



TC 6.8 Geothermal Heat Pump and Energy Recovery Applications

2023 Summer Meeting in Tampa, FL

Marriott Waterside, Florida Salon VI (2): Virtual

ASHRAE TC 6.8 FULL TC MEETING

MINUTES

Tampa, FL Sunday, 6/27/23

Howard Newton Chair

This was a Hybrid meeting with 21 people in person and 8 virtually attending

1. Welcome, Introductions, 1st timers, YEA, Remote guest
2. Review and verification of members for a quorum
3. Atlanta Draft Minutes approved after corrections
 - a. Correction to the rooster adding Carl Huber and Bob Brown
 - b. Correction to section 10 "IAPMO – Model code for ambient loop is in process" – not under ISO/CSA C448
 - c. Motion by Steve Kavanaugh, Second by Carl Huber, unanimous approval vote
4. ASHRAE Review of Liaisons
 - a. Section Head – Doug Reindl
 - b. Liaisons
 - i. Staff- Steven J Hammerling
 - ii. Standards- Paolo M Tronville
 - iii. Research- Stefan Elbel
 - iv. Handbook- Dhamshala (S)/ Werman (A)
 - v. TAC- Craig S Messmer
 - vi. ALI/PDC-
 - vii. Codes- Steve Ferguson
 - viii. Chapter Technology Transfer Chair- Elizabeth M Zakelj
5. Announcements from the Chair
 - a. Officers
 - i. Chair- Howard Newton
 - ii. Vice Chair- Roshan Revankar
 - iii. Secretary- Brendan Hall
 - iv. New Voting members needed for the future
 - b. Subcommittee Chairs
 - i. Research- Harrison Skye
 - ii. Geothermal Handbook- Matt Mitchell
 - iii. Applied Heat Recovery- Mike Filler
 - iv. Standards- Cary Smith/ Bob Brown
 - v. Programs & Education- Steve Kavanaugh
 - vi. Membership- Lisa Meline & Craig Buschur
 - vii. Webmaster- Craig Buschur
 - c. Upcoming meeting timing changes
 - i. Sunday meeting to be the Programs & Handbook in the future



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- ii. Main TC meeting will continue to be held on Tuesday
 - iii. Research and Applied Heat Recovery subcommittee virtual meetings to held a couple weeks prior to in person meetings
6. Subcommittee Reports
- a. Research
 - i. Harrison Skye gave general summary of the Research subcommittee meeting
 - 1. Work statement, WS1890, Min flow velocity for purging piping systems
 - a. contractor began on 4/1/23 and work is underway
 - 2. Research project, RP1812, Thermal Energy Storage and Geothermal
 - a. Approval pending with revisions to scope and cost
 - b. Co-Sponsor TC 7.5- Zackary Siefker
 - 3. potential future project ideas were discussed
 - a. Lisa Meline shared possible potential for a future study of grout in dry formations
 - i. Data research first, then if needed create research project
 - b. Handbook
 - i. Matt Mitchell gave Handbook chapter 35 summary
 - 1. Finished our editorial review and sent back
 - 2. possibly ready for TC review and approval in 2025, April 15, 2026 deadline for revisions – from Heather Kennedy
 - ii. Mike Filler gave summary for the Energy Recovery Chapter 9
 - 1. Motion from Steve Kavanaugh to accept Chapter 9 for publishing without changes, due to massive changes and updates made at last revision
 - 2. Second from Steve Carlson, motion passed
 - c. Kirk T Mescher Award
 - i. Lisa Meline shared that it was an award for practicing engineers
 - 1. There is a big need for more applicants and awareness of award
 - 2. Application Form will be updated in the fall and posted on the TC website
 - d. Applied Heat Recovery
 - i. Mike Filler agreed to future meeting timing changes
 - 1. Will submit report concerning Chapter 9 update
 - e. Standards
 - i. Bob Brown gave update on AHRI 600 and the evolution from 13256-1
 - 1. AHRI 600 is available for public review at AHRI website
 - ii. Bob Brown volunteered to chair standards subcommittee
 - f. Programs



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- i. Steve Kavanaugh shared that we had one seminar #63, here in Tampa with presentations from Lisa Meline, Daniel Booy and Hugh Henderson
- ii. Chicago is upcoming up next
 - 1. Steve Carlson made motion to submit 4 seminars for Chicago
 - 2. Howard Newton made second, motion passed
- iii. Potential seminar 1: Geothermal Standards updates
 - 1. Steve Carlson is going to chair
 - 2. Presentation from Bob Brown on AHRI 600 Standard
 - 3. Presentation from Lisa Meline on CSA 448 Standard
- iv. Potential seminar 2: Thermal Energy Storage Integration with Geothermal
 - 1. Xiaobing Lui to chair
 - 2. Presentation from Michelle Bernier
 - 3. Presentation from Steve Hamstra and/or Cary Smith
- v. Potential seminar 3: Recent Advancements of GHEX modeling and applications
 - 1. Antony Fountaine of NREL to chair
 - 2. Presentation from Xiaobing Lui
 - 3. Presentation from Jeff Spitzer
- vi. Potential seminar 4: Geothermal Tax Credits
 - 1. Mike Filler to chair
 - 2. Presentation from Shawn Hern
 - 3. Presentation from Brendan Hall
- vii. Indianapolis follows Chicago
 - 1. Possibly TC 2.8 would cosponsor a seminar on Decarbonization and Geothermal- Eric Peterson
 - a. Sending papers to Steve Kavanaugh for review
- g. Membership
 - i. Lisa Meline and Craig Buschur to co-chair committee
- h. Webmaster
 - i. Craig Buschur reported and asked for meeting agendas and minutes early for smooth integration to new format on website
 - ii. Link added to review AHRI 600
- 7. Industry Liaison Reports
 - a. IGSHPA
 - i. Jeff Hammonds submitted written update to the TC
 - ii. CSA C448 currently looking to be available for public review in July and published by year end.
 - iii. IGSHPA conference Dec 5-7, 2023 in Las Vegas, in partnership with NGWA
 - iv. Research conference May 28-30, 2024 in partnership with Polytechnique Montreal
 - b. GEO



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- i. Ryan Daughtery submitted written update to the TC
 - ii. IRA bill implementation being worked out including prevailing wage discussions and third party loop ownership details
 - c. IAPMO
 - i. Lance MacNevin submitted written update to the TC
 - ii. Geothermal and District Ambient loop being included in UMC 2024 version
 - iii. Revisions for the 2027 updated version may be submitted July 3, 2023- Jan 2, 2024
 - iv. Working to establish Standard Z1381 for District Systems
- 8. TAC UPDATE
 - a. GTIC Global Technical International Committee
 - b. Decarbonization Task Force sun setting is postponed they are transitioning to TC or MTC in a couple years
 - i. They have handbook guides and training coming out soon
- 9. Basecamp
 - a. Howard Newton to figure out and add members to Basecamp
 - b. Send request to Howard at howard.newton@iegmep.com with TC 6.8 Base camp- Add me in the subject line
- 10. New Business:
 - a. Subcommittee update from Electrification and Decarbonization
 - i. Draft Work Statement has been sent out for bid
 - 1. Heat Pump Application, Design, and Operation for Decarbonization
 - ii. No response to Howard's suggestions
- 11. Adjourn