

AGENDA
 ASHRAE TECHNICAL COMMITTEE 6.3
 Current ...
 CENTRAL FORCED AIR HEATING AND COOLING SYSTEMS
 Pending ASHRAE Approval ...
 “RESIDENTIAL AND LIGHT COMMERCIAL FORCED AIR HEATING AND COOLING
 SYSTEMS”
 TC 6.3 Forced Air Heating and Cooling,
 Tuesday, June 1, 2020
 1:00 p.m. – 4:00 p.m. ET
 Webinar

Attendance: Anuj Mistry-**VM**, Larry Brand-**VM**, Eric Berg-**VM** (Lennox), Andrew Hjortland (), Byran Horak (Intertek), Diane Jakobs-**VM** (Rheem), Jeff Munk-**VM** (ORNL), Jon Winkler-**VM** (NREL), Roy Crawford-**VM** (JCI), Scott Creamer (Rheem), Victor Franco (LBNL), Mark Olsen (Lennox), Paul Haydock-**VM** (Carrier), Bert Phillips (Unies)

1. Call to Order and Introductions – Review Scope and Purpose of TC 6.3

TC 6.3 is concerned with those central forced air systems used for residential and light commercial building comfort heating and cooling. Responsibility covers the design and performance of the entire system, including equipment, controls, ducts and the interactions of the system with building heating and cooling loads.

The new scope is pending approval from ASHRAE management.

2. ASHRAE Code of Ethics Commitment – Chair

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>.)

3. Review Agenda

Chairman Mistry reviewed the agenda

4. Review Voting Membership (Roster update) and establish quorum

8 of 12 voting members of the committee were present. Quorum established

5. Approval of previous minutes

Approval of Orlando 2020 Minutes: Moved (Crawford). Second (Haydock). Discussion was there scope change request from Orlando? Ans. No.

Vote passed 8,0,0.

6. Announcements

- Updates from TC Chairs Breakfast and Meeting, if any.
- TC Re-org
 - 1 time per year TC chair needs to meet with TAC review committee.
 - Reviewed ASHRAE Strategic plan for 2019-2024
 - Review of deadlines for programs and papers
- Standing committee reports
 - Refrigerant Tech Committee
 - Environmental Health Committee
 - Epidemic Task Force

Cognizant to Epidemic Task Force (ETF)

1. Review all technical questions/requests for technical guidance submitted
2. Coordinating activities of ASHRAE's internal resources
3. Partnering with and monitoring the activities of external organizations, including the more than 60 members of the ASHRAE Associate Society Alliance (AASA) of organizations related to the HVAC&R industry around the world
4. Reviewing, organizing, consolidating and publishing clear and concise summaries with citations of the most relevant information available to the built environment

- Chairman Mistry requested a liaison to represent TC6.3 on the EFT.
 - Scott Creamer offered
- Discussion:
 - Articles from Air Conditioning Heating and Refrigeration News; filter efficacy questioned. Address misinformation.
 - UV lights are supposed to be effective in killing the virus

7. Subcommittee Reports

A. Handbook (Diane Jakobs)

Chapters were submitted. Waiting to hear from ASHRAE

B. Program (Scott Creamer)

Program "Thermostats for Cooling" moved to Chicago (2021) in order to be "live"
Virtual program "Low Load Homes" is scheduled for the June conference

- Tracks for Chicago are identified as follows:
 - 1 – HVAC&R Fundamentals and Applications
 - 2 – Systems and Equipment
 - 3 – Refrigeration and Refrigerants
 - 4 – Environmental Health through IEQ
 - 5 – Building Performance and Commissioning for Management
 - 6 – Energy Conservation
 - 7 – International Design
 - 8 – Standards, Guidelines and Codes
 - 9 – (mini track) to be announced based on President Chuck Gulledge's Theme
- Program suggestions suggested by committee
 - Smart Thermostats for Cooling – Seminar for Chicago
 - Latent and sensible loads – separating them possibly for Phoenix
 - Recognizing the need for ventilation in tight spaces (suggested resources:
 - Steve Emmerich - NIST
 - Paul Francisco – U of Illinois, Champagne
 - Load based testing
 - Suggest and solicit any tracks on "Covid-19" to the effect of distribution of air and the spread of Covid-19

C. Research (Roy Crawford)

Two RTARs were reviewed by the Liaison (Omar), revised and submitted to RAC.

1. Effect of thermostat cycle time on gas furnace and boiler AFUE
2. Evaluation of Standard 103 transient components on the resulting AFUE

- Health spread – What are good design criteria for using UV, ventilation air, constant fan operation, and filtration for reducing the spread of viruses?

D. Standards (Mark Olsen not present):

- DOE requesting for comparisons of standard versions of 103, which would be best for boilers.
 - Tom Butcher comes to mind.
 - Standard 15.2P – Roy Crawford recommend TC6.3 to request being the cognizant committee for the standard in the future. Chairman Mistry will create a separate agenda item for the next meeting (Chicago).
- E. Web Site (George Yaeger not present)
- F. Low GWP – MTG report (Roy Crawford)
- MTG met in Orlando. 3 research areas in that MTG. 1. Combustion by products, 2. Adding odorant to the refrigerant, 3. Standard 15.2P.

8. ASHRAE Epidemic Task Force

- Reviewed previously under standing committee reports

9. Future roadmap – Open Discussion (Moderators: Chair, Vice Chair, Secretary)

Chairman reported - I am introducing a new topic to the mix of regular ASHRAE TC agenda items to create a roadmap for ASHRAE TC 6.3. We generally limit ourselves to discussing for the next 6 months to a year in the topics above, which has been sufficient. However, given the re-organization discussions and need to evolve, 2

we must also spend some time brainstorming ideas and creating targets for 6.3 committee. Below are some subjects to guide our discussion. I have also added our TC re-org vote from the Orlando meeting as a reminder of our commitment towards strengthening this TC.

- Research ideas?
 - Related to newer technology, testing requirements, regulatory requirements, future looking policies.
 - What is 5-10 year plan for research?
- Program ideas?
 - What is 5-10 year plan for programs? Do we formulate program ideas based on research?
- Liaisons with other committees – specifically 90.2
 - Strong liaisons leads to stronger relationships and stronger recognition of the committee's (and individual's) work.
- Light Commercial:
 - Suggestion to form a Light Commercial Working Group: <225kBTU heating, > 65000 Btu Cooling, 3 phase?
 - Identify research needs, areas of focus

Chairman is looking for volunteers to come up with a working group or subcommittee. The subcommittee will come back with ideas on areas of research need, program, application, building interaction.

Suggest Pat Riley

Suggested that Anuj hold a special meeting to identify / grow interest, and bring back actionable items.

- Electrification:
 - What is our role in ASHRAE?
 - Standard?
 - Research?
 - Guidelines for:
 - Region based application
 - Cold climate HP
 - Larry's suggestion –

- What to do with the distribution system (duct work) when replacing gas furnace with HP? Is there any specific concerns/steps that need to be addressed?
Low load homes – how to do this?
Hybrid or dual fuel?

Asking for members to bring actionable items to the committee.

- Controls
 - o Integrating smart thermostat OEM to the TC 6.3 committee.
 - o Identify research and program needs.
 - o Reach out to smart thermostat OEMs looking for a person to represent that control area with a single vote on the committee.
 - o Smart damper / Zoning
 - o Variable compressor and fans
 - o Fault detection and diagnostics
- Liaisons with other committees
 - o SPCs 90.1, 90.2 Currently these are cognizant to TC?? – Systems Energy Utilization.
 - o Ask for volunteers. Roy to bring up with the RBC

10. TC Re-organization

Not covered

11. Old Business

None

12. New Business

None

13. Adjourn

- Adjourn at 3:50 PM.