TC 7.9 Meeting Minutes  
Sunday, June 26th, 2016  
St. Louis, MO

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC  
1791 Tullie Circle, N.E./Atlanta, GA  30329  
404-636-8400

TC/TG/TRG MINUTES COVER SHEET

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

<table>
<thead>
<tr>
<th>TC/TG/TRG NO</th>
<th>TC 7.9</th>
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<tbody>
<tr>
<td>DATE</td>
<td>June 27th, 2016</td>
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<table>
<thead>
<tr>
<th>TC/TG/TRG TITLE</th>
<th>Building Commissioning</th>
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<tr>
<td>DATE OF MEETING</td>
<td>June 26th, 2016</td>
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<tr>
<td>LOCATION</td>
<td>St. Louis, MO</td>
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<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>YEAR APPTD</th>
<th>MEMBERS ABSENT</th>
<th>YEAR APPTD</th>
<th>EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE</th>
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<tbody>
<tr>
<td>Thomas Cappellin</td>
<td>Chair</td>
<td>Lixia Wu</td>
<td>2014 - 18</td>
<td>Adrienne Thomle – Section Head</td>
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<tr>
<td>Sarah Maston</td>
<td>Vice Chair</td>
<td>David Bornside</td>
<td>2012 - 16</td>
<td>William Mak – CM (YEA)</td>
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<tr>
<td>Justin Seter (YEA)</td>
<td>Secretary</td>
<td>Don Blacklock</td>
<td>2015 - 19</td>
<td>Kimberly Pierson – CM (YEA)</td>
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<td>Justin Garner (YEA)</td>
<td>2013 - 17</td>
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<td>David Cantrill – CM (YEA)</td>
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<td>Michael Amstadt</td>
<td>2013 - 17</td>
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<td>Roger Lautz - CM</td>
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<td>Lee Riback</td>
<td>2013 - 17</td>
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<td>Rick Casault - CM</td>
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<td>Stephen Wiggins</td>
<td>2013 - 17</td>
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<td>Alonzo Blalock - CM</td>
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<td>John Gibbemeyer</td>
<td>2014 - 18</td>
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<td>Reinhard Seidl - CM</td>
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<tr>
<td>Gerald Kettler</td>
<td>2015 - 19</td>
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<td>H. Jay Enck – CM</td>
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<td>John Castelvecchi</td>
<td>2014 - 18</td>
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<td>Tim Corbett - CM</td>
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<td>Ole Tiesen – CM (remote)</td>
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<td>Joy Altwies - CM</td>
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<td>Svein Morner - CM</td>
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Non-Voting Members Who Are Subcommittee Chairs

| Charles Dorgan - CM |

- David Shipley – Research / Web
  Present
- Thursten Simonsen – Journal
  Absent
- Walter Grondzik – Honors & Awards
  Present
- David Lewis - CM

- Guests

| Robert Towell - CM |

- Wade Conlan
  Jim Magee
- Paul Levy
  Audrey Dupuis (YEA)
- Andy DeRoche
  Bruce Pitts
- Ersin Gercek
  -
- Richie Mittal
  -
**DISTRIBUTION**

_All Members of TC/TG/TRG plus the following:_

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<tbody>
<tr>
<td>TAC Section Head</td>
<td>Adrienne G. Thomle</td>
</tr>
<tr>
<td>TAC Chair</td>
<td>William F. McQuade, PE, LEED AP</td>
</tr>
<tr>
<td>All Committee Liaisons As Shown On TC/TG/TRG Rosters:</td>
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</tr>
<tr>
<td>Manager of Standards</td>
<td>Stephanie C. Reiniche</td>
</tr>
<tr>
<td>Manager of Research &amp; Technical Services</td>
<td>Michael R. Vaughn</td>
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Call To Order / Scope / Introduction

Tom Cappellin (Chair) called the meeting to order at 3:04 PM. All who were present provided self-introductions, including their name and affiliation.

Lee Riback moved to approve the agenda for the St. Louis Meeting, Justin Garner seconded.

Voting Member Roll Call

There were 10 voting members present out of a total of 13 voting members. A quorum of voting members was present for the meeting.

Approval of Orlando Minutes

The draft minutes from Orlando were reviewed and a correction was noted. Motion was made and seconded to approve minutes as amended. Motion passed: 10 – 0 – 0 (Yea – Nay – Abstain)

ASHRAE Administrative Matters / Issues from TC Chairs Breakfast

TC Chair’s Breakfast Notes:

Seminar and Forum proposals for Las Vegas are due by Monday, August 8th.

Hightower Award nominations are due on Thursday, September 1st.

Professional development committee is seeking ideas for new ALI (ASHRAE Learning Institute) courses.

Correspondence / Announcements

A discussion was mentioned regarding developing a program for operating and managing an OPR workshop. This will be followed up on in the appropriate sub-committee meetings.

Society Liaisons

Sarah Maston - CEC Update - ASHRAE Programs

There will be a commissioning track in Long Beach (Summer 2017).

Tracks and key dates for upcoming conferences on are on the websites www.ashrae.org/lasvegas and www.ashrae.org/longbeach.

There up to 5 invited experts allowed per meeting for speakers that are not ASHRAE members.

New program types that are popular and to remain are the Debates and Panels.

Sub-Committee Reports

- Membership ................................................................. Don Blacklock
  - No report
  - Tom Cappellin indicated that membership has continued to grow
- Program ................................................................. Stephen Wiggins
Great meeting combined with the Handbook and Research Subcommittee on Saturday.

We have two proposals for programs in Las Vegas.

There is a commissioning track in Long Beach. There is a call to the committee and industry for papers and seminars for Long Beach amongst the TC 7.9 group.

Steve is stepping down as Program chair and Lee Riback is taking over.

May consider adjusting timeslots for sub-committee meetings and guideline 0, 1.1 and standard 202, as there is some overlap. It is a known issue that needs to be addressed.

- **Research** .......................................................... David Shipley
  - Three research ideas currently percolating. Two are waiting for external information, and one is currently moving.
  - The current research project with TC 1.4 is for improved tools on measuring the performance of a control loop. The project is nearly complete and is on track for successful publication soon.

- **Handbook (Applications - Chapter 43)** ......................... John Gibbemeyer
  - ASHRAE has a new online authoring portal for handbook documents. Goal is to publish updates in the online handbook.
  - There are a few new items that need material added into the handbook chapter for the next publication.
  - The online handbook subscription is currently $33 / year for ASHRAE members.
  - We are going to try to have monthly meetings via phone and webcast to keep up momentum on all sub-committee activity.

- **Standards** ............................................................ Walter Grondzik
  - TC 7.9 remains very active in the standards arena.
  - Are there any ideas for a new standard or guideline? Please see Walter if so.

- **Web Site** ............................................................. David Shipley
  - There has been significant change to the website, it follows the new ASHRAE template for TCs.
  - Content has been shifted over to the new site. As a reminder, there is no longer a password protected area.

- **Journal and Insights/International** .............................. Thursten Simonsen
  - No report

- **Honors & Awards** .................................................. Walter Grondzik
  - The Outstanding Achievement Award is for active volunteers, don’t be shy about nominating yourself for recognition, talk to Walter.
  - The Hightower Award has a bit tougher requirements but there are likely several who may qualify, please see Walter.

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**Cognizant Committee Liaison Reports**

- **SSPC 202 The Commissioning Process** ......................... Gerry Kettler (next several sections)
  - Standard Under Continuous Maintenance
  - Active sub-committees for Standard 202, Guideline 0, 1.1 and 1.5. All these guidelines are under continuous maintenance.
  - STD 202 adopted by 189.1. Working on 62.1 and 90.1. An informative annex in commissioning has been proposed for 90.1.
  - Liaisons have been appointed to Standards 189.1, 90.1 and 62.1. Liaisons exist with AIA, ICC, NFPA and NIBS
Industry publication summary has been developed and distributed to 202 committee members.

Meeting on Monday, 6/27 from 8 to Noon - Agenda includes:
- Commissioning Titles and Definitions – public review completed with three comments. Subcommittee 202 is developing responses.
- Commissioning process application special publication.
- Commissioning section being developed for 189.1
- International commissioning documentation report
- Commissioning documentation in Cal Green

- Gerry introduced a motion to approve the change in numbering of guideline 0 to 0.1.
- Group discussed procedure to change a title, and also as to whether it will confuse the industry.
- Motion is withdrawn until we can get context on the procedure.
- Gerry introduced a motion that guideline 1.1, 1.4, 1.5 and 0.2 all go into continuous maintenance under standard 202. This will benefit the coordination of the documents.
- Motion was seconded by John Castilevecchi and voted on 10 – 0 – 0, the motion carries.

- USDOE/NIBS CWCC Program and Certifications – Commissioning Provider (one of 5 titles)
  - DOE completed program development in 2015. It licenses organizations that meet the ISO 17024 and DOE requirements to certify individuals. BCA has been ANSI certified and licensed by DOE. NEBB is in process of seeking DOE Cx certification. AEE and ASHRAE now licensed for non-commissioning certifications.
  - DOE program has certification and certificate programs.

- National Institute of Building Science (NIBS)
  - Commissioning Council met Jan 12, 2016 in Washington
  - WBDG commissioning sections being updated

- American Institute of Architects (AIA)
  - Developing an AIA commissioning services contract boiler plate
  - Have hired a staff member to coordinate the commissioning process.

- International Code Council (ICC)
  - 2015 versions of IECC and IGCC require commissioning. The 2018 code issues appear to be following the same requirements.
  - Published Guideline G-4 – Guideline for Commissioning
  - Standard 1000 – Standard for Commissioning Process is on hold at this time. It has been through the first public review.

  - ICC IGCC being folded into 189.1 for 2018 except for administration chapter.
  - Cx requirements are being addressed in 189.1 WG 10 to follow Standard 202 process requirements and coordinate with other codes..

- CAL Green – Title 24
  - Includes Commissioning requirements
  - Has developed checklists for new construction.

- ALI Commissioning Courses…………………………………..Walter Grondzik
  - There are 4 commissioning courses. Including two all-day commissioning courses (one on building envelope) and two half day courses on Guideline 0 and Standard 202. They are popular courses and are also being offered internationally.

- SGPC 0 “The Commissioning Process” & SGPC 1 “HVAC&R System Commissioning”………………………….Micheal Amstadt
  - Working on the work statement for what could be a substantial update to Guideline 0, there is a call for members on the subcommittee.

- GPC 0.2 “Commissioning of Existing Buildings” ......................
  - No report

- GPC 1.2 “Commissioning of Existing HVAC&R Systems” .......... Rick
Public review before Las Vegas is likely, the content is in good shape, but there is serious editing to do on the draft text.

- **GPC 1.3 “O&M Training for HVAC&R Commissioning”** Walter Grondzik
  - Document is at about 98% and annexes are at about 60%.
  - There is a standing call for annex content to the committee.
  - Goal is to be published within a year.

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### Other Committee Liaison Reports

- **SSPC-62 “Ventilation for Acceptable IAQ”** Jean Pelletier
  - No report

  - Commissioning working group has been developing informative appendices to 90.1 to cover building enclosure, HVAC, lighting, etc. relative to having minimum verification requirements.
  - It is borderline on votes as to whether this will be included in 90.1 – 2016 or not.

- **SPC-111 “Testing and Balancing for New Buildings”** Justin Garner
  - No meeting in St. Louis, but expected to publish for public review soon.

- **GPC-11 Control Components Testing** Justin Garner
  - No report

- **TC 7.1 “Integrated Building Design”** David Allen
  - No report

- **TC 7.3 “Operation and Maintenance Management”** Thurston Simonsen
  - No report

- **TC 7.7 Testing and Balancing** Justin Garner
  - Meeting is tomorrow afternoon
  - There is a program on RP-1245 on traverse methods being presented in St. Louis.

- **TC 7.8 “Owning and Operating Costs”** Lee Riback
  - TC 7.8 continues to support the data gathering in the DASH database. Although it appears the code is currently housed at the National Lab, it is dormant.
  - Lee opens the floor for volunteer to take over as liaison, no immediate volunteers.

- **TC 9.6 “Healthcare”** Roger Lautz
  - No report

- **AEDG “Advanced Energy Design Guidelines”** Jay Enck
  - The 75% guide was not funded. The zero energy guideline was funded but it’s not clear what this is.

- **MTG BIM** Walter Grondzik
  - Major effort has been development of a BIM guide for owners

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### Other Association Reports
• ACG ................................................................................................. Jim Magee
  o Working on the accreditation as well, will be submitting the application by the end of July.
  o Annual meeting was very successful.
  o 2017 CxEnergy is scheduled in Orlando.
• AABC ............................................................................................... Justin Garner
  o ANSI standard for total system balancing is now published.
  o Training committee is actively working to overhaul the technician certification program.
• BCA ......................................................................................... Bruce Pitts
  o BCCB (sister organization that manages the certification) has now been ANSI accredited as of June 7th.
  o Commercial Workforce Credentialing Council has recognized the certification for DOE.
  o All of the training programs are being revisited to align with the CWCC requirements.
  o NCBC was successful. There will be a paper published next week on whole building commissioning.
  o State of Washington is requiring a certified commissioning program.
  o BCxA scholarships foundation raised $7,000 this year, which will be distributed to young folks interested in commissioning.
• NEBB: .......................................................................................... James Bochat
  o No Report
• USGBC ............................................................................................ H. Jay Enck
  o On October 15th all LEED shifts over to version 4!
• ASTM .............................................................................................. H. Jay Enck
  o Has abandoned the certification for building enclosure commissioning.
  o NIBS gave up guideline 3 to ASTM
  o 2813 has been under development and re-worked heavily
  o There is an ISO document in process for Building Enclosure Commissioning.
• CCC (California Commissioning Collaborative) ...................... Reinhard Seidl
  o Call-in meeting on June 30th, to discuss bills in legislation that require commissioning of existing buildings.
• Living Building Challenge .......................................................... David Cantrill
  o More stringent than LEED, requires net positive energy and water, although there is no direct commissioning requirement.

Old Business

• Nothing to discuss

New Business

• TAC is taking a poll about which TCs want to hold sub-committee meetings remotely prior to the conference, which may give us an opportunity to shrink up some time and reduce conflicts during the meeting.
• The Standard 110 Update has now been published and is available.

Next Meeting

• Sunday, January 29th @ 3pm in Las Vegas
Adjournment

- Meeting adjourned at 5:00 P.M. EST

Action Items

- No Items.

Motions

- Motion for meeting minutes for Orlando approval as amended - PASSED
- Motion that guideline 1.1, 1.4, 1.5 and 0.2 all go into continuous maintenance under standard 202 - PASSED

END OF MINUTES

Attachments

Notes from TC Chair’s breakfast meeting