TC/TG/TRG No. TC 2.8 DATE: June 29, 2014

TC/TG/TRG TITLE: Building’s Environmental Impact and Sustainability

DATE OF MEETING: June 29, 2014 LOCATION: Seattle Sheraton, Seattle, WA

<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>YEAR APPTD</th>
<th>MEMBERS ABSENT</th>
<th>YEAR APPTD</th>
<th>EX-OFFICIO MEMBERS &amp; ADD’L ATTENDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Dunstan L Macauley, III</td>
<td>2013</td>
<td>Mr. Tom Cappellin</td>
<td>2012</td>
<td>Ashish Rakheja</td>
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<td>Mr. David Ellis</td>
<td>2013</td>
<td>Mrs. Diotima Von Kempski</td>
<td>2012</td>
<td>Calina Ferraro</td>
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<td>Mr. Douglas David Fick</td>
<td>2013</td>
<td>Mr. Frank Mills</td>
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<td>Ng Yong Kong</td>
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<td>Mr. Kevin R Brown</td>
<td>2011</td>
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<td>Stanton Stafford</td>
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<td>Ms. Joy Altwies</td>
<td>2012</td>
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<td>Lisa Ng</td>
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<td>Dry Thomas M Lawrence</td>
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<td>Mr. Frank Mills</td>
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<td>Mike Beamer</td>
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<td>Dr. Paul Torcellini</td>
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<td>Andres Filipe</td>
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<td>Mr. Kevin Cross</td>
<td>2010</td>
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<td>Dick LeClaire</td>
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<td>Mr. Abdel Daewich</td>
<td>2012</td>
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<td>Don Brundage</td>
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<td>Mr. David L Grumman, P.E.</td>
<td>2013</td>
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<td>Costas Balaras</td>
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<td>Ms. Janice Means</td>
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<td>Michael Deru</td>
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DISTRIBUTION
ALL MEMBERS OF THE TC/TG/TRG

TAC CHAIR            Walter Grondzik
TAC SECTION HEAD     Thomas Sobieski
STANDARDS LIAISON    Cyrus Nasseri
HANDBOOK LIAISON     Larry Akers
RAC RESEARCH LIAISON Harvey Sachs
CTTC LIAISON         Chris Fudge
ALI LIAISON          Hugh McMillan
STAFF LIAISON (RESEARCH) Michael Vaughn

Note: These draft minutes have not been approved and are not the official, approved record until approved by this committee.
### TC/TG/TRG MEETING SCHEDULE

<table>
<thead>
<tr>
<th>LOCATION – past 12 months</th>
<th>DATE</th>
<th>LOCATION - planned next 12 months</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Denver, CO</td>
<td>June 2014</td>
<td>Atlanta, GA</td>
<td>June 2015</td>
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### TC/TG/TRG SUBCOMMITTEES

<table>
<thead>
<tr>
<th>Function</th>
<th>Chair</th>
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<tbody>
<tr>
<td>International Program</td>
<td>Ashish Rakheja, Frank Mills</td>
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<tr>
<td>Handbook</td>
<td>Kevin Brown</td>
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<tr>
<td>Research</td>
<td>Dave Grumman</td>
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<td>Green Guide</td>
<td>Joy Altwies</td>
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<td>Existing Buildings</td>
<td>Tom Lawrence</td>
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<td>Dunstan Macauley</td>
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### RESEARCH PROJECTS – Current

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<th>Project Title</th>
<th>Contractor</th>
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### Long Range Research Plan

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<th>Rank</th>
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### Handbook Responsibilities

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<tr>
<th>Year &amp; Volume</th>
<th>Chapter Title</th>
<th>No.</th>
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<th>Handbook Subcom. Chair/Liaison</th>
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<tr>
<td>2013 Fundamentals</td>
<td>Energy Resources</td>
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<td>Brundage/Bansal Grumman/Bansal</td>
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<td>2013 Fundamentals</td>
<td>Sustainability</td>
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<tr>
<td>Appendix</td>
<td>Description</td>
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<td>TECHNICAL PAPERS from Sponsored Research - Title, when presented (past 3 yrs. present &amp; planned)</td>
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<td>TC/TC/TRG Sponsored Conference Papers - Title, when presented (past 3 yrs. present &amp; planned)</td>
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<td>TC/TG/TRG Sponsored Forums - Title, when presented (past 3 yrs. present &amp; planned)</td>
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<td>JOURNAL PUBLICATIONS - Title, when published (past 3 yrs. present &amp; planned)</td>
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ASHRAE TC 2.8 - Building’s Environmental Impact and Sustainability

ANNUAL 2014 MEETING (Seattle)

**Roll call and Introductions** by Dunstan Macauley

1.1 Meeting called to Order w/ Quorum at 5:15 pm

1.2 Roll Call

1.3 Introduction

1.4 Total of 10 voting members

1.5 Informed that the Secretary has resigned and hence Vice Chair Ashish Rakheja will take the minutes.

2. **Accept Agenda/Approve Minutes of Chicago Meeting by Dunstan Macauley**

   Approval of Minutes:

   2.1 Due to resignation of Secretary, the approval of minutes is postponed to Chicago meeting in Jan 2015.

3. **Announcements/Membership/Listserv by Dunstan Macauley**

   3.1 Kevin Cross, Tom Lawrence and Janice Means rolling off in June 2014.

   3.2 Coming in Frank Mills, Don Brundage, Ng Yong Kong, Mitch Swann, John Swift, Stanton Stafford from July 1, 2014

   3.3 Dunstan acknowledged the contribution of members rolling off and congratulated those coming on the Committee.

4. **Update from Section 2 by Dunstan Macauley**

   4.1 TC Training workshop was held in the morning

   4.2 Each TC Chair to review the Code of Ethics.

   4.3 Next Winter meeting in Chicago followed by summer meeting in Atlanta.

5. **Standards Sub-Committee Report**

   5.1 SPC 191 (Proposed Standards for Water Efficiency in Buildings, Site & Mechanical Systems) Update by John Swift. The meeting was held earlier in morning. Target to send second draft for public review by Aug 8, 2014.

   5.2 SPC 189.1 (Standard for the Design of High Performance Green Buildings except Low Rise residential Buildings) Update by Tom Lawrence. This standard is progressing as per schedule.

   Tom encouraged audience to be part of the meeting.
5.3 SPC 189.3 (Design, Construction and Operation of High Performance Green Healthcare Facilities) Update by Doug Fick. The committee meets on Monday morning. In NY meeting, the comments were reviewed and draft is expected to finish in July followed by second public review in Sep-Oct, 2014.

6. Standing Committee Liaison Report

6.2 TAC
No Liaison present

6.3 Special Publications
No Liaison Present

6.4 RAC
No Liaison present

7. Seminar Sub Committee Report by Dunstan (Kevin Brown absent)

7.2 TC 2.8 is participating at two sessions.

8. Research Sub-committee Report by Joy Altwies

8.1 Potential three research topic ideas were discussed in meeting.
   a. Motivations to adopt/not adopt the ASHRAE Standards (AEDG).
   b. Comparison of LEED Water usage tool and actual usage.
   c. Performance of buildings designed as per Standard 189.

8.2 Research ideas were invited from the audience.

9. Handbook Sub Committee Report by Don

9.1 Two chapters on Energy & Resources.

9.2 These need to be updated by Jan 2016.

9.3 Sustainability chapter may be incorporated in Handbook

10. Green Guide Sub Committee Report by Tom Lawrence

10.1 Fourth edition of Green guide was published late last year.

11. International Sub Committee by Ashish Rakheja

11.1 Informed that Seminars planned in future on following:
   - Voluntary efforts for Green Rating and Sustainable Practices around the world.
   - Learnings from Past.
   - Engineer’s role in designing Sustainable master-planning of projects.

11.2 Article contributed by sub-committee in past edition of ASHRAE Journal.

11.3 Sub-committee looking at a new article for ASHRAE Journal on following topics
• Article on Sustainability Practices in Australia.
• Net Zero Energy Buildings in world
• Green Building Ratings
• Comparison of Commissioning Practices across World : (Authors : Mitchell Swan, Tom Lawrence, Yong Kong, Ashish Rakheja)

12. Website Sub-Committee Report by Dunstan
   12.1 The TC website is up to date.
   12.2 David Ellis is webmaster and has resigned.
   12.3 Dunstan requested for content to be added to website.

13. Existing Buildings Sub Committee Report by Dunstan

14. Related Activities Report
   14.1 LEED (USGBC – ASHRAE Interaction)
       • No presence.
       • Need to re-connect with USGBC.
   14.2 Advanced Energy Design Guides by Paul Torcellini
       • Currently working on 50% AEDG on Stores and draft expected by August for public comments.
   14.3 Database for Analyzing Sustainable and High Performance Buildings by Michael Deru
       • Deru recommended to take this off the agenda.
   14.4 Inter Agency Sustainability Working Group by Kinga Porst
       • No discussions
   14.5 Green Globes/GBI (Harvey J. Bryan/Coad)
       No discussions
   14.6 ASHRAE Building Energy Quotient by Paul Torcellini
       • No discussions
   14.7 MTG on Green Life Cycle Analysis (Tom Lawrence)
       • No discussions

15. New Business
   15.1 Lisa Ng offered to be the webmaster.
   15.2 TC 2.8 is looking for new secretary which will be finalized soon.
15.3 Calina will be taking over from Dunstan as chair for Existing Buildings.

15.4 Dunstan proposed that TC 2.8 looks at Energy water nexus as the subject falls under purview of this committee. After discussions the sub-committee was named as Water-Energy Nexus.
   Motion by Paul
   Seconded by Doug
   Motion carries 8-0-0 CNV

16. Executive Session to review bids on RTAR 1627

   16.1 Only voting & corresponding members with no commercial interest in bids allowed to stay in room.

   16.2 Reporting Evaluation sheets were circulated by Dunstan and session moderated by Joy

   16.3 Motion moved to approve Bidder No 2 by Dave Grumman
       Motion carried 7-0-1 CNV.

17. Adjourn

   17.1 Motion by Dave

   17.2 Seconded by Tom

   17.3 Motion passed unanimously (7-0-1), CNV.
TC 2.8 Web Site

www.tc28.ashraetcs.org

TC 2.8 E-mail List

This list is only for communications related to ASHRAE TC 2.8 Building Environmental Impacts and Sustainability. Do not distribute messages of any commercial nature.

To subscribe or unsubscribe to the list, you can go to the TC 2.8 list web site: http://lists.onebuilding.org/listinfo.cgi/tc28-I-onebuilding.org

To send a message to all subscribers to the list, address your message to:
tc28-I@lists.onebuilding.org

Note: ASHRAE does not operate this list. Please do not ask them for help. If you have any questions, please contact: Jason Glazer JGlazer@gard.com

Thanks to Jason and GARD Analytics for hosting this list!