



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

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**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 \_\_\_\_\_ 11/25/2022 \_\_\_\_\_

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

DATE OF MEETING \_\_\_\_\_ 6/28/2022 \_\_\_\_\_ LOCATION \_\_\_\_\_ Toronto, ON / Virtual – Teams \_\_\_\_\_

MEMBERS PRESENT (VM's in <b>bold</b> )	YEAR APPTD	MEMBERS ABSENT (VM's in <b>bold</b> )	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
<b>Gerardo Alfonso</b>	2017	<b>Robert Helt (MNQ)</b>	1994	Daryl Collerman (Guest)
Steven Faulkner	2006	Abiodun Abiola (PCM)	2021	Jamie Lian (Guest)
Randall Higa	2016	Osama Azzam (PCM)	2020	Corey Metzger (Section Head)
<b>Larry Markel</b>	1997	Zachery DeLuke (PCM)	2022	
<b>John Nix (MNQ)</b>	2007	Timothy O'Leary (PCM)	2022	
<b>Frank Pucciano</b>	2001	Beatriz Salazar (PCM)	2021	
Steven Rosenstock	2005	David Williams (PCM)	2021	
<b>Michael S. Todd</b>	2011	Vincent Yu (PCM)	2020	
		Ricson Chude	2017	
		Robert Crosby	2004	
		Chad Dorgan	2000	
		Charles Frazell	1997	
		Armin Hauer	2011	
		Joseph Lunsford	1995	
		Ken Luther	1990	
		Ram Narayanamurthy	2013	
		Glenn Remington	2017	
		John Richardson Jr.	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	
<b>DISTRIBUTION: <i>All Members of TC/TG/MTG/TRG plus the following:</i></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 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 3:39 PM (EDT). Technical committee member introductions were made both in person and online. Absent members are identified on the cover sheet.

Frank Pucciano, Chair, reviewed the membership list and determined that a quorum was present (4 of 5 VMs). Frank reviewed with everyone the ASHRAE code of ethics, which is presented on the agenda.

## 2. APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

**Motion: John Nix/Geraldo Alfonso 4-0-0-1-CV** – John Nix made a motion to approve the January 2022 virtual minutes as distributed with a second from Geraldo Alfonso. There was no additional discussion and the motion passed unanimously.

### Report Action Items:

None.

## 3. TC MEMBERSHIP AND COMMITTEE APPOINTMENTS

Since the 2022 winter meeting, there were two provisional corresponding members (PCM) added to the roster.

- Osama Youssef
- Timothy Patrick O’Leary

The committee is presently below the minimum threshold of VMs (six) but that shall change after this meeting.

Frank went over the rollover roster for FY2023. Geraldo, John, and Larry will be rolling off and Steven Rosenstock, Daryl, Zach, and Randall will be rolling on.

## 4. CHAIR REPORTS: Frank Pucciano

Frank reported as follows:

- a. Publications calling for folks to join them.
- b. Toronto program statistics
- c. Panel session on Wednesday AM by our TC 1.9, “Can Connected Buildings Save the Grid?” Randall, Larry, and Frank will lead this panel discussion.
- d. Atlanta is the next conference – net zero and decarbonization tracks seems to be the HOT focus.

- e. Programs due 8/9 for Atlanta.
- f. Upcoming conference locations: 2023 Summer is in Tampa Bay, 2024 Winter in Chicago, 2024 Summer in Indianapolis
- g. Task force on building decarbonization, looking for volunteers from TCs, Randall, Larry, John, and Frank interested in helping for the next 12 months.
  - i. Building decarbonization retrofit guide – John
  - ii. Heat pump operation guide – Randall
  - iii. Heath care guide
  - iv. Building performance technical guide
  - v. Grid interaction – Larry
  - vi. Building decarbonization design guide
- h. Functional Group (FG) MOP updated – also need strategic plan and interim meetings, Frank plans to have interim meeting to generate strategic plan.

**Up and coming meetings:** Atlanta, GA – February 4 to 8, 2023

## **5. SUBCOMMITTEE REPORTS**

### **a. Standards: Steven Rosenstock**

“Standards are going absolutely crazy.”

Major push everywhere continues for decarbonization!

90.1 update being published in 2022.

### **b. Research: Larry Markel**

Attended the breakfast where they presented their strategic plan (see appendix).

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

Randall is chairing the panel tomorrow.

Hopefully this panel’s response can lead to future programs.

List of future topics: off-site generation/thermal storage and hooking micro-grids to help support the grid, community development of micro-grids

Teco project possibly in Tampa.

d. **Handbook: Geraldo Alfonso**

Our chapter has been edited, approved, and turned in on time! Geraldo did an awesome job on getting this over the finish line, published for 2023 handbook.

Larry's comment for next revision – add a section on carbonization issues, especially as it relates to electricity.

Steven R suggested on-site energy storage/generation requirements (ventilation...).

Send outlines to Geraldo for ideas to start the next update by August 1.

e. **Membership: Larry Markel**

Larry attended college of fellows mentoring YEA. Larry invited all to come for our adjournment.

Total TC membership stands at 35 at this meeting. 4 VM, 2 MNQ, 7 PCM, 22 CM, 5 YEA.

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

Any members who would like to suggest any topics, please send to John.

6. **WEBSITE: Steven Faulkner**

Website is up to date as of today. MS Internet Explorer is going away. Steven F. is contacting headquarters for help.

7. **LIAISON REPORTS**

Section Head: Corey Metzger – send email to Tara and Corey to add Daryl as VM. Activity form due by 7/1. Read the new MOP. TAC working to improve hybrid meeting operations.

RAC: None.

TAC:

Handbook: None.

8. **OLD BUSINESS**

None.

9. **NEW BUSINESS**

There was some discussion about potentially changing our meeting time.

Larry suggested a Doodle poll for members to decide. Steven R. or Steven F. will help set it up. Sunday 6-8PM is off the list.

## 10. ANNOUNCEMENT OF NEXT MEETING

Chairman Frank announced that the next meeting will be held in Atlanta, GA in February 2023, hopefully at our usual time on Tuesday.

Frank thanked everyone for attending the meeting.

## 11. ADJOURNMENT

The meeting was adjourned at 5:30 PM (EDT) with a motion by John and a second by Steven R. **The motion passed 5-0-0-0-CV.**



Respectfully Submitted,

Michael S. Todd  
Secretary

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Appendix I – Research breakfast slides



2022annual-June27  
-conf-presentation-

Appendix II – Panel submission (Toronto)



Panel session  
submission-short.doc