



**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 10/21/2023

TC/TG/MTG/TRG TITLE Electrical Systems

DATE OF MEETING 10/20/2023 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	Daryl Collerman	2019	Frank Pucciano
<i>Zach DeLuke</i>	2022	Steve Rosenstock	2005	
<i>Angel Lopez (PCM)</i>	2023	John Nix (MNQ)	2007	
Larry Markel	1997	Steven Faulkner	2006	
Farhad Omar (PCM)	2023	Randall Higa	2016	
Tom Pollard (PCM)	2023	Ala'a Mohammed Abu Shawish (PCM)	2023	
<i>Beatriz Salazar</i>	2021	Ibrahim Assi (PCM)	2022	
Michael S. Todd	2011	Stephen Duda (PCM)	2023	
		Jacob Edmondson (PCM)	2022	
		John Houdek (PCM)	2022	
		Scotty Hutto (PCM)	2022	
		<i>Kyle C Mullins (PCM)</i>	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 1:05 PM (EDT). 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 (4 of 7 VMs). Gerardo reviewed with everyone the ASHRAE code of ethics, which is presented on the agenda. He also expressed his desire for this committee to reach out and work with other ASHRAE committees, especially during this critical time of decarbonization and electrification.

2. APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

Motion: Larry Markel/Zach DeLuke 4-0-0-3-CV – Larry Markel made a motion to approve the June 2023 hybrid meeting minutes (Draft 2) as distributed with a second from Zach DeLuke. There was no additional discussion and the motion passed unanimously.

Report Action Items:

None.

3. TC MEMBERSHIP AND COMMITTEE APPOINTMENTS

The new FY24 roster was distributed for this interim meeting. Frank Pucciano no longer appears on our roster, but he should be added back as a CM. Since the 2023 summer meeting, there were two provisional corresponding members (PCM) added to the roster.

- Angel Duran Lopez Jr
- Robert Thomas Pollard

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

4. CHAIR REPORTS: Gerardo Alfonso

Gerardo posted numerous files on Basecamp from ASHRAE just prior to this meeting.

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

5. SUBCOMMITTEE REPORTS

a. Standards: Steven Rosenstock

None.

b. Research: Larry Markel

Larry noted that our committee has sponsored and co-sponsored research in the past. Larry is willing to help folks bring any research ideas to fruition. Gerardo suggested Larry to solicit research ideas via a Basecamp post. Larry agreed.

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

Indianapolis June 22-26, 2024. Dates:

- Nov 22, 2023, CP and Paper Sections
- 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**

Beatriz was just added to Basecamp last week. Gerardo will do his best to help Beatriz get started. Frank stated that TC 2.5 is revising their handbook and wanted to know if our TC wants to volunteer to review their handbook? Gerardo will reach out to TC 2.5 chair on this idea.

e. **Membership: Larry Markel**

Total TC membership stands at 42 at this meeting. 7 VM, 1 MNQ, 10 PCM, 24 CM, 5 YEA.

Gerardo suggested that we create a Power Point about our TC for distribution. Larry agrees and will work on a short PPT to promote our committee (targeting before December 2023).

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

None.

g. **WEBSITE: Steven Faulkner**

Website needs updating. Gerardo will reach out to Steven.

6. LIAISON REPORTS

Section Head: None.

RAC: None.

TAC: None.

Handbook: None.

7. OLD BUSINESS

None.

8. NEW BUSINESS

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."

Larry clarified the agenda committee's scope was voted on several years ago to broaden our TC's scope with "the built environment." Gerardo will ask ASHRAE to officially update our scope and Steven to update our website.

Gerardo will send out a doodle poll for another interim meeting hopefully the first week of December.

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

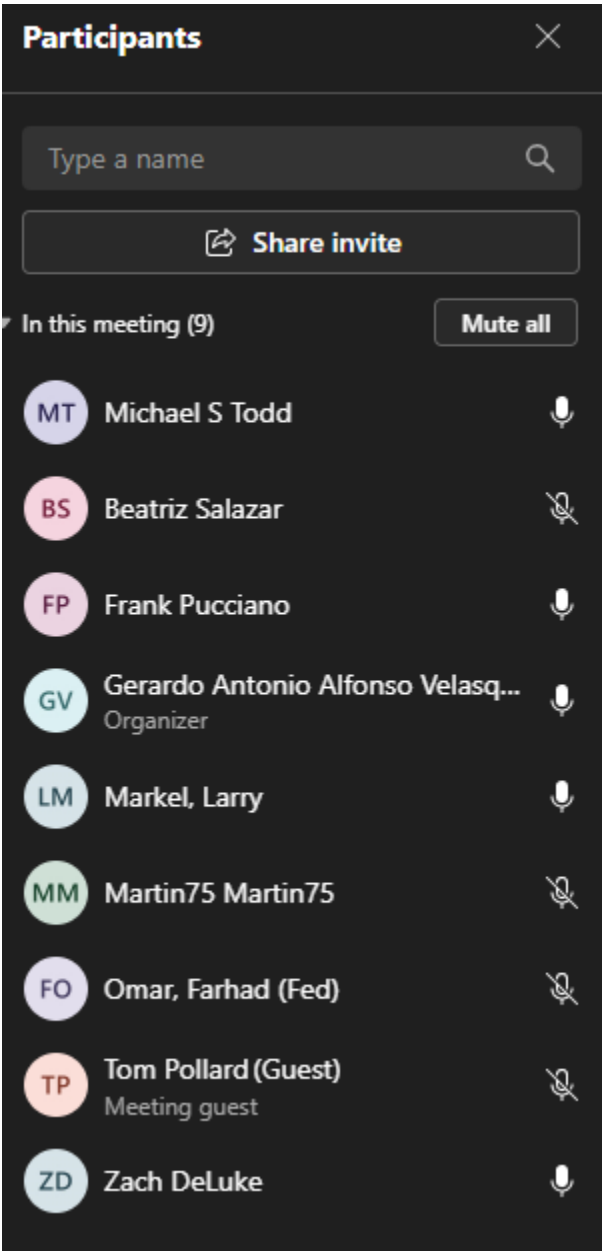
The meeting was adjourned at 1:48 PM (EDT).

Respectfully Submitted,

Michael S. Todd
Secretary

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Appendix I – List of participants



Angel Lopez (from Spain) = Martin75 Martin75