



1791 Tullie Circle, N.E./Atlanta, GA 30329

404-636-8400

DRAFT 1

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. _____ TC 1.9 _____ DATE _____ 6/25/2021 _____

TC/TG/MTG/TRG TITLE _____ Electrical Systems _____

DATE OF MEETING _____ 6/22/2021 _____ LOCATION _____ Virtual – Teams _____

MEMBERS PRESENT (VM's in bold)	YEAR APPTD	MEMBERS ABSENT (VM's in bold)	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Gerardo Alfonso	2017	Steve Rosenstock	2005	
Robert Coleman (TC 1.11)	Guest	Robert Helt (MNQ)	1994	
Daryl Collerman	Guest	John Nix (MNQ)	2007	
Steven Faulkner	2006	Osama Azzam (PCM)	2020	
Armin Hauer	2011	Joao Manoel Delcidio (PCM)	2020	
Randall Higa	2016	Joaquin Ledezma (PCM)	2020	
Larry Markel	1997	Paul Lemar (PCM)	2020	
Frank Pucciano	2001	Kyle Mullins (PCM)	2019	
Shams Shaikh	Guest	Florin Daniel Popa (PCM)	2020	
Michael S. Todd	2011	Beatriz Ofelia Salazar (PCM)	2021	
		David Williams (PCM)	2021	
		Vincent Yu (PCM)	2020	
		Ricson Chude	2017	
		Robert Crosby	2004	
		Chad Dorgan	2000	
		Charles Foster	2001	
		Charles Frazell	1997	
		Joseph Lunsford	1995	
		Ken Luther	1990	

		Ram Narayanamurthy	2013	
		Glenn Remington	2017	
		John Richardson	2007	
		Pavithra Santhanam	2018	
		Colleen Smith	1994	
		Leo Stambaugh	1994	
		John Stoops Sr.	2003	
		Marvin Thedford Jr.	1990	
		Gary Throckmorton	2000	
		Russ Tiffany	1998	
		Marija Todorovic	2005	
		William Warren Jr.	1983	
DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:				
TAC Section Head:		SH1@ashrae.net		
All Committee Liaisons as Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)		TACchair@ashrae.net CTTC1@ashrae.net RL1@ashrae.net HBS3@ashrae.net SL1@ashrae.net		
Mike Vaughn, Manager of Research & Technical Services		MORTS@ashrae.net		

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

1. CALL TO ORDER

Introduction of Members and Guests

Technical Committee 1.9 was called to order at 3:02 PM. Technical Committee Member introductions were made via Teams. Absent Members are identified on the cover sheet.

Steven Faulkner, Chair, reviewed the membership list and determined that a quorum was present (4 of 6).

2. APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

Motion: Armin Hauer/Steve Rosenstock 4-0-0-2-CV Gerardo Alfonso made a motion to approve the January 2021 Virtual minutes as distributed with a second from Frank Pucciano. There was no additional discussion and the motion passed unanimously.

Report Action Items:

None.

3. TC MEMBERSHIP AND COMMITTEE APPOINTMENTS

Since the 2021 winter virtual meeting, there were two provisional corresponding members added to the roster.

- Beatriz Ofelia Salazar
- David M Williams

The preliminary 2021/2022 roster had some issues, so Steven sent questions back to Tara. Armin Hauer will be rolling on a VM and Frank Pucciano remains a VM as incoming chair. Gerardo Alfonso volunteered to be incoming VC.

4. CHAIR REPORTS: Steven Faulkner

Steven reported as follows:

- a. Once per year, each TC shall evaluate their progress in accomplishing the purpose for which they were constituted and recommend their status to their section head. TC are encouraged to remain active. There have been 5 TC mergers to date.
- b. TAC is promoting their Open Mike Policy and asking for your ideas/feedback anytime but especially at their meetings at the beginning and end of the two conference meetings. There is also a new form to submit motions to TAC.
- c. New rosters take effect after the June meeting. Our TC roster has issues and questions have been sent to Tara.

- d. TAC is maintaining a list of interim TC meetings on its website. TAC is promoting interim meetings to get more ASHRAE work done.
- e. New leadership training is available on basecamp. TAC is exploring making PDH credits available.
- f. Our section head (Jennifer Leach) resigned and Larry Smith (incoming TAC chair) is filling in for now.
- g. Seminar and Forum proposals for Las Vegas are due by Monday 7/12.
- h. Professional development committee (PDC) is seeking ideas for new courses (ALI).
- i. CEC seeking ideas for tracks for upcoming meetings.

Up and coming meetings: Las Vegas, NV – January 29 to February 2, 2022

5. SUBCOMMITTEE REPORTS

a. **Standards: Steven Rosenstock**

ASHRAE Standard 105 (Expressing, and Comparing Building Energy Performance and Greenhouse Gas Emissions), is finally releasing after 2 or 3 public reviews.

b. **Research: Larry Markel**

Board hasn't approved ASHRAE research budget so not much happening until July.

c. **Program: John Nix & Frank Pucciano**

Frank proposes our TC should do something for Track 5 for Las Vegas. Program proposals are due 7/12. Frank has some time to start correspondence about organizing a future program. Here is some more information on Track 5 for Las Vegas.

Track 5 – Energy System Integration: Energy is the omnipresent reality of our daily lives (e.g., electricity for appliances and equipment, heat and cold for industrial processes and commercial purposes). Once used, part of the input the energy is wasted as heat/cold or as exhaust byproducts, thus contributing to the pollution of soil, water and air. The integration of various energy sources/grids with buildings, processes and transportation allows to better exploit the available energy (renewables, in particular) while reducing the said waste through a circular approach to energy usage. Papers on renewables, fossil fuels, grid integration, aggregation, demand-side flexibility, smart devices, IoT, synthetic hydrogen and synthetic fuels, CCUS, electrification would fit this track.

CCUS – Carbon Capture, Utilization & Storage

IoT – Internet of Things

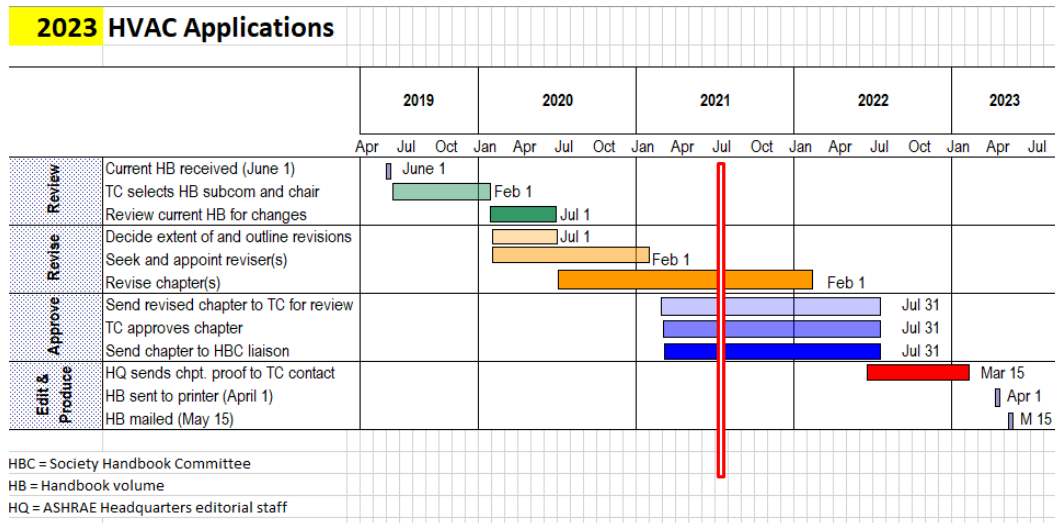
d. **Handbook: Armin Hauer**

As of the 2021 summer meeting, we are solidly in the blue section of the graph.

i.e.

* Must send revised chapter to TC for review – Armin distributed via basecamp

* TC must approve chapter



Electrical Considerations is chapter 57 (in 2019 version)

TC 1.9 members please provide Armin with any final inputs now, so that we can get the handbook revision voted out in January 2022.

Steven suggested an October interim meeting on the handbook revisions. We are still open for more inputs.

e. **Membership: Larry Markel**

Total TC membership stands at 38 at this meeting. 6 VM, 2 MNQ, 9 PCM, 21 CM.

f. **Professional Development Committee (PDC Coordinator): John Nix**

None.

6. **WEBSITE: Steven Faulkner**

Website is up to date since the January virtual meeting.

7. LIAISON REPORTS

Section Head: None.

RAC: None.

TAC: None.

Handbook: None.

8. OLD BUSINESS

None.

9. NEW BUSINESS

None.

10. ANNOUNCEMENT OF NEXT MEETING

Chairman Steven Faulkner announced that the next meeting will be held in Las Vegas, Nevada in January 2022 hopefully at our usual time on Tuesday.

Steven thanked everyone for attending the meeting.

11. ADJOURNMENT

The meeting was adjourned at 4:18 PM with a motion by Steven Faulkner and 2nd by Armin Hauer.

The motion passed 5-0-0-1-CV.

Respectfully Submitted,

Michael S. Todd
Secretary

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Appendix I – Section 1 TAC Breakfast Presentation & Handouts, and Publications



TC leadership
Breakfast Agenda.pdf



TC Breakfast
Reminder Handout.pdf