



ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc.

1971 Tullie Circle, NE • Atlanta Georgia 30329 • (404)636-8400 • Tlx 705343 ASHRAE • Fax (404)321-5478

TC/TG/TRG MINUTES COVER SHEET

These draft minutes have not been approved and are not the official, approved record until approved by this Technical Committee. (Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/TRG No.: TC 6.2

TC/TG/TRG Title: District Energy

Date of Meeting: June 28, 2015

Date: June 28, 2015

Location: Atlanta, GA

Please note that Membership listed below and herein is effective at the commencement of this meeting and does not reflect updates and changes made during and subsequent to the meeting.

Members Present	Year Apptd	Members Absent	Year Apptd	Ex-officio Members & Guests	Year Apptd
				Corresponding Members	
Lucas Hyman		Ken Collier		Steve Tredinnick	
Drew Overmiller		Chris Paraskevacos		Brandon Oyer	
Jay Eldridge		Frank St John		David Wade	
Steve Severini		Gary Phetteplace		Geoff Bares	
		John Andrepont		Rich Sweetser	
				Larry Markel	
				Dragos Paraschiv	
				Eren Selcen	
				Verle Williams	
				Art Giesler	
				Thomas Olmsted	
				Alan Neely	
				Jim Young	
				Tim Anderson	
				Wangda Zuo	
				Guests	
				Dharam Punwani	
				Edmund Wong	
				Jason Juhasz	
				Jessica Mangler	
				Joe Brillhart	
				John Molnar	
				Steve Hancock	
				Joana Melo	
				Ulf Johansson	
				David Autrey	
				Bill Ryan	
				Khalid A. Almulhim	



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DISTRIBUTION

All Members of TC/TG/TRG and guests plus the following:

TAC Section Head:	Mark Hegberg
TAC Chair:	Eric Adams
Handbook Liaison:	Michael Patton
Journal/Insights Liaison:	
Standards Liaison:	Cyrus Nasser
RAC Research Liaison:	Stephen Hancock
Program Liaison:	
Special Publications Liaison:	
Chapter Tech Transfer	Maggie Moninski
ALI Liaison:	Darin Nutter

ADDITIONAL DISTRIBUTION

ASHRAE Staff Liaison (Standards):	Michael Vaughn
ASHRAE Staff Liaison (Technical Services):	Michael Vaughn



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ACTIVITIES SHEET
ASHRAE TC 6.2 DISTRICT ENERGY
Sunday, June 28, 2015 Atlanta, GA

Chairman: Lucas Hyman
Vice-Chair: Drew Overmiller
Secretary: Steve Severini

TC 6.2 Meeting Schedule:

Location Past 3 Meetings

Chicago, IL January 2015
Seattle, WA June 2014
New York, NY January 2014

Location Next 3 Meetings

Orlando, FL January 2016
St. Louis, MO June 2016
Las Vegas, NV January 2017

TC 6.2 Sub-Committees:

Committee

Handbook
Membership
Program
Research
Standards
ALI Coordinator
Webmaster

Chair

Steve Tredinnick
John Andrepont
Tim Anderson
Jay Eldridge
(open)
Chris Paraskevakos
Drew Overmiller

Research Projects

None current.

Technical Papers From Sponsored Research:

None Current

ACTIVITIES SHEET (Continued)
ASHRAE TC 6.2 DISTRICT ENERGY
Sunday, June 28, 2015 Atlanta, GA

TC 6.2 SPONSORED SEMINARS, FORUMS, AND WORKSHOPS (Past three years and this meeting)

Year	Location	Topic
2012, June	San Antonio	None
2013, January	Dallas	None
2013, June	Denver	<i>Seminars 19 and 27: The New ASHRAE District Heating and District Cooling Design Guides, Parts 1 and 2 (1267-RP).</i>
2014, January	New York	<i>Seminars 6, 16, and 17: Efficient Technologies That Are Also Economically Sustainable, Parts 1, 2 and 3: District Energy and Complementary Options. (co-sponsored with TC 1.10 Cogeneration Systems and TC 6.9 Thermal Storage)</i>
2014, June	Seattle	<i>Workshop 11: Achieving High Delta-T: Keys to High Performance District Energy Systems</i>
2015, January	Chicago	None
2015, June	Atlanta	None

TC 6.2 SPONSORED TECHNICAL PAPER SESSIONS AND CONFERENCE PAPER SESSIONS

(Past three years and this meeting)

Year	Location	Topic
2012, June	San Antonio	None
2013, January	Dallas	None
2013, June	Denver	None
2014, January	New York	None
2014, June	Seattle	<i>Technical Paper Session 5: Theoretical and Real World Application of Energy Saving Techniques (co-sponsored with TC 6.05 Radiant Heating and Cooling)</i>
2015, January	Chicago	None
2015, June	Atlanta	None

Journal Publications: (Past three years)

1. Tredinnick, S., Wade, D., Phetteplace, G. July 2015. "District Energy Enters the 21st Century".

Minutes of Meeting of: TC 6.2 District Energy
Sunday, June 28, 2015 Atlanta, GA

1. Call to Order:

Chair Lucas Hyman called the meeting to order at 3:00 PM. Lucas welcomed all in attendance, and opened the meeting by stating the scope of TC 6.2 District Energy:

Technical Committee 6.2 is concerned with district energy technology and integrated systems that provide one or more forms of thermal energy or a combination of thermal energy and electric power from a central plant(s) to meet the heating, cooling, or combined thermal energy and power needs of end-users in two or more structures. The TC collects and disseminates information on regional resource planning including the design, performance, economic analysis, operation and maintenance of central plants, distribution networks, and consumer limited to materials, construction methods, heat transfer, fluid flow, and measurement. The scope of the TC includes the development and assessment of associated technologies for energy use sections.

An agenda was distributed and an attendance sheet was circulated and signed by attendees. See attached copies. A roll call of voting members was conducted with the following voting members being present: Lucas Hyman, Drew Overmiller, Jay Eldridge, and Steve Severini. With 9 current voting members, the 4 voting members present did not represent a quorum. Lucas noted the non-quorum and indicated that no voting will be conducted. Self-introductions by all attendees were made. Lucas asked for comments on the agenda – none were made.

(Please note that the IDEA Annual District Energy/CHP Conference was held in Boston on the same dates of this June 2015 Atlanta ASHRAE meeting, which impacted attendance at this TC 6.2 meeting.)

2. Approval of the Chicago January 2015 Meeting Minutes:

Lucas distributed a draft of the Chicago January 2015 meeting minutes for review. A spelling correction ("Larry Markel") was noted. A vote was not conducted due to the non-quorum.

3. Announcements by Chair:

Drew Overmiller attended the Section 6 breakfast meeting held earlier in the day and noted the following items:

- a. A volunteer opportunity is available to participate in a Multidisciplinary Task Group (MTG) on operations and maintenance energy efficiency, called MTG OMEE. Anyone interested should contact the TC 6.2 chair.
- b. The membership category of Provisional Corresponding Member is being eliminated.
- c. Enhancements are being made to the notification system which will improve the TC's awareness of seminars and forums that would be of interest to that particular TC.

4. Liaison Reports:

A. DOE: Rich Sweetser reported that DOE is now looking at district energy and CHP from the perspective of "resiliency". This new outlook is precipitated by the effects of Superstorm Sandy and Winterstorm Nemo. There is also movement in the northeast for a plan called the REV process ("Reforming the Energy Vision") which stands to change the way that electricity is delivered and billed.

- B. IDEA: Rich Sweetser also noted that IDEA wrote a letter to ASHRAE stating that the new ASHRAE Standard 100 "Energy Efficiency in Existing Buildings" is unfair to district cooling systems. As discussed in the past TC 6.2 meeting, Standard 100 uses "site energy" to determine compliance, which makes district energy unfavorable when following the Standard's calculation procedure. The IDEA letter is in the hands of the SSPC 100 committee for action. It was also noted that Standard 100 has reportedly experienced criticism on other aspects beyond the site vs. source debate.
- C. IDEA: John Andrepont was not in attendance. The following information is from his previous report:
- i. 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.
 - ii. 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.
 - iii. Upcoming IDEA conferences include:
 - 29th Annual Campus Energy Conference
February 7-12, 2016 – Austin, Texas
 - 107th Annual District Energy/CHP Conference and Trade Show
June, 2016 – St. Paul, Minnesota
 - iv. For further information on IDEA, contact:

Rob Thornton, President
IDEA
24 Lyman Street, Suite 230
Westborough, Massachusetts 01581

tel: 508-366-9339
fax: 508-366-0019
e-mail: rob.idea@districtenergy.org
website: www.districtenergy.org

5. Sub-Committee Reports

- A. Handbook: Steve Tredinnick (Chair) – not present.
Lucas reported that the Handbook committee has completed the revisions to District Energy (Chapter 12) for the 2016 Systems and Equipment Handbook. The revisions were voted upon prior to the meeting by letter ballot and unanimously approved by TC 6.2 voting members.

Lucas publicly thanked Steve Tredinnick for his service and a job well done. He also announced that TC 6.2 is actively looking for someone to chair the Handbook committee for the next revision cycle.

B. Membership: John Andrepont (Chair) – not present.

Lucas urged corresponding members to consider becoming voting members, and any guests to become corresponding members. Anyone interested should inform the TC 6.2 chair and provide their ASHRAE number in the correspondence. Tim Anderson and Larry Markel expressed interest in becoming voting members during the discussion.

C. Programs: Tim Anderson (Chair)

Orlando meeting: there was discussion regarding submitting for Track 4 Design/Build for a seminar or forum discussing “advantages/disadvantages of design/build for district energy” or perhaps “lessons learned”. Track 5, Codes and Standards was also mentioned as a possibility for discussion of ASHRAE Standard 100 and how other entities handle evaluating existing building efficiency. It was noted that ASHRAE discussed this exact issue for perhaps 10 years prior to Standard 100 being issued and further discussion may be viewed as a rehash of old news. Track 7, The Great Debate was mentioned as a possibility for central plant vs distributed cooling presentation.

St Louis meeting: Track 4, HVAC Systems is a possibility for a presentation “how to reduce central plant energy by 20%”. Rich Sweetser mentioned that TC 1.10 is presenting the “New CHP Design Guide and E-tool” and noted that TC 1.10 would like to co-sponsor a seminar with us. There was affirmative response from attendees. No voting was conducted due to lack of quorum.

D. Standards: no current chair. No discussion.

E. Webmaster: Drew Overmiller

Our TC 6.2 home page (<http://tc62.ashraetcs.org/>) has been recently updated and the roster and other information will be updated following this meeting. Jessica Mangler has agreed to be our new TC 6.2 Webmaster.

F. ALI Liaison: Chris Paraskevakos – not present

No discussion.

G. Research: Jay Eldridge (Chair)

Art Giesler noted that TC 1.10 Cogeneration Systems has received approval for developing a CHP Design Guide.

There was significant discussion regarding possible “research” that compares and contrasts the topic of site energy vs. source energy, in light of the recent publication of ASHRAE Standard 100 and the debate regarding its use of site energy. It was noted that the site vs. source issue is sensitive to many and will not go away. Rich Sweetser stated that SSPC 100 spent nearly 10 years reviewing this issue prior to the publication of Standard 100. Larry Markel suggested perhaps performing research to determine a better way to measure building efficiency – keeping in mind that District Energy wants to be feeding efficient buildings and do it in an efficient manner. Others noted that Energy Star is a source rating, and ASHRAE BEQ is also, whereas ASHRAE Standard 100 is a site rating. No action items were developed at this meeting.

David Wade encouraged attendees to obtain a copy of the "Energy Efficiency Improvement Act of 2015" which was enacted earlier this year. It attempts to align building owners and tenants to collectively conserve energy. A PDF of the bill can be found at: <https://www.gpo.gov/fdsys/pkg/BILLS-114s535enr/pdf/BILLS-114s535enr.pdf>

6. Old Business:

Lucas again encouraged attendees to participate by become corresponding or voting members.

7. New Business

Lucas Hyman announced that he will be retiring in September 2015 and is resigning as Chair of TC 6.2. Drew Overmiller (currently Vice Chair) will be the new Chair. Steve Severini will remain as Secretary. The Vice Chair position is open.

8. Meeting Adjournment:

- The next general meeting will be held at the same time (3 pm) in Orlando.
- The meeting was adjourned at 4:16 pm.

Submitted by,
Steve Severini
TC 6.2 Secretary
December 31, 2015

Agenda
ASHRAE TC 6.2 – District Heating and Colling - General Meeting
Sunday, June 28, 2015, 3:00 – 5:00 PM
Atlanta Georgia - Hilton Hotel, Room 301

Preliminaries	(10 min.)
Call to Order –welcome guest and members	
Circulation of Agenda and Attendance Sheet	
Member Roll Call	
Quorum Determination	
Introductions	
Modifications to Agenda	
Approval of Minutes	(2 min.)
Chicago	
Announcements by Chair – Lucas Hyman	(8 Min.)
Section 6 Breakfast	
Liaison Reports	(10 Min.)
Section 6 TC Section Head	
IDEA/DOE/Others	
Handbook – Steve Tredinnick	(10 Min.)
(Subcommittee Meeting Scheduled)	
2012 HVAC Systems & Equipment Handbook Revision Update	
Membership – John Andrepont	(5 Min.)
Programs – Tim Anderson	(15 Min.)
(Subcommittee Meeting Scheduled)	
Review Past Program (Chicago)	
Detail Future Programs Submittals	
Standards – None	(1 min.)
Website – Drew Overmiller	(5 min.)
(Subcommittee Meeting Scheduled)	
ALI Coordinator – Chris Parakevakos	(5 min.)
Research – Jay Eldrige	(20 min.)
(Subcommittee Meeting Scheduled)	
Old Business	(10 min.)
ASHRAE Standard 100	
New Business	(10 min.)
Adjourn (collect attendance sheet and roster changes)	(1 min.)



Applied

Engineering Services

Client: TLC-2 Location: _____
 Project: Main Meeting
 Project No. _____ Sheet: _____ of: _____
 Subject: June 28, 2015 Atlanta, GA
 By: _____ Date: _____

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<u>Name</u>	<u>Position</u>	<u>Voting (y/n)</u>	<u>Email</u>	<u>YEA (y/n)</u>
✓ Drew Overmiller	Vice Chair	Y	dovermiller@burnsmcd.com	N
✓ Wangda Zuo	CM	N	w.zuo@miami.edu	N
✓ Jessica Mangler	webmaster	N	jmangler@gmail.com	Y
✓ Tim Anderson	Programs	N	tanderson@applied-e-s.com	N
✓ Daniel Aubrey	visitor	N	dave.aubrey@hoffman-hoffman.com	N
✓ Bill Ryan	Visitor	N	wryan@uic.edu	
✓ NICOLE SWETSON	CM	N	NSWETS@EXALYPARTNERS.COM	
✓ DAVID WADE	CM	N	dww@rolaeng.com	no
✓ Steve Geverini	VM, Secretary	Y	sseverini@newcomb-boyd.com	
✓ Jim Young	CM	N	jyoung@itwininsulation.com	
✓ Geoff Bares	CM	N	gbares@cbi.com	N
✓ Lucas Hyman	Chair	Y	LBH@Goss-Eng.com	
✓ ART GIESLER	CM	N	ART.GIESLER@ATT.NET	N
✓ JAY EDWARDS	Research	Y	JAY.EDWARDS@DARINAPPLIED.COM	
✓ John Molnar	CM	N	molnar@armstrongfluidtechnology.com	
✓ Ulf Johansson	Guest	N	ulf.johansson@uponor.com	
✓ Larry Markel	CM	N	LARRY-MARKEL@SRA.COM	
✓ KHALID A. ALMULHIM	Visitor	N	mulhima@gmail.com	
✓ VERLE WILLIAMS	CM	N	verle.williams@gmail.com	