



ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc.

1791 Tullie Circle, NE • Atlanta, Georgia 30329-2305 ☎404-636-8400 • Fax 404-321-5478

Reply To: Dennis J. Wessel, P.E.
5890 Bradford Way
Hudson, Ohio 44236
(216) 469-2572

April 2, 2024 (revised 4/4/24)
TC-9.1 Large Building Air Conditioning Systems
Program Subcommittee Meeting

Minutes

Upcoming Orlando Program Deadlines

- **Wednesday, May 29, 2024** | Conference Paper Abstracts and Paper Session Requests Due
- **Monday, June 17, 2024** | Conference Paper Abstract Accept/Reject Notifications
- **Wednesday, June 19, 2024** | Website Opens for Extended Abstracts and Seminar, Workshop, Forum, Debate and Panel Proposals
- **Friday, August 2, 2024** | Debate, Panel, Seminar, Forum, Workshop, and Debate Proposals Due
- **Wednesday, September 4, 2024** | Conference Papers Due
- **Friday, September 27, 2024** | Conference Paper Accept/Revise/Reject Notifications
- **Friday, October 4, 2024** | Debate, Panel, Seminar, Forum, Workshop Scheduling Notifications
- **Wednesday, October 9, 2024** | Revised Conference Papers Due
- **Monday, October 28, 2024** | Conference Paper Final Accept/Reject Notifications

The following are the **program tracks for Orlando**:

1. Fundamentals and Applications
2. HVAC&R Systems and Equipment.
3. Refrigeration & Refrigerants.
4. Energy Storage and Grid Resiliency
5. Pathways to Building Decarbonization.
6. Artificial Intelligence
7. Industrialized Construction: Opportunities and Challenges
8. Ventilation and Indoor Environmental Quality
9. Future-Proofing the Built Environment

Indianapolis Programs:

1. Seminar: System options in Evaporative cooling prohibited locations
Chair – Madison Schultz – **This was rejected for Indy, Madison will resubmit it for Orlando.**

Orlando Programs (proposed):

1. HVAC System Rightsizing: How much is too much?
Co-Sponsor: TC-6.2 District Energy
Speakers (confirmed):
 - a. ~~Ken Warren (warren.k@portseattle.org) agreed to do central plant heating.~~ Warren has been unreachable so another speaker will be sought.
 - b. Suzan Sun Yuang (suzan.sun-yuan@stantec.com) agreed to address design.
 - c. Geoff Bares (geoff.bares@centrioenergy.com) volunteered to do district cooling load diversity.
 - d. Possible co-sponsorship with TC-6.1 (Hydronics) **Ms Jessica A Mangler, PE**
TC0601@ashrae.net
2. Seminar: Special Challenges in Pet Relief areas. Chair – Ken Warren
 - a. Russell Lavitt will provide input. Russell will be consulted on possible speakers and a program chair.
 - b. Contact TC-2.2 as possible co-sponsor or to lead
3. Forum: Does Standard 90.1 and Title 24 require over complication of control systems? **Need a Chair**
 - a. Phil Trafton offered to provide Title 24 support
 - b. Input should be sought from a control company.
 - c. A lighting control company should be contacted or a control company that does lighting control
 - d. Mark Pavol suggested that Guideline 36 adds complexity to this issue as well.

Program possibilities for future consideration:

1. **Can we Engineer for Decarbonization?** Kelly Cramm had Forum in Chicago on this topic which was very well attended and drew a lot of discussion.
2. Special challenges in grow facilities. Contact the Plant and Animal Environments TC-2.2 (Chair: Mrs Danielle Monfet) or MTG.CEA (Controlled Environment Agriculture - chair: Kevin Moldoon) for co-sponsorship. John Kuempel is a member of MTG.CEA.
2. Do large multi family buildings have special challenges? Possible co-sponsorship with TC-9.12
3. Energy and operating cost comparison of various HVAC system types.
4. Large system multizone control options.
5. Madison is aware of a DOE study on Community Ground Source well systems. This would make a good program. Perhaps “Case studies of community ground loop systems”.

6. Retrofit Opportunities for 60s vintage induction systems