



AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

1791 Tullie Circle, N.E. | Atlanta, GA 30329 | 404-636-8400

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No: TC 6.9

DATE: Monday, February 04, 2013

TC/TG/MTG/TRG TITLE: Thermal Energy Storage

DATE & LOCATION OF MEETING: Monday, January 28, 2013 Dallas, TX

VOTING MEMBERS PRESENT	YEAR APPTD	VOTING MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Brian M. Silveti	2000	Chang Sohn	2002	Blake Ellis - CM
Geoffrey Bares	2011	John F. Dunlap	2010	Charles E. Dorgan-CM
Guy Frankenfield	2011	Scott A. Shaffer	2011	Douglas T. Reindl-CM
Harshal R. Upadhye	2011			Ed P. Lohrenz-CM
John H. Nix	2011			Gregory Henderson-CM
John S. Andrepont	2011			Henry A. Becker-CM
Lucas Hyman	2010			Ivan Thomas-CM
Mike Filler	2013			Jeffrey M. Kane-CM
Paul Steffes	2002			John Lau - CM
Robert R. Willis	2011			Kenneth M. Fulk-CM
				Mark M. MacCracken-CM
				Steven Benz-CM
				Brian Blenis - G
				Chris Mincey - G
				Drew Overmiller - G
				Jason DeGraw - G
				Joe Swann - G
				Larry Burns - G
				Matt Mitchell - G
				Michael Frohnapple - G
				Paulo Tabares - G
				Richard Brooks - G
				Richie Mohan - G

DISTRIBUTION

All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head:	Lucas Hyman of Goss Engineering Inc.
TAC Chair:	Charlie Culp of Texas A&M
ALL COMMITTEE LIAISONS AS SHOWN ON TC/TG/MTG/TRG ROSTERS:	John Nix - Professional Development
	Michael Patton - Handbook
Manager Of Standards	
Manager Of Research & Technical Services	

ASHRAE Technical Subcommittee 6.9 - Thermal Storage

Meeting Minutes – Dallas, TX January 28, 2013

1. Preliminaries

- a. The meeting was called to order at 4:38 PM by Lucas Hyman, Chair.
- b. The agenda and sign in sheet were distributed.
- c. A roll call of voting members was taken.
- d. A quorum of voting committee members was established; 10 of the 13 voting members attended this meeting.
- e. Self introductions were made.
- f. There were no changes to the agenda as proposed.

2. Approval of Minutes

Minutes from the 2012 summer meeting in San Antonio, TX were reviewed.

- John Andrepont made a motion to approve with corrections noted.
- John Nix seconded the motion.
- Approved unanimously by the voting members.

3. Announcements by Chair – Lucas Hyman

- a. The ASHRAE Code of Ethics was read out loud.
- b. If you want to be a “reviewer” of technical documents, please notify Lucas Hyman.
- c. If you want to be a Corresponding Member, give Lucas your business card with a note indicating your intentions.
- d. Recommend that each member update their individual bios on the ASHRAE website.

4. Liaison reports:

- a. Handbook – Michael Patton introduced himself as the Handbook Liaison. He has already met with John Lau, our Handbook Chair.
- b. Professional Development – John Nix said that his committee has started looking at how we can update the TES training course. Doug

Note: These Minutes were amended and approved at the June 24, 2013 TC 6.9 meeting.

Reindl has begun looking at what information needs to be updated.
Doug Reindl is working on updated vendor quotes.

5. Handbook – John Lau

- a. New 4-year cycle has begun. These revisions will be included in the 2016 Edition of the Systems and Equipment Handbook.
- b. John solicited authors to spearhead the revisions to sections of the Handbook.
- c. For more details, please see the Handbook Minutes posted on the TC 6.9 website.

6. Programs – Geoff Bares

- a. At this Dallas, TX conference, there was a seminar on “Grid Interactive TES”. Harshal Upadhye is, also, presenting a conference paper.
- b. For the 2013 Denver, CO conference, there are no plans to submit a seminar.
- c. For the 2014 New York, NY conference, TC 6.2 is planning on doing a seminar based on the new “District Cooling Design Guide”. John Andrepont and Geoff Bares solicited support from TC 6.9. Geoff Bares made a motion for TC 6.9 to co-sponsor this seminar with 6.2 (District Energy), and 1.10 (Cogen). The motion was seconded by John Nix, and approved unanimously by the voting members. The title of our seminar might be something like “Efficient Technologies that are Economically Sustainable.”
- d. Chris Mincey has volunteered to take over for Geoff starting in July of 2013 when Geoff becomes the TC 6.9 Vice-Chair.
- e. For more details, please see the Program Subcommittee minutes posted on the TC 6.9 website.

7. Standards – Robert Willis

- a. The status of SPC 150 – this commissioning standard is being revised. Draft will be sent to voting members. John Nix requested that voting members comment prior to the Public Review phase which may begin in June of 2013.
- b. At the 2012 ~~Winter~~Summer Meeting in ~~Chicago, IL~~San Antonio, TX, TC 6.9 voted to keep the Cool Storage methodology in AHRU Standard 900.

Note: These Minutes were amended and approved at the June 24, 2013 TC 6.9 meeting.

- c. Robert will send out ASHRAE Standards; 94.1, 94.2, and 94.3 to the voting members ahead of the 2013 Summer Meeting. At the Summer Meeting, TC 6.9 must vote our intentions to Reaffirm, Revise, or Not to Keep these standards. Reaffirming or Revising the standards will require setting up a committee and working on revisions.
- d. For more details, please see Standards Minutes posted on the TC 6.9 website.

8. Website – Arisbeth Sandoval

- a. Our TC 6.9 webpages are up to date. The consensus of the members was that it was in good condition.
- b. Subcommittee chairs should send minutes and documents to be posted to the website to Guy Frankenfield, and he will work with Arisbeth Sandoval to get them posted.
- c. The link to the Sandia Lab TES software will be added to our webpages.

9. Research – Brian Silvetti

- a. Brian requested that members provide comments on the Work Statement (WS) 1607, TES to Support Renewable Energy Resources to Larry Markel by February 15, 2013.
- b. The TES Design Guide is out of print and out of date. Brian will be writing an RTAR to update the Design Guide.
- c. Lucas Hyman is the PMS chair for the Design Guide for Cogen.
- d. Michael Deru provided an overview on the status of NREL's efforts to develop a Tool to calculate the Carbon Emissions Metrics based on time of day, season of the year, and geographic location. He is approximately 70% complete with the work, and presented the status at the ASHRAE Computer Modeling conference in October of 2012. However, NREL has re-directed their funds and this project is out of funding. Michael will submit an unsolicited research proposal to ASHRAE to complete the work. Brian Silvetti will send Michael Deru a copy of the TC 6.9 Carbon Emission Tool WS.
- e. For more details, please see the Research Minutes posted on the TC 6.9 website.

10. Old Business

No old business.

11. New Business

a. The official roster will be updated this winter. The following is a list of chairpersons that will be in position in July of 2013:

- i. Chair – Guy Frankenfield
- ii. Vice Chair – Geoff Bares
- iii. Secretary – Richleey Mohan
- iv. Research – Brian Silvetti
- v. Program – Chris Mincey
- vi. Standards – Robert Willis
- vii. Handbook – John Lau
- viii. Website – Arisbeth Sandoval

b. New voting members in July of 2013; John Lau, Mark MacCracken, and Henry Becker.

c. Honors and Awards:

- i. Lucas Hyman received the Hightower Award.
- ii. In the future distinguished service awards may be automatic.
- iii. If we think one of our members deserves an award, we should nominate that person.

12. Adjourn

- Motion by Mike Filler to adjourn.
- Seconded by Geoff Bares.
- Motion passed unanimously.
- Meeting adjourned at 5:32 PM.