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.: <u>TC 1.09</u>	Date: _February 1, 2011
TC/TG/TRG TITLE: _Electrical Systems	
DATE OF MEETING: Tuesday, February 1, 2011	LOCATION: Las Vegas, Nevada

MEMBERS PRESENT	YEAR APPT'D	MEMBERS ABSENT	YEAR APPT'D	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
	AITIB		AITIB	ADDITIONALATTENDANCE
Voting Members		Voting Members		Section Head
Steven Faulkner		Kirk Bond		Victor Penar
John Stoops				
John Richardson		International Members		
John Nix		Mrs Marija S Todorovic		
Frank Pucciano		3		
Kris Findley		Corresponding Members		
J		Steve Rosenstock		
Corresponding Members		Wayne Frazell		Visitors
Robert Helt		Lawrence Markel		
Michael Todd		Kenneth Luther		
Armin Hauer		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 Metzer		
		Wayne Mitchell		
		Chad Dorgan		
		Rex Noble	1	

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 ASHRAE Special Publications: John A. Clark

TAC Section Head: Victor Penar Chapter Tech Transfer: Steve L Rosen Research Liaison: <u>Dr Sriram Somasundaram</u>

ALI/PDC: Filiza H Walters

HB Applications: John Pennington

TAC Chairman: Charles C Wilkin, PE Standards Liaison: Michael Woodford Manager of Standards: Stephanie Reiniche Staff Liaison/Resch./Tech Svcs: Michael Vaughn

ASHRAE TC/TG/TRG ACTIVITIES SHEET

MEETING DATE: February 1, 2011

TC/TG/TRG NO.: <u>TC 1.09</u>_ TC/TG/TRG TITLE: Electrical Systems

CHAIR: Steven Faulkner VICE CHAIR: Frank Pucciano SECRETARY: Kris Findley

TC/TG/TRG MEETING SCHEDULE

Location – Past 12 Months	Date	Location – Planned Next 12 Months	Date

TC/TG/TRG SUBCOMMITTEES

10/10/110 0000011111111120		
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

STANDARD ACTIVITIES – List and Describe Subjects

None

TECHNICAL PAPERS from sponsored research – title, when presented (past 3 years present and planned)

None

TC/TG/TRG SPONSORED SYMPOSIA – 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

TC/TG/TRG SPONSORED SEMINARS – title when presented (past 3 years, present, and planned)

6/06 How to Get the Untapped Savings in Your Electric Bill

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 & Trade: Impact on buildings and Operating Cost, Co-Sponsor

2/11 Putting Your Meter-And Submeter-To Work For You

TC/TG/TRG SPONSORED FORUMS – title, when presented (past 3 years, present, and planned)

1/03 Are You Sure Your Building Can Survive While Operating or Standby Power?
1/10 Will Equipment Protection Requirements for Large Buildings Change as NZEB with PV Increase?

JOURNAL PUBLICATIONS – when published (past 3 years, present and planned)

Submitted By: Steven Faulkner
Chair

ASHRAE TC 1.9 Electrical Systems

Minutes for the Meeting at The Las Vegas Convention Center Las Vegas, Nevada Tuesday, February 1, 2011

1. CALL TO ORDER

Introduction of Members and Guests. Technical Committee 1.9 was called to order at 3:40 pm at the Las Vegas Convention Center in Las Vegas, Nevada. 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 Faulker reported the drafted minutes for the Orlando, Florida meeting were sent out via e-mail.

Motion: A motion to approve the Orlando minutes was given by Chair Steven Faulkner and a second by John Nix. A vote was taken and minutes from the Orlando meeting was approved 6-0-0 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 up coming meetings in Montreal, Canada. Winner of Hightower Award. Roster updates, Updating voting member, TC voting procedure.

Discussion to use Google Groups for TC discussions.

Up and coming meetings: Montreal, Canada June 25 to June 29, 2011

Chicago, IL January 21 to January 25, 2012

Discussed results of Seminar 45; Putting Your Meter – Submeter To Work For You: Had between 100 to 120 in attendance on 2/1/10

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6. SUBCOMMITTEE REPORTS

A. Standards: Ken Luther

B. Research: Larry Markel

C. Program: Russell Tiffany

D. Handbook: Frank Pucciano

John Pennington – Handbook Liaison

Discussion on next round of Chapter Additions

E. Membership: Larry Markel

Discussion on ways to reach out to find more members that can attend meetings.

F. Professional Development Committee (PDC Coordinator):

Jon Nix spoke: ASHRAE would also like to have new short courses and long courses. We discussed a short course on electric, gas and water rates, how to calculate energy savings for energy efficiency projects.

Need more discussion.

7. WEB SITE: Kris Findley

Kris has updated the website, needs more information on seminars provided in the past.

8. LIASION REPORTS

Robert Helt and Michael Todd TC 1.11

TC 1.11 is planning to do a Seminar in Chicago on Harmonic Distortion and Reality. They would like to TC 1.9 to co-sponsor this seminar. The seminar will cover; how drives are applied, harmonic guidelines, Standard 5.19

John Nix made a motion to co-sponsor seminar with TC 1.11, Steven made a second to the motion. Motion passed 6-0-0

9. OLD BUSINESS

Discussion on developing a short course for energy rates.

10. NEW BUSINESS

Discussed Seminar on electric vehicles and net zero energy buildings for Montreal Meeting. Discussion on Research TC 6.9, Wok Statement to look at thermal storage-system level, looking for co-sponsor. Larry made a motion to co-sponsor research project with TC 6.9,

second by John Richardson, motion passed 6-0-0. Larry will send out for review to cosponsor.

Roster Updates Aruin Hauer Add Voting Member Michael Todd Add Voting Member Kirk Bond Delete Voting Member

Discussion on Net Metering Research Project

Larry made motion to write up RTAR, Steven made a second to the motion, vote taken and passed 6-0-0.

John Stoops proposed to do a Forum on High Penetrations of PV's. John to speak with PV manufacturer's and Sales Reps on being speakers for the Seminar or Forum in Chicago.

Discussion on Smart Grid, Standard 201 P

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 Montreal, Canada the same time period in June.

12. ADJOURNMENT

Robert Helt made a motion to adjourn, Kris Findley made a second to the motion. Motion carried 6-0-0.

Respectfully Submitted, Steven Faulkner Chair, TC 1.09