TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG NO.: TC 9.01 ISSUE DATE: June 29, 2015

TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

DATE OF MEETING: January 27, 2015 LOCATION: Chicago, IL

<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>TERM END</th>
<th>MEMBERS ABSENT</th>
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<th>ADDITIONAL ATTENDANCE</th>
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<tbody>
<tr>
<td>John L Kuempel Jr, Chair/Program Sub-C Chair</td>
<td>Ken Gill, member</td>
<td>Corr. Members:</td>
<td>Corresponding Members:</td>
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<tr>
<td>Howard McKew, Vice Chair/Handbook</td>
<td>Jeff Traylor, member</td>
<td>Philip Johnson</td>
<td>John Molinar</td>
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<td>Charlie Henck, Standards Sub-C Chair</td>
<td>Kelly Cramm, Steve Nicklas</td>
<td>Rachel Romero</td>
<td>Gene Strehlow</td>
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<td>Steve Duda, Honors &amp; Awards Sub-C Chair</td>
<td>Secretary/Webmaster</td>
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<td>Alonzo Blalock</td>
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<td>R. Lee Millies, Jr.</td>
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<td>Provisional</td>
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<td>John Vucci, Member</td>
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<td>Corresponding Members:</td>
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<td>Lynn Werman, Membership Sub-C Chair</td>
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<td>Rachel Romero</td>
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<td>Jay Eldridge</td>
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** NP Not Present

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TC 9.01 Large Building Air-Conditioning Systems

Meeting Minutes

Meeting Date: January 27, 2015
Chicago, IL

I. Call to Order

a) Chair John Kuempel called the meeting to order at 1:00 PM local time,

II. Introduction of Members And Guests

a) Self-introductions of members and guests were made around the table as the attendance roster was circulated. Chair welcomed all members and visitors. A quorum was not achieved.

- Voting Members: 10 Present 4 Absent, Quorum was achieved
- Voting Non-Quorum Members: 0 Present 0 Absent
- Corresponding Members: 4 Present
- Society Liaisons: 0 Present
- Staff Liaisons: 0 Present
- Guests: 6 Present

Note: Voting Non-Quorum members are voting members if present, but do not count against quorum if absent.

III. Minutes from NYC and Seattle were reviewed

a) NYC Minutes - Duda made a motion Lynn Werman second – 8/0/1 motion passed
b) Seattle minutes – Eldridge made a motion to approve, Henck second – 8/0/1
c) Agenda for the meeting was passed out and reviewed

IV. Agenda Comments / Updates (Kuempel)

a) No Additions to Agenda requested.

V. Chair’s Comments and Section 9 Report (Kuempel)

a) Owners and Operators task group needs volunteers
b) There is a new TC competition best TC in Section,
c) All members are asked to review the Code of Ethics.
d) CEC is asking members to volunteer to review papers.
e) Tracks have been set for the upcoming Atlanta meetings.
f) There are options for conference calls for meetings.
g) TAC had presentation on “talking to your local Chapter” as to what TC’s do

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VI. ASHRAE Liaison Reports

a) Section 9 (Werman) – Rosters due

b) Research was at the subcommittee meeting.

c) Standards - Malcom Knight spoke to the group about Guideline 22

TC 9.01 Subcommittee Reports

a) Membership (Keumpel):
   - Howard McKew will be leaving the TC
   - Steve Nicklas may be leaving the TC, but is trying to work with a new employer to see if he can
   - John Vucci – Vice Chair has accepted
   - Secretary – Eldridge as secretary and Webmaster
   - 3 members are rolling of in May, John will be selecting new members to replace them.

b) Handbook (McKew): Chapter 2 is complete, but it has not been distributed to the voting of the TC. The other 4 chapters are not complete to him yet. He will be getting with the other authors and reviewers to see where they are. The TC will need to vote by electronic ballot. Watch your emails.

c) Standards (Henck):
   - Guideline 22 Instrumentation for Monitoring Central Chilled-Water Plant Efficiency was put together in 2012. Staff reviewed it and it needs to be updated. The committee needs to decide to revise, reaffirm or abandon the guideline. We need a subcommittee to decide what to do. The TC will bring it to a vote in Atlanta. Phil Johnson would be interested in joining the committee if one is put together. There have been many updates for pumping, energy sources, and metering that should be included in the guideline. John Vucci felt that this was a good document and it should be updated.

   - Duda/ Henck made a motion/second that the guideline be revised, and that a committee be formed to review it. The motion passed (8/0/1). John Kuempel will chair, Welch, Johnson, and Vucci will be on the committee. Other members will be solicited.

   - Wednesday 8 AM will be the proposed meeting time for the committee.

   - Henck will complete the necessary forms.

d) Research (Duda):
   - 4 RTARs received… Numbers are lower than typical.
   - 59 projects underway. There is not a lack of funds if the projects are available.
   - RP 1448 – “Chiller room ventilation requirements” is complete, except for the results to be used by ASHRAE standard 15. There will now be some science behind the rules.

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RTAR 1727 – The interaction of HVAC with Ice rink equipment in indoor equipment. We have been asked for co-cognisant with TC 10.2 and assistance with the project.

RTAR 1684 Work Statement – Dispersion of refrigerant through building openings. Standard 15 does not define it well. The SSPC 15 did not vote for it, because they thought that there was not enough value in the project. The working group will get together again to see what should be included in the work statement. (CFD model/Tool, Refrigerants included, etc) The TC discussed what should be included in the models and worst case scenarios. The next RAC submittal deadline is May 15 for review in Atlanta.

e) Program (Eldridge):
- We co-sponsored seminars 31 and 44
- Seminars to be submitted for the Atlanta meetings due Feb 9

f) Professional Development (Henck): HVAC 1 & 2 are going worldwide with very good attendance. The classes can be done in 5 days. They are working on a new courses.

g) Honors & Awards (Duda):
- Steve passed out a report and it is attached.
- S. Duda was looking for people for the distinguished and exceptional service awards. There has been a slight change in the points required.
- John Vucci was nominated from the TC for ASHRAE Fellow.
- S. Duda is looking for a new Hightower nominee.
- Honors & Awards report was issued addressing each award, due date, and latest candidates.

h) Publications (): No report
- S. Duda wrote on overlooked code requirements for the Engineer’s Notebook column in the ASHRAE Journal.

i) Website Report ():
- Jay Eldridge agreed to look at the requirements to be web master.

VII. TC/PC Liaison Reports

a) TC 4.03 – Ventilation & Filtration (S. Duda) TC is looking at simplified ways to calculate separation distance for supply and exhaust openings.

b) AI – SPC 202 standard is going to have that group take on the other commissioning guidelines under standard 202 committee.

c) TC 6.01 – Hydronic and Steam Heating Equipment and Systems (K. Cramm) No Report

d) TC 7.05 – Smart Building Systems (G. Strehlow) No Report

e) TC 7.09 – Building Commissioning (Blalock) Standard 202 is going to take on the other commissioning guidelines under standard 202 committee. There is also going to be a new commissioning code for officials to make sure that they are doing their jobs correctly. It will be out for public review and comment in a couple weeks.

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f) TC 8.07 - Variable Refrigerant Flow (J. Vucci) RP 1684 was discussed in the meeting. ALI gave approval for a 3 hour course for engineers to design VRF. Handbook chapter needs about 4 months of work. There was a discussion of the ASHRAE article about the headquarters article that compared the two floors of the building.

g) TC 9.06 – Healthcare (J. Traylor) No Report

h) TC 9.08 – Large Building Applications (S. Nicklas) No report.

i) TC 9.09 – Mission Critical Facilities () Discussion on what qualifies as liquid cooling. Starting research on direct contact liquid cooling. Developing a building metric for data centers.

j) TC 9.10 – Laboratory Systems (K. Cramm) No Report, meets after this meeting

k) TC 9.12 – Tall Buildings (M. Fly) RP to revise the Tall Building Design Guide.

l) SSPC 15 Mechanical Refrigeration Safety (Vucci) SSPC is developing a residential version of the standard.

m) TG 2- HVAC Security (H. McKew) They are trying to get better recognized in the handbook as a higher level of security.

n) SPC 188 – Risk Management of Legionella (R. Millies) Discussed the impact on cooling towers and how the standard will apply.

o) SPC 188 Legionella in HVAC (Milles) SPC is hoping that they are close to publication with a continuous maintenance.

p) TC 6.2 (John) TC was talking about updated Standard 100. The site energy is the problem vs source energy.

q) SPC 205c Standard for data for energy modeling.

VIII. Old Business

IX. New Business

X. Adjournment

a) For Good & Well Being

b) Meeting adjourned at 3:30 PM.

XI. Attachments:

End of Minutes

Respectfully submitted by:

Jay Eldridge, Secretary

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