

**ASHRAE TC 6.9 – Thermal Storage**  
**General Meeting Minutes**  
Monday, January 22, 2018  
4:30 – 6:00 PM  
Empire, Palmer House, Chicago, IL

**Attendees**

Each person introduced themselves and an attendance sheet was distributed. Attendees included:

Ken Fulk	VM	Standards Subcommittee Chair
Brian Silvetti	CM	Research Subcommittee Chair
Chris Mincey	VM	
John Lau	VM	TC 6.9 Chair
Geoff Bares	VM	
John Nix	VM	PDC Liaison
Scott Shaffer	CM	
Farzin Rad	CM	Handbook Subcommittee Chair
Guy Frankenfield	VM	Temporary Acting Secretary
Henry Becker	CM	
Daniel Pyewell	CM	Webmaster
Zidu Ma	CM	
John Dunlap	VM	
Blake Ellis	VM	
Mark MacCraken	CM	
Ayyoub Momen	CM	
Michael Deru	CM	
Ivan Thomas	CM	
Jasim Mahdi	G	
Jon Heitzinger	G	
Brandon Gross	G	
Richard Brooks	CM	Programs Subcommittee Chair
Fu Linda Xiao	G	
Ahmed Elatar	CM	
Lauren Zelinski	G	
David Autrey	G	
Ryan Lime	CM	
Dawen Lu	G	Section Head

Patrick MacCormac	G	
Ali Fallahi	G	
Babak Attari	G	
Abel Alonso	G	
Jim McClendon	G	
Brian Blenis	CM	
Ramin Faramarzi	CM	
Mike Kazmierczak	CM	
Omar Abdelaziz	G	Research Liaison
John Molnar	CM	
Charles Dorgan	CM	
John S. Andrepont	CM	
Trent Hunt	VM	
Jason Glazer	G	
Amy Van Asselt	CM	
Dharam Punwani	CM	

### Preliminaries

- Meeting called to order at 4:30 PM by Chairperson, John Lau.
- The TC 6.9 Purpose Statement was read by John Lau.
- The agenda and attendance sheet were circulated.
- Voting Member Roll Call – 10 voting members were present.
- Based on a total of 11 voting members, a quorum was determined.
- All attendees were given the opportunity to introduce themselves.
- Modifications to the agenda – during research there will be a vote on the Design Guide for a no cost 3-month extension of the project.

### Approval of Minutes

Long Beach – Summer Meeting 2017. John Dunlap made a motion to approve the minutes as written, and seconded by Blake Ellis. Unanimously approved.

### Announcements by Chair – John Lau

#### Section 6 Breakfast

- You can now access your personal information on the ASHRAE website.
- Provisional corresponding member – this is a relatively new position that allows the individual to join at any time, and comes with a 2-year term. If the new provisional member stays active, then they can become a full corresponding member.
- 125<sup>th</sup> anniversary of ASHRAE is next year. ASHRAE is looking for articles to celebrate the technical historical heritage.
- New Restructured MOP (Manual of Procedures) is now available on the ASHRAE website.
- February 9<sup>th</sup>, submissions for the Houston programs are due.

## Liaison Reports

- Research liaison, Omar Abdelaziz, attended this meeting and provided the following information:
  - New submission window for RTAR's is March.
  - Congratulations to Brian Silveti who received special recognition for Research Service.
  - A "Disposition of ASHRAE Research Funding" form must be filled out at the conclusion of a Research project.
- Our new Section 6 TC Section Head is Dawen Lu.
- Professional Development Committee – John Nix reported that our Thermal Storage course was approved. Doug Reindl is the author and instructor for this 3-hour course. Our course will be available to be taught at the Houston meeting.
- John Dunlap offered to be our liaison to 90.1.
- MTG.ASEC (Avoided Source Energy Consumption) – Guy Frankenfield indicated that this project is on hold.

## Handbook – Farzin Rad

This is the second year of the 2020 HVAC Systems & Equipment Handbook revisions.

- New ASHRAE authoring portal will be used this year for the revisions.
- Some of the updates may include:
  - New Design Guide
  - Research from RP-1607
  - Passive thermal storage. John Molnar offered to assist with this.
  - Heated storage in ground

## Programs – Richard Brooks

Future Programs (Houston summer of 2018, Atlanta winter of 2019)

Houston:

- 4 hour course on Thermal Energy Storage was approved by ASHRAE's professional development organization. Doug Reindl will be teaching this course.
- Track 3 – The Future of Thermal Energy Storage supporting Resilient District Energy, CHP Systems, and Microgrids. Motion to approve seminar by Chris Mincey and seconded by John Nix. Unanimously approved.
- Motion to co-sponsor this track with TC1.10, TC8.3, and TC 6.2. John Nix, and seconded by Chris Mincey.
- Track 2, 5, or 7 – Thermal Energy Storage at the Small Scale. John Andrepont made a motion to approve, seconded by Trent Hunt. Unanimously approved.

Atlanta:

- Thermal vs. Battery Storage
- TES 101

## Standards – Ken Fulk

Status Update:

- Ken reported that there was some confusion by the ASHRAE Standards committee who thought that we were not working on SPC 150. He is working to clear up that misunderstanding with ASHRAE Standards, because there has been a lot of work done on SPC 150 over the past couple of years.
- Ken is working on updates to the 150 document regarding diagrams. Once that is complete, Ken will send the DRAFT out to the voting members for approval this year. Once approved, TC 6.9 intends to move forward with a new Guideline that will allow more commissioning flexibility instead of following the strict 150 requirements.
- Mike Filler must provide a form to discontinue 94.2, Heat Storage.
- ASME is working on a safety standard for solid state thermal storage. Ken does not believe that this is related to TC 6.9, but Ken will keep us informed.

## **Research – John Lau and Brian Silveti reported in the absence of Paulo Cesar Tabares Velasco**

### **Status Update:**

- RP-1719 – Design Guide for Cool Thermal Storage – Jason Glazer of Gard Analytics provided a PPT presentation on the status of the research project. This research should be complete in June of 2018. Brian Silveti made a motion to provide a no-cost extension of 3-months for this research. 9 voted yes, and 1 person abstained. Motion approved.
- RTAR-1762 – Design Guide for CTIC Systems – Co-Sponsoring with TC 1.10. Geoff Bares provided an update. Recently signed a contract with Avalon Consulting for this research, and the research will be complete in a year. John Andrepont is a sub-consultant on that project.
- MTG.ASEC – WS-1804. This project is currently on hold, and will be taken off of future agendas.
- Amy Van Asselt of the University of Wisconsin provided a presentation at this Conference on RP-1607 that was well attended. An executive summary of RP-1607 has been approved to be uploaded to the TC website, which will be done within the next few weeks.
- John Lau indicated that RTARs will be discussed extensively in Houston due to the absence of Paulo at this meeting.

## **Long Range Planning/Website – John Lau/Daniel Pyewell**

- Daniel has been keeping our website up to date.
- Daniel set up the remote access technology for this meeting, but no one attended. We made the decision during this meeting to not utilize this equipment for the Houston meeting.

## **Honors and Awards – Blake Ellis**

- Brian Silveti received the Research Service Award. Only one award like this is given out each year. Brian received several rounds of applause.

## **Old Business**

None.

## **New Business**

- Daniel Pyewell volunteered to be the TC 6.9 Secretary.
- Brian Silveti is stepping down from being a voting member.
- Mark MacCracken would like to roll on as a voting member.
- 90.1 is working on a new working group on renewable power, and may be interested in having a TC 6.9 liaison. John Andrepont has been recommended to become the liaison with 90.1, which has been approved by John Lau. Amy Van Asselt also expressed interest in becoming Liaison with 90.1.

## **Adjourn**

Motion by John Nix to adjourn, and seconded by Ken Fulk.