

ASHRAE TC 6.9 – Thermal Storage – 2025 Hybrid Winter Meeting Agenda

Phoenix, Monday, June 23, 2025
4:30PM – 6:30 PM Pacific Time (MT without Daylight Savings)

Preliminaries

(5 min)

1. Call to Order - (TC Chair – Daniel Pyewell)

Purpose Statement:

TC 6.9 is concerned with the storage of thermal energy for use in heating and/or cooling and with charging or discharging this energy at a controllable rate. The TC collects and disseminates information on storage processes, materials, containers, components, systems and costs as well as on analytical methods for evaluating and predicting storage performance.

2. ASHRAE Code of Ethics Commitment – (TC Chair – Daniel Pyewell)

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

Meeting Housekeeping Items:

Please ensure you sign in via the attendance sheets that are being circulated.

All virtual participants, please mute your microphone unless speaking.

3. Introduction/ Attendance – (TC Chair – Daniel Pyewell)

- a. Secretary for the meeting (Kyle Gluesenkamp) to take attendance via the membership roster, attendance sheets, and from the online Teams meeting attendance list.
- b. Member and Guests Introductions and Sign in
 - i. Please state your name, company/ location, and position on the committee
- c. Establish a Quorum, Review of Current Voting Members, and TC 6.9 Officers (Ref. Manual of Procedures – 3.2.2, 2.13, 2.14, & 2.15)

	Members	Role		Roll Off
1	Daniel Pyewell	Chair	VM	2025-06-30
2	Emishaw Iffa	Vice Chair	VM	2027-06-30
3	Kyle Gluesenkamp	Secretary	CM	
3	Bruce Lindsay	Program Subcommittee Chair	CM	
4	John Nix	ALI Coordinator	CM	
6	Charles Booten		VM	2025-06-30
7	John F Dunlap	Standards Subcommittee Chair	VM	2025-06-30
8	Hooman Arjmand		VM	2025-06-30
9	Geoff Bares		VM	2028-06-30
10	Mike Filler		VM	2027-06-30
11	Amy Van Asselt		VM	2025-06-30
12	Jason Woods	Research Subcommittee Chair	CM	
14	Navin Kumar	Handbook Subcommittee Chair	CM	

- d. Discuss recruiting of new members and officers to this Technical Committee (TC 6.09). To become PCM, access “Join TC 6.9” under Membership on T.C. webpage

4. Approval of Minutes (2 min)
Hybrid Winter Meeting 2024 in Orlando

5. Announcements by Chair – Daniel Pyewell (3 min)
Section 6 Virtual Breakfast

6. Liaison Reports (10 min)

- a. TAC Section 6 Head – Doug Reindl
- b. Training and Education Committee (TEC) – John Nix
 - i. Look at development of E-class
- c. TC 2.5 Global Climate Change – John Nix
- d. STD 90.1 – Amy Van Asselt
- e. IDEA – John Andrepont
- f. LEED v5 – Ian LaHiff

7. Standards – John Dunlap (10 min)

- a. Std. 150-2000
- b. Std. SP 233P
- c. ASME TES-2-200X
- d. AHRI 900-2014
- e. 94.1, 2, and 3 (withdrawn) standards use for tax code – Reda Djebbar and Brent Kovash
- f. Proposed New Standards
 - i. Stan’s standard proposal “Thermal Energy Storage (TES) in Refrigeration System: Stability and Thermal Properties Requirements”.

8. Programs – Bruce Lindsey (10 min)

- a. Review Past Programs
- b. Review Current Programs
- c. Discuss Future Programs
- d. T.C. 6.9 Hall of Fame new entries
 - i. Bruce looking for volunteers to help support the initiative.
- e. Stan’s suggestion of subcommittee to develop abstracts of TES presentations for conferences
 - i. Stan volunteered to chair effort, and is looking for volunteers to help support. He recommends that subcommittee have a rotating chair.

9. Handbook – Navin Kumar

(10 min)

- a. Plan for this coming year (2028 update):
 - i. Include new content from Henry Becker on water quality
 - ii. Other potential new content from Frazin and William Davies on geothermal borehole technology?
 - iii. New content from Stan Nabozny
 - iv. Establish review team to review all content and comments – arrange this year
 - v. Develop schedule for next two years

10. Research – Jason Woods

(15 min)

- a. RTAR – Quantifying carbon savings from TES, how to simplify the analysis
 - i. Update from chair Mike Filler? (Support from John Dunlap and Ken Fulk). Previous discussion was just a PTAR may be considered as emissions calculations are already available, and don't need to do any research.
- b. RTAR from TC 6.8 on “evaluation of GSHP with diurnal TES”
- c. Quantifying benefits from TES (ongoing efforts at national labs)
- d. Stan Nabozny's mention of research project from refrigeration TC, related to supermarkets (RTAR submitted, working on SOW)
- e. Co-sponsor of TC 6.2 RTAR on pre-cooling district CHW Loops.
 - i. Work Statement with co-sponsor voted and approved by T.C. 6.2
- f. Future ideas for potential RTARs:
 - i. Any other new ideas, please forward along to Jason Woods

11. Long Range Planning/Website –Daniel Pyewell

(10 min)

- a. Stan Nabozny has volunteered to take on the role of secretary after this summer's meeting
 - b. Membership – 17 new PCMs have joined the T.C. since the winter meeting.
 - c. Voting Members – Daniel Pyewell, Chuck Booten, John Dunlap, Hooman Arjmand, and Amy Van Asselt roll off after the summer meeting.
- Farzin Rad, Ivan Thomas, Sandra Boetcher, Jason Woods, and Stan Nabozny volunteered to roll on as voting members after the summer meeting.

12. Honors and Awards – Blake Ellis

(5 min)

13. Old Business

(5 min)

- a. ORNL update on Energy Plus Support for TES – Emishaw Iffa
- b. USACE Paper from Alexander Applicability of Large Thermal Energy Storage
 - i. The guideline has officially been published.
- c. Stor4Build Status Update – Kyle Gluesenkamp
- d. Effort for creating stand-alone publication for addressing IRA Tax Credits
 - i. Dog this effort off to let things settle with new administration and tax interpretations
- e. DTG (Decarbonization Task Force) – Bruce Lindsay
 - i. Upcoming ASHRAE Building Decarbonization Conference in Chicago
- f. Proposed US-EU Battery Project from USTR
 - i. Steve Hammerling has sent review comments to ANSI, and has requested further information and documents to be passed along to the TC to further review for interest in engagement.

14. New Business

(10 min)

- a. Mike Filler – update on 48E tax credits
- b. Update on Peak Load Management Association
 - i. By Bruce Lindsay
- c. Update on Energy Service Professionals
 - i. By Stan Nabozny

15. Adjourn