



1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400

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 12/07/2023

TC/TG/MTG/TRG TITLE Electrical Systems

DATE OF MEETING 12/07/2023 LOCATION Virtual – Teams

MEMBERS PRESENT (VM's in bold , YEA)	YEAR APPTD	MEMBERS ABSENT (VM's in bold , YEA)	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Gerardo Alfonso	2017	<i>Beatriz Salazar</i>	2021	Frank Pucciano
Daryl Collerman	2019	John Nix (MNQ)	2007	
<i>Zach DeLuke</i>	2022	Steven Faulkner	2006	
Scotty Hutto (PCM)	2022	Randall Higa	2016	
<i>Angel Lopez (PCM)</i>	2023	Ala'a Mohammed Abu Shawish (PCM)	2023	
Larry Markel	1997	Ibrahim Assi (PCM)	2022	
Tom Pollard (PCM)	2023	Stephen Duda (PCM)	2023	
Steve Rosenstock	2005	Jacob Edmondson (PCM)	2022	
Michael S. Todd	2011	John Houdek (PCM)	2022	
		<i>Abrar Hussain (PCM)</i>		
		<i>Kyle C Mullins (PCM)</i>	2023	
		Farhad Omar (PCM)	2023	
		Abiodun Olatokunbo Abiola	2021	
		Ricson Chude	2017	
		Robert Crosby	2004	
		Chad Dorgan	2000	
		Armin Hauer	2011	
		Robert Helt	1994	
		Jianming Lian	2023	
		Joseph Lunsford	1995	

		Ken Luther	1990	
		Ram Narayanamurthy	2013	
		Timothy Patrick O'Leary	2022	
		Glenn Remington	2017	
		John Richardson Jr.	2007	
		<i>Pavithra Santhanam</i>	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 are 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 12:03 PM (EST). Technical committee member introductions were made online. Absent members are identified on the cover sheet.

Gerardo Alfonso, Chair, reviewed the membership list and determined that a quorum was present (6 of 7 VMs). Gerardo reviewed with everyone the ASHRAE code of ethics, which is presented on the agenda.

2. APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

Motion: Steven Rosenstock/Daryl Collerman 6-0-0-1-CV (PASS) – Steven Rosenstock made a motion to approve the October 2023 hybrid meeting minutes (Draft 2) as distributed with a second from Daryl Collerman. There was no additional discussion and the motion passed unanimously.

Report Action Items:

None.

3. TC MEMBERSHIP AND COMMITTEE APPOINTMENTS

Frank Pucciano no longer appears on our roster, but he should be added back as a CM. Since the last interim meeting in October, there was one provisional corresponding members (PCM) added to the roster.

- Abrar Hussain

Welcome to all the recent PCMs and thank you Scotty, Angel, and Tom for attending today's interim TC meeting!

4. CHAIR REPORTS: Gerardo Alfonso

None.

Up and coming meetings: Chicago, IL – January 20 to 24, 2024

5. SUBCOMMITTEE REPORTS

a. Standards: Steven Rosenstock

189.1 recently updated.

100 publishing early 2024.

240P contains lifecycle carbon for building projects with PPR in early 2024.

Different states want low carbon standards and phasing out gas efficiency programs. Only rebates for heat pumps.

ICC 2024 contains all electric, electric ready, and EV charging infrastructure, all being discussed.

DOE, EPA, and Federal grant programs to update building codes.

DOE new rules for ALL home appliances coming in 2024.

b. Research: Larry Markel

No active projects being (co-)sponsored or RTARs in process right now for our committee. Within ASHRAE, there is lots of interest in reliability, decarbonization, and efficiency. **Please let Larry know about any co-sponsorship opportunities.** Steven Rosenstock asked the question about interest in all electric vs electric ready vs mixed use (fossil fuels) for research? Different designs, different uses, different costs; which way is best? Gerardo asked what about the use of AI to optimize building savings and/or building maintenance (Nest thermostat vs AI for controls, next level)?

c. Program: John Nix & Frank Pucciano

Indianapolis June 22-26, 2024. Dates:

- Jan 5, 2024, Abstracts for Seminars
- Feb 26, 2024, Debates, panel, seminars, forum, workshops proposals

Teams Meeting Discussion of Potential Programs – Track 5 Electrification: Possibilities and Pitfalls. Submissions are encouraged in the areas of relationships between electrification and decarbonization, electrification of space and water heating, building/grid interactions in a highly electrified environment, onsite energy generation and storage, district energy systems and all other areas related to the electrification of building systems (from Tampa).

- i. Debate: Electrification versus Electrical Infrastructure
- ii. Forum or Panel: Grid versus Onsite Generation and Impact to Decarbonization and Climate Change
- iii. Seminar/Forum/Panel or Debate: Battery Energy Storage Systems (BESS) for Decarbonization versus Resiliency and Reliability

d. Handbook: Beatriz Salazar

None.

e. Membership: Larry Markel

Total TC membership stands at 42 at this meeting. 7 VM, 1 MNQ, 11 PCM, 24 CM, 6 YEA.

Larry working to have the Power Point about our TC at Chicago. Larry asked for ideas to attract new members (email him).

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

None.

g. **WEBSITE: Steven Faulkner**

Website it up to date.

6. LIAISON REPORTS

Section Head: None.

RAC: None.

TAC: None.

Handbook: None.

7. OLD BUSINESS

Anyone have interest and time to review HB on climate change? Let Gerardo know of interest, and he will post more info on basecamp.

Committee Scope

This technical committee is concerned with electrical systems insofar as they interact with HVAC&R.

Website shows:

Agenda shows: "TC 1.9 is concerned with electrical systems insofar as they interact with the built environment."

Motion: Larry Markel/Steven Rosenstock 6-0-0-1-CV (PASS) – Larry Markel made a motion to change the TC's scope to end with "the built environment" with a second from Steven Rosenstock. There was no additional discussion and the motion passed unanimously.

Gerardo has emailed TAC and still waiting on a response. He hopes to have answer by the Chicago meeting.

8. NEW BUSINESS

None.

9. ANNOUNCEMENT OF NEXT MEETING

Chairman Gerardo announced that the next meeting will be held in Chicago, IL in January 2024, at our usual time on Tuesday.

Gerardo thanked everyone for attending the meeting.

10. ADJOURNMENT

The meeting was adjourned at 12:58 PM (EST).

Respectfully Submitted,

Michael S. Todd
Secretary

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Appendix I – List of participants

A screenshot of a meeting interface showing a list of 10 participants. At the top left, there is a dropdown arrow and the text "In this meeting (10)". At the top right, there is a button labeled "Mute all". The list of participants is as follows:

Initials	Name	Role	Mute Status
MT	Michael S Todd		Muted
AL	Angel Duran Lop... (Guest)	Meeting guest	Muted
DC	Daryl Collerman (Guest)	Meeting guest	Unmuted
FP	Frank Pucciano		Muted
GV	Gerardo Antonio Alfonso Velasq...	Organizer	Muted
LM	Markel, Larry		Muted
SR	Rosenstock, Stev... (External)	External	Muted
SH	Scotty Hutto (External)	External	Unmuted
T2	Tom Pollard-Reg... (Guest)	Meeting guest	Unmuted
ZD	Zach DeLuke (External)	External	Unmuted