

THESE DRAFT MINUTES HAVE NOT BEEN APPROVED AND ARE NOT THE OFFICIAL, APPROVED RECORD UNTIL APPROVED BY THIS COMMITTEE.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.  
1791 Tullie Circle, N.E./Atlanta, GA 30329 USA

TC/TG/TRG MINUTES COVER SHEET

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

TC/TG/TRG No.: TC 1.09

Date: June 26, 2012

TC/TG/TRG TITLE: Electrical Systems

DATE OF MEETING: Tuesday, June 26, 2012

LOCATION: San Antonio, Texas

MEMBERS PRESENT	YEAR APPT'D	MEMBERS ABSENT	YEAR APPT'D	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
<b>Voting Members</b> Steven Faulkner Michael Todd Armin Hauer John Stoops Frank Pucciano  <b>Corresponding Members</b> Larry Markel		<b>Voting Members</b> Kris Findley  <b>International Members</b> Mrs Marija S Todorovic  <b>Corresponding Members</b> John Nix Robert Helton John Richardson Steve Rosenstock Wayne Frazell Kenneth Luther Russell Tiffany Leo Stambaugh Curtis Crane Ronald Antinori Subhash Brahmavar Robert Crosby Dr Alexander Domijan Dr Chad Dorgan Fred Daughtery Carlos Estrada Charles Foster Norman Fowler Joe Hague Robert Helt Rodney Lewis Joseph Lunsford Janet Lynch John Metzger		<b>Section Head</b> Victor Penar RAC Art Giesler HANDBOOK Chris Ahne  <b>Visitors</b>

		Wayne Mitchell Chad Dorgan Rex Noble Janice Peterson Thomas Piwinski Richard Rundus Colleen Smith Lousi Sulfstede Paul Tanpitukponoje Marvin Thedford Gary Throckmorton William Warren Charles Foster Janice Peterson William Warren Jr.		
--	--	--	--	--

**DISTRIBUTION:**

ALL MEMBERS OF TC/TG/TRG (and meeting guest) TAC Section Head: <u>Victor Penar</u> Chapter Tech Transfer: <u>Steve L Rosen</u> Research Liaison: <u>Art Giesler</u> ALI/PDC: <u>Filiza H Walters</u> HB Applications: <u>Chris Ahue</u>	ASHRAE Special Publications: <u>John A. Clark</u> TAC Chairman: <u>Charles C Wilkin, PE</u> Standards Liaison: <u>Michael Woodford</u> Manager of Standards: <u>Stephanie Reiniche</u> Staff Liaison/Resch./Tech Svcs: <u>Michael Vaughn</u>
--	--

**ASHRAE TC/TG/TRG ACTIVITIES SHEET**

MEETING DATE: June 26, 2012

TC/TG/TRG NO.: TC 1.09 TC/TG/TRG TITLE: Electrical Systems

CHAIR: Steven Faulkner VICE CHAIR: Frank Pucciano SECRETARY: Michael Todd

**TC/TG/TRG MEETING SCHEDULE**

Location – Past 12 Months	Date	Location – Planned Next 12 Months	Date
<b>Chicago, Illinois</b> <b>San Antonio, Texas</b>	<b>1/24/12</b> <b>6/26/12</b>	<b>Dallas, Texas</b> <b>Denver, Colorado</b>	<b>1/2013</b> <b>6/2013</b>

**TC/TG/TRG SUBCOMMITTEES**

Function	Chair
Standards	Ken Luther
Research	Larry Markel
Program	Russell Tiffany
Handbook	Frank Pucciano
Webmaster	Kris Findley

--	--

**RESEARCH PROJECTS – CURRENT**

Project Title	Contractor	Monitoring Committee	Report Made At Meet

**LONG RANGE RESEARCH PLAN**

Rank	Title	W/S Written	Approved	To RAC
None				

**HANDBOOK RESPONSIBILITIES**

Year & Volume	Chapter	Title	No	Deadline	Handbook Liaison
2004 Systems	Electrical Systems		55	2011	Brian Rock

<p><b>STANDARD ACTIVITIES</b> – List and Describe Subjects None</p>
<p><b>TECHNICAL PAPERS</b> from sponsored research – title, when presented (past 3 years present and planned) None</p>
<p><b>TC/TG/TRG SPONSORED SYMPOSIA</b> – title, when presented (past 3 years, present, and planned) 2/00 Current Aspects of Distributed Technology (co-sponsored w/ TC 9.5) 1/04 Distributed Generation, Security and the Hydrogen Economy None</p>
<p><b>TC/TG/TRG SPONSORED SEMINARS</b> – title when presented (past 3 years, present, and planned) 1/08 How Do You Connect Your Net-Zero Building to the Grid? Seminar 66 6/08 Benchmarking for Carbon Analysis: Here’s What’s Coming Seminar 56 1/10 What Does A large building Operator Need to Know about the SmartGrid while the Grid is Still in School Seminar 15 6/10 Cap &amp; Trade: Impact on buildings and Operating Cost, Co-Sponsor 2/11 Putting Your Meter-And Submeter-To Work For You 6/11 Electric Vehicles and Net Zero Energy Buildings: A Perfect Match or an Odd Couple</p>
<p><b>TC/TG/TRG SPONSORED FORUMS</b> – title, when presented (past 3 years, present, and planned) 1/10 Will Equipment Protection Requirements for Large Buildings Change as NZEB with PV Increase?</p>
<p><b>JOURNAL PUBLICATIONS</b> – when published (past 3 years, present and planned)</p>

Submitted By: Michael Todd  
Secretary

## **ASHRAE TC 1.9 Electrical Systems**

### **Minutes for the Meeting at Grand Hyatt San Antonio, Texas Tuesday, June 26, 2012**

#### **1. CALL TO ORDER**

**Introduction of Members and Guests.** Technical Committee 1.9 was called to order at 3:38 pm at the Grand Hyatt in San Antonio, Texas. Technical Committee Members and guests introduced themselves and briefly described their backgrounds. Absent Members are identified on the cover sheet.

Steven Faulkner reviewed the membership list to determine if a quorum was present. A quorum was present.

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

Chair Steven Faulkner reported the drafted minutes for the Chicago meetings were sent out via e-mail.

**Motion:** A motion to approve the Chicago minutes was given by Secretary Michael Todd and a second by Steven Faulkner. A vote was taken and minutes from the Chicago meeting was approved 4-0-2 vote.

#### **Report Action Items:**

There were no outstanding Action Items.

#### **3/4. TC MEMBERSHIP and COMMITTEE APPOINTMENTS**

**Report on changes in voting members.**

#### **5. CHAIR REPORT: Steven Faulkner**

Comments from breakfast, spoke about upcoming meetings in Dallas and Denver, conference papers, seminars, and forums concerning the number submitted versus the number approved, MTE's (multi-disciplinary task groups), changes in speaker registration fees, encouraged everyone to go to local chapter meetings to help to increase our TC attendance at the winter and annual meetings, phone and web interface TC meetings still in testing phase and having technical issues, thank you letters to be sent to participant employers, and to use the new ASHRAE brand.

Up and coming meetings: Dallas, Texas June 26 to June 30, 2013

#### **6. SUBCOMMITTEE REPORTS**

**A. Standards: Ken Luther**

**B. Research: Larry Markel**

**C. Program: Russell Tiffany**

**D. Handbook: Frank Pucciano**

Frank has the extended outline for expansion and Chris Ahne offered to help find writers to assist us.

**John Pennington – Handbook Liaison**

***Discussion on next round of Chapter Additions***

**E. Membership: Larry Markel**

More discussion on ways to reach out to find more members that can attend meetings. Reported that more “older” folks showed up to the San Antonio YEA mixer than “younger” folks and it was asked

**F. Professional Development Committee (PDC Coordinator):**

**7. WEB SITE: Kris Findley**

Kris was absent and website is not yet updated but will be soon.

**8. LIASION REPORTS**

See ASHRAEwiki.org for a collection of terminology  
25% of Denver programs will be allocated to research.

**9. OLD BUSINESS**

None.

**10. NEW BUSINESS**

Frank Pucciano discussed wanting to somehow re-energize this committee.

Seminar/Tracks for up and coming meeting:

- Integrating Heat Recovery Heat Pump Systems into NetZero Designs (co-sponsor w/ TC6.8)
- Role of SMART Buildings in Microgrids that Address Energy Security and Sustainability Objectives (Dallas?)

Other Utility Interest & Issues

- A. Electric Technologies
- B. Source vs. Site Energy-Economics
- C. Electric Consideration on HVAC Systems
  - a. Mission Critical
  - b. National & Local Security
  - c. Back-up Generation
  - d. Interconnection
  - e. CHP

Industry Interest & Issues

- A. Variable Speed
- B. Electronics
- C. Electrical load increases vs. chiller loading

- D. Back-up Power Capabilities
- E. Thermal Storage
- F. Renewables-Intermittent vs. Baseload

Steven thanked everyone for coming to the meeting.

**11. ANNOUNCEMENT OF NEXT MEETING**

Chairman Steven Faulkner announced that the next meeting would be held in Dallas, Texas in January 2013 at the same time on Tuesday.

**12. ADJOURNMENT**

Frank Pucciano made a motion to adjourn; Steven Faulkner made a second to the motion. Motion carried 5-0-1.

Respectfully Submitted,  
Michael Todd  
Secretary, TC 1.09