

**ASHRAE TC 5.7
Evaporative Cooling
Main Meeting Minutes
2026 ASHRAE Annual Meeting Minutes**

**Monday February, 2nd, 2026
5:00-7:00 PM PST
Caesars Palace, Umbria Boardroom (PS)**

[Join Teams meeting now](#)

1. Call to order (Mark Miller)

- Welcome **7:00 pm**
- ASHRAE Code of Ethics:

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

(See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

- Attendance: **QUORAM IS MET:** Please sign in: [Sign-In](#)
- Review Leadership, Voting; Corresponding and guests. Check quorum.

Name	Role	Voting	Name	Role	Voting
Mark Miller	Chair	Yes			
Annette Dwyer	Vice Chair	Yes			
Yang Cheng-Min	Secretary	Yes			
Richie Mittal	Research Chair	Yes			
Patricia Graef	Standards Chair	Yes			
Gursaran D Mathur	Handbook Chair	Yes			
Steven J Slayzak	Program Chair	Yes			
Mark Miller	Webmaster	Yes			

2. Chair’s Report (Mark Miller)

- Announcements and Highlights from TC Chairs Breakfast Meeting:

Roster updates are due at the end of February

Mark sent a message to CM’s to verify their interest in the committee

DEI was discussed and is now a standing committee under members council not (instead of the board level) Please engage any new members

RESEARCH UPDATE: \$2-3 million in research is done per year (each project averages \$100k-\$350k

CEC talked about 175 submitted programs (85 accepted) Full detail in the table below:

2026 Winter Program Statistics

Program	Proposals Submitted	Proposals Scheduled
Panel Sessions	19	6
Forum Sessions	9	6
Seminar Sessions	131	65
Workshop Sessions	7	4
Debate Sessions	9	4
Total	175	85
Total with Paper Sessions		121



Annual meeting is in Austin, TX June 27 – July 1st

Chicago in 2027 –

Alice Yates, Director of Government affairs spoke – reported tremendous growth and 186 outreach activities. Anyone can sign up for bi-weekly news letters: **Subscribe and read the latest at** www.ashrae.org/government-affairs

TAC updates: some gov't agencies were not able to travel to the conference.

Roster updates: Training was provided by Jason Atkinsson at the Chairs Breakfast

- Society Updates:

Some changes in the voting process and positions are coming

Changes to Life Members (considering activity and contributions to society for free membership – others may still pay a fee)

- Membership:

Yang Cheng-Min resigned as TC 5.7 Secretary

Kelvan from Armstrong volunteered to be secretary...

3. Liaison reports

- Section Head: (~~Esteban Baccini Jauregui~~) NEW NAME : **FARZAN Dr Farzin M Rad,**
- Section liaison: (William Walter)
- RAC Liaison:
- Handbook Liaison: (Mark Miller)
- MARK MILLER Report: Refrigeration handbook is split apart since it is getting too large
- CEC is limiting the meeting space for all subcommittees (some pushback)

NO LIASONS ATTENDED OUR TC MEETING IN LAS VEGAS

4. Approval of minutes from the Summer Meeting

- Summer Meeting Minutes: [Basecamp Link](#)

Ritch moves to approve, Pat G seconds

Motion Passes vote: (all present, no abstentions)

5. Subcommittee reports

- Programs (**Steven J Slayzak**) Seminar 51 & 55 approved (decarbonization submittal topic turned down for Las Vegas, but was encouraged to re-submit for future conference)
 - Communications of sub-committees.
 - Winter meeting Seminar (Winter)

TRACKS for Austin:

2026 Annual Meeting - Austin– June 27 – July 1, 2026

Conference Chair : Cindy Calloway(cindy.callaway@p2sinc.com)

Fundamentals and Applications

- Track Chair: Mikeal Salonvaara | salonvaaramh@ornl.gov

HVAC&R Systems and Equipment

- Track Chair: Atilla Biyikoglu | abiyik@gazi.edu.tr

Research Summit

- Track Chair: Craig Bradshaw | crbrad@illinois.edu

Workforce Development

- Track Chair: Mike Bilderbeck | mbilderbeck@pickeringfirm.com

Ground Source Heat Pumps

- Track Chair: Ahmed Elatar | elataraf@ornl.gov

Hot Climate Building System Design, Operation and Resilience

- Track Chair: Jie Cai | cai40@purdue.edu

AI in Building Design and Construction

- Track Chair: Jeslu Jacob | jesluceline@gmail.com

Building Decarbonization

- Track Chair: Raul Simonetti | raul.simonetti@carel.com

Discussion: hot climate design might be good for TC 5.7 as well as AI in Building and Design

Steve mentioned high load data centers are going to liquid systems. Still big opportunities for cooling air within data centers (per Steve)

Discussion: adiabatic precooling is also an opportunity

Steve may round up some presenters around this topic for Austin

DISCUSSION ON SEMINAR 6: Colorado River current agreement expires end of 2026

Assembly women Lisa Clark spoke – the discussion is opening about the moratorium on evaporative cooler.

DISCUSSION ON SEMINAR 22: Southern Nevada water authority spoke and said that any water used to generate power outside of their region is not considered. Moderator of the session summarized that locally you are 'stealing from Peter to pay Paul'

- Research (**Richie Mittal**)
 - Update; Opportunities. There is money available: do we have any proposals
 - IDEAS: Galon Gerig mentioned 90.4 committee member brought up using water – how do you properly account for water use in utilities.
 - Further discussion regarding how cooling towers accounted for: not clear how returned river water and cooling ponds are accounted for.
 - NREL: 4 gallons per KW/hour, but there is no consensus in the industry.

- ****Consider a Research project to look at this number... write an RTAR.. (energy water nexus committee TC 2.8 - would be a possible committee for Ritche to reach out (Steve Slayzak to support) Goal: get real numbers to be able to contribute to the conversations from Seminar 6 & Seminar 22**
- Handbook (**Gursaran D Mathur**)
 - 2 chapters for the handbook:**
 - Chapter 53 – Evaporative cooling, (last published June of 2023)
 - GD discussion with William and Steve – only minor changes (last update was major changes.)
 - Due date April 12th: next 2-3 weeks and we will vote by letter ballot

 - Chapter 41 – HVAC system & equipment to be published this year in June. The draft document was submitted last April. For next year: Once again, the last version had major changes, only minor changes expected for this revision
 - Some changes to the 2024 handbook: VAV, adiabatic dehumidification, economizers
 - New figures, new tables, new references
- Standards (**Patricia Graef**)
 1. Standard 212: Method of Test for Determining Energy Performance and Water-Use Efficiency of Add-On Evaporative Precoolers for Unitary Air-Conditioning Equipment
 - ii. Std 133 and 143 were published but now it is time to start again. Expected work is mainly to update the references.
 - iii. Std 212: received an extension. Took some time to receive workable/editable copy of the final wording. Pat has done the mandatory language. Still need to check references.
 - iv. Dalip Singh volunteered to get the number of copies of each standard downloaded from publications committee (he is on the committee)
- Website (**Mark Miller**)
 - Status **UPDATED** the website, including updating the document folders

Suggestion: Add the website link to the minutes:

<https://tc0507.ashraetcs.org>

6. Old Business

- Standard 212: Method of Test for Determining Energy Performance and Water-Use Efficiency of Add-On Evaporative Precoolers for Unitary Air-Conditioning Equipment
- ASHRAE Task Force for Building Decarbonization
- How can TC5.7 help to address the growing concerns over water usage in evaporative cooling solutions? (covered with Research discussion)
- DOE Energy plus doesn't include evaporative cooling (Nick Lea and Mark Pavol looked into this – fundamentals are included. Steve noted that each program has it's quirks on how to use it)
- Meeting Time of **5 pm – 7 pm preferred** over 4 – 7 from Orlando

7. New Business

- none

8. Adjourn

- Meeting adjournment

Motion to adjourn