2015, 3 members will roll off (Richard Sweetser, Dragos Paraschiv, Geoff Bares). Blake Ellis, Tim Wagner and Gearoid Foley agreed to become Voting Members.

All other subcommittee positions are staying the same.

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

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.

g) **Honors & Awards:** Dharam Punwani

- ASHRAE developed a new award, for Top TC for each Section.
- 2014-2015 Top TC Award – TC1.4

h) **ASHRAE Standard 100**

Richard Sweetser presented an update on the Energy Efficiency Standard for Existing Buildings (Standard 100), which is technically unfair to mixed-fuel buildings (CHP and District Energy examples). He said that SSPC 100 will be presenting the Standard 100 for voting to the Standards Committee and the ASHRAE Board. He reported that himself, Dharam Punwani and Gearoid Foley are now members of a working group of SSPC 100 dealing with the site/source energy issue, under the standard continuous maintenance process.

7. **Chairman’s Overview and Report:** Dharam Punwani

Annette Dwyer and Dragos Paraschiv attended the TC Chairs’ Breakfast Meeting. ASHRAE evaluates the TCs based on the TC Activity form. Riyaz Papar noted that several TC1.10 members have achievements that will qualify for several ASHRAE awards.

ASHRAE encouraged TC1.10 members to review the ASHRAE code of ethics ([https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics](https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics)).

ASHRAE is encouraging members to update their online BIOs, a new input field titled Employment Discipline was added to the online member biographical input form, and TAC would like members to self-declare their employment discipline.

A new MTG have been formed – MTG.O&MEE Operations and Maintenance that Impacts Energy Efficiency, our TC can have a voting representative if any member is interested.

ALI was soliciting TCs for new ideas for courses.

In Chicago, Lucas Hyman delivered a CHP course session, with 50-60 participants.

8. **Old Business:**
New Business:

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

Meeting Times for 2015 Annual Conference in Atlanta: (Tuesday - June 30, 2015)

TC 1.10 Handbook, Chapter 7 from 12:00pm – 1:00pm.
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

Adjourn

John Andrepont moved that the meeting be adjourned. Richard Sweetser seconded the motion and it was approved (7, 0, 0, 1, CNV).

Minutes prepared and respectfully submitted by Dragos Paraschiv, TC 1.10 Secretary.
January 25, 2015

IDEA Liaison Report to ASHRAE TC 6.2 and TC 1.10

Prepared and presented by: John Andrepont (+1-630-353-9690 / CoolSolutionsCo@aol.com)

The International District Energy Association (IDEA) is an industry association of over 1,000 members. The membership includes District Energy (Thermal) Utilities; Physical Plant and Utilities Personnel from University, Medical, and other District Energy Facilities; Equipment Manufacturer/Suppliers; Service Providers to the Industry; other District Heating & Cooling Associations; plus Government, Student, and other Personal members.

IDEA has two major conferences each year (one focused on campus District Energy systems and one focused on thermal utility systems), as well as smaller workshops on subjects such as marketing and thermal distribution, plus occasional regional-focused conferences. Each major conference also focuses on integrating Combined Heat & Power (CHP) and Thermal Energy Storage (TES) with District Energy.

Upcoming IDEA conferences include:
- 106th Annual District Energy/CHP Conference and Trade Show June 28-July 1, 2015 – Boston, Massachusetts (same dates as ASHRAE Annual Meeting)
- 29th Annual Campus Energy Conference February 7-12, 2016 – Austin, Texas

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