

TC 9.1 Large Building Air-Conditioning Systems

Tuesday, January 23 1:00 PM – 3:00 PM CST

Marriott Marquis Chicago, Biology (2)

| Name | Position | Voting Status | Attendance |
|-------------------|----------------------------------|---------------|------------|
| Phillip Trafton | Chair | Voting | Yes |
| Ken Warren | Vice Chair | Non-voting | Yes |
| Madison Schultz | Secretary | Non-voting | Yes |
| R Lee Millies | Standards Subcommittee Chair (V) | Voting | Yes |
| Zehui Hong | Research Subcommittee Chair | Non-voting | Yes |
| Jay Eldridge | Handbook Subcommittee Chair | Voting | Yes |
| Dennis Wessel | Program Subcommittee Chair (V) | Non-voting | Yes |
| Elizabeth Primeau | Webmaster | Non-voting | Yes |
| Kelley Cramm | Member | Voting | Yes |
| Mark Fly | Member | Voting | Yes |
| Mark Pavol | Member | Voting | Yes |
| Douglas Cochrane | Corresponding Member | Voting | Yes |

Additional Members:

Bill Klock, Charles Henck

Additional Members:

Susan Sun-Yuan, Ashish Rakheja, Danny McGrail, Stephen Huckabone, Jaycen Mouillesseaux, Joy Altwies, Brian Sybesma, L. Hardo, Daniel Bersohn

Online Attendees:

Alonzo, Steve

Meeting brought to order at 1:05pm by Phil Trafton.

Code of Ethics Commitment

In this and all other 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 we shall avoid all real or perceived conflicts of interests.

Scope

TC 9.1 is concerned with the general design concepts of the HVAC systems that are utilized for the conditioning of large buildings, including the integration of components into centralized and decentralized systems.

1. Approval of previous minutes

- a. Motion by Jay Eldridge, Second by Mark Pavol, Vote: Unanimous CNV

2. TAC Update (Joy)

- a. Submit forms by end of day today.
- b. New roster update software will roll out soon.
- c. Roster updates will happen in February for review by Brad
 - i. Take effect July 1
- d. TAC trying to engage with membership more. Polled for how many attend local chapter meetings regularly
- e. 54,000 Members, 1,000 active on TCs
- f. New MTG for Generative AI active
- g. Task Group 9 for Space is now TC 9.13 Space Applications
- h. Trying to increase the number of Fellows in ASHARE
 - i. 1-1.5% of Membership
 - ii. Other organizations are about 3%

3. Confirmation of voting membership and leadership positions as listed on website

4. Sub-Committee Reports

- a. Handbook (Jay)
 - i. Comments have been received
- b. Research (Zehui)
 - i. Cost estimating guidelines
 - ii. Look for ways to leverage ASHRAE funds
 - iii. Deadline Sep 1 for Service to ASHRAE Research Award, nominations encouraged
 - iv. No current research projects
 - v. Discussion: Consideration for collaboration with ground source loop TCs since they will likely affect central plants in the future.
 - vi. Discussion: Consideration for collaboration with Handbook to ensure no redundant information.
- c. Standards (Lee)
 - i. TC 9.1 is cognizant of Guideline 0, Guideline 16, Guideline 22, Standard 15
- d. Honors and Awards
 - i. New Chair – Mark Fly
- e. Website (Liz)
 - i. Website is up to date
 - ii. All Subcommittee Chairs to let Liz know about all meetings so that meeting times can get listed on website.
- f. Programs (Dennis)
 - i. Indianapolis deadline is February 26.
 - 1. Pet relief areas
 - 2. Standard 90.1 Guidelines 36 and overcomplication of controls
 - a. Kelley to Chair, coordinate with Johnathan Smith
 - 3. Evaporative Cooling Prohibition

- a. Follow up after Tampa forum
 - b. Chair: Madison
 - c. Submit for Indianapolis
- 4. Right Sizing HVAC Systems
 - a. Possible co-sponsorship
 - i. TC for District Energy systems
 - ii. TC 9.12 Tall Buildings
 - iii. TC 6.1
 - b. Dennis following up on this
 - c. Submit for Orlando
 - d. Discussion on possible speakers and format
- 5. Decarb Stewardship session
 - a. Lead by Kelley
- ii. Discussion on sessions at this conference that had high levels of interest:
 - 1. Decarbonization
 - 2. Micro-nuclear plants
 - 3. Heat pumps
 - 4. Balance existing gas systems with new electric heat systems
 - 5. Equity is important to discuss
 - a. i.e. As natural gas customers drop, prices will increase for the most disadvantaged

5. Liaison Reports

- a. TC 4.3 – No updates. Steve Duda will attend in Indianapolis
- b. TC 5.1 (Jay) – working on some research projects
- c. TC 5.7 (Mark) – water versus power use. Standard 212 needing some maintenance.
- d. TC 7.9 (Alonzo) – cooling systems without water for data centers – possible program topic. ICC has developed guideline for AHJs on the topic of Commissioning.
- e. TC 9.8 – No updates
- f. TC 9.9 (Mark) – liquid cooling is trending up in the industry. 500 people on their roster, 150 at the TC meeting. Membership is increasing significantly. Wetted materials and liquid performance research planned. 14 books have been written on data center design, but they do not sell. Thought to put the information on Wiki.
- g. TC 9.10 (Kelley) – Meeting is later. Chair is having regular bi-monthly leadership meetings which is helping with continuity of issues. Updating Design Guides. Guideline 36 is being amended.
- h. TC 9.12 (Dennis) – six programs at this conference. Not submitting any for Indianapolis. Handbook updates done. AEDG has been disbanded. Dennis investigating cost to develop AEDG for Tall Buildings.
- i. Standard 15 (Kelley) – 2022 version of Standard has a lot of changes that increase clarity.
- j. CEBD (Center for Excellence in Decarbonization) was approved as replacement of Taskforce for Building Decarbonization. Each Council to have liaison.
- k. Planning Committee is looking for input on Strategic Plan.

6. Old Business

- a. Request to not have subcommittee meetings in the weeks leading up to the meeting. Consideration should be made to have meeting(s) between Conferences.

7. New Business

- a. Guideline 34 (historic buildings)
 - i. Discussion on value of maintaining guideline

1. Phil will begin the process of determining if it needs updates with the help of Ken
8. **Next Meeting:** Indianapolis Conference
9. **Adjournment** at 3:04pm