



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 \_\_\_\_\_ 5/24/2024 \_\_\_\_\_

TC/TG/MTG/TRG TITLE \_\_\_\_\_ Electrical Systems \_\_\_\_\_

DATE OF MEETING \_\_\_\_\_ 5/24/2024 \_\_\_\_\_ LOCATION \_\_\_\_\_ Teams \_\_\_\_\_

MEMBERS PRESENT (VM's in <b>bold</b> , YEA)	YEAR APPTD	MEMBERS ABSENT (VM's in <b>bold</b> , YEA)	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
<b>Gerardo Alfonso</b>	2017	<i>Beatriz Salazar</i>	2021	
<b>Daryl Collerman</b>	2019	<b>John Nix (MNQ)</b>	2007	
Stephen Duda (PCM)	2023	Steven Faulkner	2006	
<b>Randall Higa</b>	2016	<b>Zach DeLuke</b>	2022	
Scotty Hutto (PCM)	2022	Ala'a Mohammed Abu Shawish (PCM)	2023	
Jamie Lian	2023	Ibrahim Assi (PCM)	2022	
<i>Angel Lopez (PCM)</i>	2023	Jacob Edmondson (PCM)	2022	
<b>Larry Markel</b>	1997	John Houdek (PCM)	2022	
Farhad Omar (PCM)	2023	<i>Abrar Hussain (PCM)</i>	2023	
Tom Pollard (PCM)	2023	<i>Dr. Fengqi Li (PCM)</i>	2024	
<b>Steve Rosenstock</b>	2005	<i>Kyle C Mullins (PCM)</i>	2023	
<b>Michael S. Todd</b>	2011	Michael Poplawski (PCM)	2024	
		Subrata Saha (PCM)	2024	
		<i>Xinwei Zhuang (PCM)</i>	2024	
		Abiodun Olatokunbo	2021	
		Ricson Chude	2017	
		Robert Crosby	2004	
		Chad Dorgan	2000	
		Armin Hauer	2011	
		Robert Helt	1994	

		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>	<i>2018</i>	
		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	
<b>DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:</b>				
TAC Section Head:		<a href="mailto:SH1@ashrae.net">SH1@ashrae.net</a>		
All Committee Liaisons as Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)		<a href="mailto:TACchair@ashrae.net">TACchair@ashrae.net</a> <a href="mailto:CTTC1@ashrae.net">CTTC1@ashrae.net</a> <a href="mailto:RL1@ashrae.net">RL1@ashrae.net</a> <a href="mailto:HBS3@ashrae.net">HBS3@ashrae.net</a> <a href="mailto:SL1@ashrae.net">SL1@ashrae.net</a>		
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 12:04 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 (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/Larry Markel 6-0-0-1-CV (PASS)** – Steven Rosenstock made a motion to approve the March Interim 2024 meeting minutes (Draft 1) as distributed with a second from Larry Markel. There was no additional discussion and the motion passed unanimously.

### Report Action Items:

None.

## 3. TC MEMBERSHIP AND COMMITTEE APPOINTMENTS

Since the last meeting in March, there were two provisional corresponding member (PCM) added to the roster.

- Subrata Saha
- Xinwei Zhuang

Welcome to our TC!

## 4. CHAIR REPORTS: Gerardo Alfonso

None.

**Up and coming meetings:** Indianapolis, IN – June 22 to 26, 2024

## 5. SUBCOMMITTEE REPORTS

### a. Standards: Steven Rosenstock

In March, DOE sent out approval of 90.1 - 2019 and states have two years to be in compliance with their local codes.

Addendum a to 90.4-2022 is out for public review comments.

- [Addendum a to 90.4-2022 Link](#)

DOE is issuing new appliance standards to increase efficiencies almost everywhere. Example, 90% of existing light bulbs don't meet these new standards today.

240P and 242P (lifecycle carbon) are having lots of discussions.

Federal buildings clean energy standards are mandating no future fossil fuels consumption in 2030 for new projects and to reduce fossil fuels down towards zero emissions.

- [U.S. Department of Energy Announces Final Rule to Propel Federal Buildings Toward Zero Emissions | Department of Energy](#)
- [Federal Building Energy Efficiency Rules and Requirements | Department of Energy](#)

Farad brought up an issue that he has seen examples of VFD harmonic filters consuming 3kW on standby and why isn't this being addressed? Steven mentioned to bring it up to the 90.1 committee and Daryl also suggested to reach out to TC 1.11 (electric motors and motor control).

**b. Research: Larry Markel**

Please send any research ideas to any of the committee's leadership. Larry can help generate the RTAR and get it before RAC.

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

None.

**d. Handbook: Beatriz Salazar**

Gerardo announced the goal is to create a plan at Indianapolis to update the handbook with new content and ideas.

**e. Membership: Larry Markel**

Total TC membership stands at 45 at this meeting. 7 VM, 1 MNQ, 15 PCM, 24 CM, 8 YEA.

Larry is working to send out a PPT to the TC before Indianapolis to help recruit new members.

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

None.

**g. WEBSITE: Steven Faulkner**

Website is up to date.

## 6. LIAISON REPORTS

Section Head: None.

RAC: None.

TAC: None.

Handbook: None.

## 7. OLD 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."

Our TC voted in December 2023 to approve the expanded scope and was submitted to TAC for approval. TAC has provided the following feedback at this meeting: TAC believes that "the built environment" scope is too broad.

No new updates and hopefully will have an update at Indianapolis.

## 8. NEW BUSINESS

Gerardo plans to reach out to TC 1.11 for potential learning and collaboration.

## 9. ANNOUNCEMENT OF NEXT MEETING

The next Annual meeting will be held in Indianapolis, IN on June 25, 2024, from 3:30 pm to 5:30 pm.

Gerardo thanked everyone for attending the meeting.

## 10. ADJOURNMENT

Farad motioned to adjourn the meeting. The meeting was adjourned at 12:34 PM (EDT).

Respectfully Submitted,

Michael S. Todd  
Secretary

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