NOTE: These are not the official minutes until approved by Technology Council
<table>
<thead>
<tr>
<th>Motion</th>
<th>Description</th>
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<tbody>
<tr>
<td>M1</td>
<td>Technology Council approved the Technology Council January 17, 2020 Webinar Minutes as presented.</td>
</tr>
<tr>
<td>M2</td>
<td>Technology Council reaffirm the <em>Airborne Infectious Diseases</em> Position Document (PD) for a period of six (6) months.</td>
</tr>
</tbody>
</table>
| M3     | Technology Council approve and appoint the following members to the *Indoor Carbon Dioxide* PD Committee:  
  - William Bahnfleth - Public  
  - Howard Kipen - General  
  - Josephine Lau - General  
  - Corrine Mandin - Public  
  - Chandra Sekhar - General  
  - Pawel Wargocki - Public  
  - Lan Chi Nguyen Weekes - General |
| CM4    | It was moved by Art Giesler that motions 1 through 4 of the OPS Report be approved as a consent agenda item. |
| CM5    | It was moved by Art Giesler that motions 5 and 6 of the OPS Report be approved as a consent agenda item. |
| CM6    | It was moved by Art Giesler that Motions 7 through 10 of the OPS Report be approved as a consent agenda item. |
| M7     | Standards Committee recommends that Technology Council recommend to Publishing and Education Council that ASHRAE make all standards accessible over the internet at no cost. |
| M7A    | That the motion be amended to delete “for free” and replace it with “for viewing only”. |
| CM8    | That motions 2 through 20 of the Standards Committee Report be approved as a consent agenda for publication as listed. |
| M9     | Standards Committee recommends that the proposed changes to the Title, Purpose, and Scope (TPS) for SPC 514P, Minimizing Risk of Disease and Injury Associated with Building Water Systems, be approved as shown in Attachment A of the Standards Committee Report posted on Basecamp as `STDS RPT ATT A 514.doc`. |
| M10    | Standards Committee recommends that the following changes to Standards Committee MOP be approved by Technology Council. |
| M11    | TAC recommends that Technology Council approves changes to TAC MOP which is shown on Basecamp as `04C - Att. A - TAC-MOP.W20 - 2.5.2020.docx`. |
| M12    | EHC recommends that Technology Council recommend to the BOD that SSPC 62.2 addendum a to 62.2-2019 on unvented combustion appliances be approved for publication. |
After a discussion on the publication, it was moved by Dennis Knight and seconded by Van Baxter to postpone the motion until the pre-Austin meeting.

EHC recommends that Technology Council recommends to Publication & Education Council that the Residential IAQ Guide be made available for free download to the public.

**ACTION ITEMS**
Technology Council
Orlando Winter Meeting
Wednesday, February 5, 2020

<table>
<thead>
<tr>
<th>AI#</th>
<th>Responsibility</th>
<th>Status</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Staff</td>
<td>Complete</td>
<td>Sarah Maston’s Society Planning Liaison Report to be posted on Basecamp for review by Chairs.</td>
</tr>
</tbody>
</table>
MINUTES
Technology Council
Orlando Winter Meeting
Wednesday, February 5, 2020

Voting Members Present
Dennis Knight, Chair
Bill McQuade, Vice Chair
Van Baxter
Rick Hermans 9:22*
Sarah Maston 9:15*
Jaap Hogeling
Trent Hunt 9:20*
Steve Emmerich
Art Giesler
Billy Austin
Mike Bilderbeck
Krishnan Gowri
Heather Platt Gulledge
Kishor Khankari

Non-Voting Members Present
Wayne Stoppelmoor
Jay Kohler
Paul Francisco
Pat Graef
David Yashar
Rajan Rajendran
Dustin Meredith
Wade Conlan
Dru Crawley

Guests
David Delaquila
Frank Stanonik
Sarah Toy
Tim McGinn
Shawn Nienhuesa

ASHRAE Staff
Steve Ferguson, Sr. MOS
Steve Hammerling, AMORTS
DD Latham, Admin
Lilas Pratt, MOSP
Stephane Reiniche, DOT
Mike Vaughn, Sr. MORTS
Alice Yates, DOGA

*Time of arrival

1. CALL TO ORDER

Chair, Dennis Knight, called the meeting to order at 9:09 a.m. Vice Chair, Bill McQuade, was asked to record any action items during the meeting. The Chair asked for any changes to the agenda. There being none, the agenda was accepted as presented.

Secretary’s Note: Quorum was met with 10 voting members, plus the Chair. All reports noted in the minutes can be found on Basecamp at ASHRAE Technology Council/Docs and Files/Meetings/02_05_2020_TechC Winter Meeting

2. MINUTES/ACTION ITEMS

M1 It was moved by Heather Platt Gulledge and seconded by Jaap Hogeling that the minutes of Technology Council’s January 17, 2020 webinar be approved as distributed.

TechC Vote: 10-0-0, CNV

Technology Council Action Items were reviewed, updated and can be found on Basecamp listed as 03B ACTION ITEMS as of 1_17_2020.pdf.

Secretary’s Note: At this time the agenda was rearranged to allow the Standing Committee Chairs time to finish their meetings. The Subcommittees presented their reports first.

3. SUBCOMMITTEE REPORTS

A. SPECIAL PROJECTS

Van Baxter reported on the activities of the Special Projects subcommittee and highlighted those shown below. There were no motions to bring forward to the Council. The full report can be found on Basecamp listed as 05B_SpcProj_Report_to_TechC_2020_02_04_F_correction.docx
Special Projects Subcommittee is reviewing the Procedures for ASHRAE Special Projects that currently reside in the Technology Council MOP in order to better clarify the procedures and to streamline the information. The subcommittee reviewed a first draft of proposed changes and continued the discussion of those changes on a conference call planned for mid to late February 2020. Proposed changes will be brought forward to Operations Subcommittee once the review has been completed. At this meeting, the subcommittee approved a recommended change to the ROB that was sent to Operations Subcommittee and will be presented as part of that report.

Special Project Publications Updates

- SP 142 Smart Grid Application Guide – Publication January 2020
- SP 141 Multifamily Design Guide – Publication Spring 2020
- SP 143 AEDG for Multifamily Buildings: Zero Energy – Publication Summer 2020
- SP 144 Designing for Operational Excellence Guide – Publication Summer 2020
- SP 302 Standard 62.2-2029 User’s Manual – Publication Fall 2020

Secretary’s Note: At 9:22 a.m. quorum was increased to 13 voting members, plus the Chair.

B. DOCUMENT REVIEW SUBCOMMITTEE

Bill McQuade gave a brief update on DRSC activities and presented the two motions below. The full report can be found on Basecamp listed as 05C – DRSC Rprt to TechC 20.W.docx.

Bill McQuade moved that:

M2 Technology Council reaffirm the Airborne Infectious Diseases Position Document (PD) for a period of six (6) months.

BACKGROUND: This PD is set to expire Jan. 31, 2020. A revision to the PD (newly retitled Infectious Aerosols) is underway but requires an additional six months to complete. Revisions include broadening the scope to include not just airborne transmissible infectious diseases, but any pathogen that may be aerosolized. The PD would apply to buildings as well as homes, schools, prisons, shelters, transportation, and other public facilities other than the general ventilation and air quality requirements of Standards 62.1, 62.2 and 170. And while not specifically called out in the PD, emerging infectious pathogens, such as 2019-nCoV, are also covered, as well as recent research findings on the influence of humidity on infectiousness.

TechC Vote: 13-0-0, CNV

Bill McQuade moved that:

M3 Technology Council approve and appoint the following members to the Indoor Carbon Dioxide PD Committee:

- William Bahnfleth - Public
- Howard Kipen - General
- Josephine Lau - General
- Corrine Mandin - Public
- Chandra Sekhar - General
- Pawel Wargocki - Public
- Lan Chi Nguyen Weekes - General
BACKGROUND: Andrew Persily was previously approved as PD committee chair and developed the proposed roster. Persily has a ‘public’ designation, so the committee meets the balance requirements for PD committees (4 public, 4 general). The members represent a number of relevant ASHRAE committees and outside expertise.

TechC Vote: 13-0-0, CNV

C. OPERATIONS SUBCOMMITTEE

OPS Chair, Art Giesler, presented the Operations Subcommittee report listed on Basecamp as 05A OPS Report to TechC 2_5_2020_Final_Correction.docx

CM4 It was moved by Art Giesler that motions 1 through 4 of the OPS Report be approved as a consent agenda item.

a. That Technology Council recommend to the BOD that the Procedures for ASHRAE Standards Action (PASA) 4.2.2.6 Standards Reaffirmation Subcommittee (SRS), PASA 7.2.4.2, Numerical Requirements for Standards Action Votes, PASA 7.4.3, Balance and Interest Categories, PASA, Definitions be revised

BACKGROUND: Standards Committee assigned PPIS an action item to review the term “consensus body” in PASA. The term “consensus body” and “project committee” is used interchangeably; the term is not used consistently, and neither “consensus body” nor “project committee” are defined in PASA. The proposed changes provide a resolution to the issue.

b. That Technology Council recommend to the BOD that the Procedures for ASHRAE Standards Action (PASA) 4.2.2.6, Standards Reaffirmation Subcommittee (SRS), and Standards Committee Manual of Procedures (StdC MOP), 6.2.6.1, Standards Reaffirmation Subcommittee Membership, and Standards Committee Reference Manual 13 (StdC RM), Standards Reaffirmation Subcommittee, be revised

BACKGROUND: Current practice for SRS membership approval stops at the Standards Committee Chair. The proposed changes would reconcile this change across all Standards Committee documents.

c. That Technology Council recommend to the BOD that the Procedures for ASHRAE Standards Action (PASA) be approved.

BACKGROUND: This term “standards committee document” and “SCD” is used in such a way, that it can lead to confusion. The ASHRAE Board of Directors created a rule that states: “Rule 1.201.004.4 There are four types of Standards Committee documents:
A. Standards
B. Guidelines
C. User Manuals
D. Code Change Proposals”

In view of the differences between the use of the term and acronym PPIS recommends the following modifications for clarity in the PASA.

d. That Technology Council recommend to the BOD that the PASA 7.3, Maintenance of Standards, be approved as shown:
7.3 MAINTENANCE OF STANDARDS

ASHRAE Standards shall be maintained under periodic maintenance procedures except when use of continuous maintenance procedures has been voted by the Standards Committee. (See definitions of continuous maintenance and periodic maintenance in Annex. A.)

When a PC does exist for a standard on periodic maintenance, the PC is required to approve a motion to initiate a revision to the Standard or Guideline and send that recommendation to the Manager of Standards and the SPLS liaison so a PINS announcement can be made. Once the PINS has been announced, the PC may begin a revision process.

When a PC does not exist, a designated subcommittee of StdC shall (a) form Interpretation Committees to respond to requests for interpretation, and (b) with the advice of the cognizant Technical Committee, Task Group, or Technical Resource Group, shall provide recommendations to the Standards Committee concerning the need for reaffirmation, revision based on updated references or adding a second system of units to a standard, thereby making the standard useable in either SI or IP units, withdrawal or the need to form a new project committee to revise a standard.

BACKGROUND: Currently our procedures are silent on situations where an SSPC, SGPC, SPC, or GPC wants to issue an addendum to a PM standard or guideline. It rarely occurs but it has occurred in the past for an SPC and now for an SSPC. The proposed language establishes procedures for Periodic Maintenance.

TechC Vote: 13-0-0, CNV

CM5 It was moved by Art Giesler that motions 5 and 6 of the OPS Report be approved as a consent agenda item.

a. That Technology Council recommend to the Board that ROB 1,201.019, Policy for ASHRAE Special Projects be revised as shown below:

1.201.019 Policy for ASHRAE Special Projects

1.201.019.1 FOREWORD
A. This "Policy for ASHRAE Special Projects," and its companion document "Procedures for ASHRAE Special Projects" (Appendix A of the Technology Council Manual of Procedures), originated in "Policy and Procedures for ASHRAE Special Projects," formerly Appendix B of the Technology Council Board Approved Rules. In June 1999 this original document was revised and split into the policy document and procedures document listed above. In June 2005, additional revisions were made to include policies related to Fast Track Special Projects and Cooperative Special Projects and to retain only the policy related material in this document, while moving all procedural material into the Technology Council MOP.

B. The original "Policy and Procedures for ASHRAE Special Projects" was developed by a presidential ad hoc committee consisting of Robert O. McDonald, Chair; David Levine; and Preston McNall; assisted by staff members J. Richard Wright and Steve Beckler and advised by Frank H. Faust. This policy replaced Rules of the Board 360-001-001 "Guidelines for Determining Compensation for Services and Expenses of ASHRAE Members and Representatives involved in ASHRAE Special Projects" adopted January 1979, and 360-001-002 "Policy for Solicitation and Acceptance of ASHRAE Special Projects" adopted June 1979.
1.201.019.3 Scope

The scope of this policy includes the following: Definitions, including the different types of Special Projects; Character of Special Projects; Criteria for establishment, solicitation, negotiation and acceptance; and, Criteria for compensation of Special Project committees. Procedures for the management of Special Projects will be maintained by are specified in Appendix A of the Technology Council MOP.

1.201.019.4 Definitions

A. ASHRAE Special Project

1. An ASHRAE Special Project is a project, normally performed outside of the ASHRAE research program, that cannot be accomplished effectively or in a timely manner on a volunteer basis and, therefore, requires some form of direct support, compensation or expense reimbursement for the project participants. Special Projects are normally funded in large part from outside sources but ASHRAE may fund or co-fund the project.

6. Administrative and financial oversight of all Special Projects is the responsibility of the ASHRAE Special Projects Subcommittee of Technology Council. Among other responsibilities (as described in the Technology Council MOP Procedures for ASHRAE Special Projects), this subcommittee approves the initiation of all Special Projects.

B. Regular Special Project - A Regular ASHRAE Special Project is one conducted under normal time frames and without major involvement of multiple organizations that are characteristic of Fast Track Special Projects and Cooperative Projects as defined below. In addition, Regular Special Projects are conducted in a consistent manner involving the Special Projects Subcommittee of Technology Council, a Special Projects Committee and a Cognizant Committee as described in the Procedures for ASHRAE Special Projects Technology Council MOP. The other two types of Special Projects are conducted in a variety of manners depending on the circumstances and the organizations involved.

BACKGROUND: After review of the Rules of the Board, Special Projects Subcommittee agreed that several clarification changes should be made so that Technology Council and the subcommittee can better manage these projects moving forward.

TechC Vote: 13-0-0, CNV


TechC Vote: 13-0-0, CNV

Secretary’s Note: The OPS report was corrected during the meeting to include a missed motion.

CM6 It was moved by Art Giesler that Motions 7 through 10 of the OPS Report be approved as a consent agenda.

a. That OPS recommended to Technology Council that Standards Committee Manual of Procedures (StdC MOP) Section 1.6.1., Voting Rules for Meetings be revised as shown below:
1.6 Voting

1.6.1 Voting Rules for Meetings

Unless otherwise specified, actions of the StdC and Subcommittees require approval by a majority of those voting at a meeting excluding abstentions. Standards actions and official interpretations require:

1. affirmative votes by the majority of the voting membership and
2. affirmative votes from at least two thirds of those voting at a meeting (yes/no), excluding abstentions.

1.6.2 Voting Rules for Letter Ballots

The Chair of the StdC or its subcommittees may authorize a letter ballot to be issued on any matter. Unless otherwise specified, actions of the StdC and Subcommittees conducted by letter ballot require approval by a majority of the voting membership of the committee, excluding abstentions. Standards action and issuance of an official interpretations require:

1. affirmative votes of the majority of the voting membership and
2. affirmative votes from at least two thirds of those voting (yes/no), excluding abstentions.

BACKGROUND: This recommended change was approved by PPIS on June 21, 2019 at the Kansas City meeting. The proposed StdC MOP and StdC RM changes are to align with current practice.

b. That OPS recommended to Technology Council that Standards Committee Manual of Procedures (StdC MOP) Section 7, Approval Sequence of Standards Related Actions be revised as shown below:

### StdC MOP 7 APPROVAL SEQUENCE OF STANDARDS RELATED ACTIONS

*(Pg 10, 1 change, add another row to table):*

Add new row to table:

**Initiate Revision of an Existing SSPC- or SPGC-Managed Standard or Guideline under Periodic Maintenance**

**Initiator:** SSPC/SGPC or Subcommittee

**Recommending Entity:** SSPC/SGPC

**Affirmative Vote Required:** *Majority

**Approving Entity:** SSPC/SGPC

**Affirmative Vote Required:** *Majority

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<tr>
<th>Action</th>
<th>Initiator</th>
<th>Recommending Entity</th>
<th>Affirmative Vote Required</th>
<th>Approving Entity</th>
<th>Affirmative Vote Required</th>
<th>Other Approval</th>
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<tr>
<td>Initiate Development of a New Standard or Guideline</td>
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<td>PPIs</td>
<td>*Majority</td>
<td>StdC</td>
<td>*Majority</td>
<td>BOD</td>
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<tr>
<td>Select Project Committee Chair and Members</td>
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<tr>
<td>Recommend PC Membership</td>
<td>SPLS Liaison &amp; PC Chair</td>
<td>SPLS</td>
<td>*Majority</td>
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<tr>
<td><strong>Recommend Policy Level</strong> PC Chair</td>
<td>PC Chair</td>
<td>SPLS</td>
<td>StdC</td>
<td>*Majority</td>
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<td><strong>Advisory Public Review (APR)</strong></td>
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<td>Recommend advisory public review</td>
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<td>PC</td>
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<td>Publication Public Review (PPR)</td>
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<td>Recommend Fast Track Processing PC or SRS #</td>
<td>PC or SRS</td>
<td>+Standards Action</td>
<td>PC or SRS #</td>
<td>+Standards Action</td>
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<td>Recommend Normal Track Processing PC or SRS #</td>
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<td>+Standards Action</td>
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<td>Respond to Comments</td>
<td>PC or SRS #</td>
<td>PC or SRS #</td>
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<td>Publication/Withdrawal</td>
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<td>Recommend publication or withdrawal following PPR (unsolved objector/commenter/negative PC vote with reason) PC or SRS #</td>
<td>PC or SRS #</td>
<td>+Standards Action</td>
<td>StdC</td>
<td>*Majority</td>
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<tr>
<td>Recommend publication or withdrawal following PPR (no unresolved objectors and no threat of legal action) PC or SRS #</td>
<td>PC or SRS #</td>
<td>+Standards Action</td>
<td>PC or SRS</td>
<td>+Standards Action</td>
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<tr>
<td>Appeal</td>
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<tr>
<td>Uphold or deny an Objector's appeal</td>
<td>Appeals Panel</td>
<td>Appeals Panel</td>
<td>*Majority</td>
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<td><strong>Initiate Revision of an Existing Standard or Guideline</strong> (when no PC exists for R/RA/W)</td>
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<td>Recommend revision within 5 year cycle TC/TG/TRG or SRS</td>
<td>SRS</td>
<td>*Majority</td>
<td>StdC</td>
<td>*Majority</td>
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<tr>
<td><strong>Initiate Revision or Reaffirmation of an Existing Standard or Guideline</strong> (when a PC exists)</td>
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<tr>
<td>Recommend revision within 5 year cycle SSPC/SGPC or subcommittee</td>
<td>SSPC/SGPC</td>
<td>*Majority</td>
<td>SSPC/SGPC</td>
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<tr>
<td>Recommend reaffirmation and review updated references PC</td>
<td>PC</td>
<td>*Majority</td>
<td>StdC</td>
<td>*Majority</td>
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<tr>
<td><strong>Initiate Reaffirmation of an Existing Standard or Guideline</strong> (when no PC exists)</td>
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<tr>
<td>Recommend reaffirmation and review updated references TC/TG/TRG</td>
<td>TC/TG/TRG</td>
<td>*Majority</td>
<td>SRS</td>
<td>Majority</td>
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<td><strong>Withdraw an Existing Standard or Guideline</strong></td>
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<tr>
<td>Recommend withdrawal TC/TG/TRG or SRS</td>
<td>SRS</td>
<td>+Standards Action</td>
<td>SRS</td>
<td>*Majority</td>
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<tr>
<td><strong>Revise a Title, Purpose and Scope (TPS)</strong></td>
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<td>Recommend revised TPS Policy Level PC</td>
<td>SPLS</td>
<td>*Majority</td>
<td>StdC</td>
<td>*Majority</td>
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<tr>
<td>Recommend revised TPS Other PC</td>
<td>SPLS</td>
<td>*Majority</td>
<td>StdC</td>
<td>*Majority</td>
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**Notes**

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<tr>
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<th>Standards Committee</th>
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<tbody>
<tr>
<td>PC</td>
<td>Project Committee</td>
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<tr>
<td>PPIS</td>
<td>Standards Committee - Policy, Planning and Interpretations Subcommittee</td>
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<tr>
<td>SPLS</td>
<td>Standards Committee - Standards Project Liaison Subcommittee</td>
</tr>
<tr>
<td>SRS</td>
<td>Standards Committee - Standards Reaffirmation Subcommittee</td>
</tr>
<tr>
<td>TechC</td>
<td>ASHRAE Technology Council</td>
</tr>
<tr>
<td>BOD</td>
<td>ASHRAE Board of Directors</td>
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</tbody>
</table>

Quorum at a meeting

More than 50% of voting membership present

#  

SRS can act as the revision committee under certain circumstances

*  

For a normal committee vote: majority of those voting at a meeting; Letter ballot – majority of the voting membership

+  

For a standards action: affirmative votes by the majority of the voting membership and affirmative votes from at least two-thirds of those voting at a meeting, excluding abstentions. When recorded votes are taken at meetings, project committee members who are absent shall be given the opportunity to vote before or after the meeting. See example below.
Letter Ballot – Affirmative votes by the majority of the voting membership and affirmative votes from at least two-thirds of the voting membership, excluding abstentions. Negative votes with reason shall be ‘recirculated’ to all voting members with time limit in case anyone wants to change vote. Results are final upon expiration of time limit.

**Background:** This allows SPCs and SSPCs to make a recommendation to revise a standard before disbanding or to make recommendations to revise documents for which the committee is responsible for maintaining. A mechanism doesn’t currently exist.

c. That OPS recommended to Technology Council that changes to the Residential Building Committee MOP be approved as shown in Attachment 06F_ResBuildingComm_MOP_Proposed_11-21-19_PTG of the RBC Report posted on Basecamp.

**Background:** The RBC has reviewed their MOP and updated it to better align with the ROB and to remove items that more reasonably should reside in a Reference Manual.

d. That OPS recommended to Technology Council that changes to the Refrigeration Committee MOP be approved as shown in Attachment A - REF-CPCC_Rules_of_Board_Jan_2020.pdf of the REF Report posted on Basecamp.

TechC Vote: 13-0-0, CNV

5. **SPECIAL COMMITTEE/LIAISON REPORTS**

   A. **GAC Liaison Report**

   Mike Bilderbeck, GAC Liaison, gave an update on GAC activities. The report can be found on Basecamp listed as 06A_Tech_Council_Liaison_report_from_GAC_McQuade_Winter_2020_Orlando_v1.pdf for further review.

   B. **Society Planning Liaison Report**

   Sarah Maston reviewed with the Council the Society’s Planning Liaison Report which can be found on Basecamp listed as 06B_SP_Gaps_and_Overlap_Analysis_TechC_Rev

   **AI#1 – An action item was assigned to Staff to post Sarah Maston’s Society Planning Liaison Report to Basecamp for review by Chairs.**

6. **ASHRAE DC OFFICE UPDATE**

   Alice Yates from ASHRAE’s DC office presented a report on the activities of GAC and the DC office. This presentation can be found on Basecamp listed as 07_2020_Tech_Council_GA_Staff_Report_.pdf.

7. **DOT REPORT**

   Stephanie Reiniche gave a brief update on the Technology’s department activities. The DOT report is posted on Basecamp for further review listed as 08_DOT_Report.doc.
8. **STANDING COMMITTEE REPORTS**

Wayne Stoppelmoor presented the Standards Committee Report. Motions were presented and highlight information items are shown below. The full report is posted on Basecamp and listed as 04A-StdC Report to TC Orlando 2020 2.5.20 (corrected).doc

**A. STANDARDS**

The following motion was moved by Jaap Hogeling and seconded by Heather Platt-Gulledge that:

**M7** Standards Committee recommends that Technology Council recommend to Publishing and Education Council that ASHRAE make all standards accessible over the internet at no cost.

**Background:** In the first recommendation from the *Report of the Presidential ad hoc Committee on ASHRAE’s Role in the Globalization of Standards*, in order to increase the international use and influence of ASHRAE standards, consider changing the business model for standards distribution so that ASHRAE standards are available over the internet at no cost, thus enhancing their availability, while retaining fees for the sale of printed copies of standards. This would bring ASHRAE's policy in line with that of the Internet Engineering Task Force, whose Internet standards are arguably the most widely adopted and successful in the world.

**M7A** It was moved by Heather Platt Gulledge and seconded by Rick Hermans.

That the motion be amended to delete “for free” and replace it with “for viewing only”.

TechC Vote on Motion to Amend: 13-0-0, CNV

**TechC Vote on Motion as Amended:** 12-0-11, CNV

*Secretary’s Note: This motion has been referred to PEC for review and consideration.*

It was moved by Jaap Hogeling and seconded by Krishnan Gowri

**CM8** That motions 2 through 20 of the Standards Committee Report be approved as a consent agenda for publication as listed.


c. BSR/ASHRAE Addendum *g (Adds zeotropic refrigerant blend R-470B)* to ANSI/ASHRAE Standard 34-2019, *Designation and Safety Classification of Refrigerants*.


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1 Jaap Hogeling abstained because he did not follow the motion.


**TechC Vote: 13-0-0, CNV**

It was moved by Jaap Hogeling and seconded by Krishnan Gowri that:

**M9** Standards Committee recommends that the proposed changes to the Title, Purpose, and Scope (TPS) for SPC 514P, Minimizing Risk of Disease and Injury Associated with Building Water Systems, be approved as shown in Attachment A of the Standards Committee Report posted on Basecamp as **STDS RPT ATT A 514.doc**.

**TechC: 12-0-1,2 CNV**

It was moved by Jaap Hogeling and seconded by Van Baxter that:

**M10** Standards Committee recommends that the following changes to Standards Committee MOP be approved by Technology Council:

**Standards Committee Manual of Procedures:**

**6.2.5 Code Interaction Subcommittee**

CIS shall advise the StdC on ASHRAE’s relationship with building model code developers, and standards developers, writing bodies. CIS shall advise StdC on ASHRAE’s relationships with other organizations when directed by the Board of Directors. (See StdC Reference Manual Section 12).

**6.2.5.1 CIS Membership**

CIS is comprised of StdC and non-StdC members with knowledge of Code Development and Standards Development. Membership is subject to approval by the Chair of Technology Council.

**Background:** ASHRAE BOD ExCom assigned an action item to Standards Committee to develop a policy that provides a clear path for committees to request ASHRAE submit proposals and comments to standards being developed by other organizations. This proposed change expands the rules so CIS is responsible for reviewing and approving those requests.

**TechC: 13-0-0, CNV**

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2 Heather Platt Gulledge abstained because she is a committee member of SPC 514.
Mr. Stoppelmoor highlighted the following information items from the Standards Committee Report to Tech Council.

1. Standards Committee approved and will recommend that the Board approve the following for publication:

2. Standards Committee approved and will recommend that the Board approve the following Title, Purpose and Scope and that SSPC 170 be responsible for developing the Guideline:

   **TITLE**: Operations Guideline for Ventilation of Health Care Facilities

   **PURPOSE**: The purpose of this guideline is to provide information and guidance for the operation of ventilation systems that provide environmental control in new and existing health care facilities.

   **SCOPE**:

   2.1 This guideline is intended for use by facility operators and those involved in the design, construction, installation, commissioning, management, operation, maintenance, accreditation, inspection, and service of health care facilities. This guideline applies to patient care areas, resident care areas, and related support areas within health care facilities.

   2.2 This guideline considers chemical, physical, and biological contaminants that can affect the delivery of medical care to patients and residents, the convalescence of patients and residents, and the safety of patients, residents, health care workers, and visitors.

   2.3 This guideline provides guidance for temperature and humidity.

   2.4 This guideline provides guidance for odor control and asepsis.

   2.5 This guideline provides guidance for ventilation rates including, but not limited to outdoor air, to serve health care facilities.

   2.6 This guideline provides guidance for thermal comfort.

3. Standards Committee approved and will recommend that the Board approve the following Title, Purpose and Scope and that a new Guideline Project Committee be formed:

   **TITLE**: Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events

   **PURPOSE**: The purpose of this guideline is to recommend building measures to minimize occupant health impacts caused by smoke from wildfire and prescribed burn events.

   **SCOPE**:

   2.1 This guideline applies to commercial buildings; institutional buildings, including healthcare facilities; and multi-unit residential buildings, as well as dedicated spaces within these building types intended for temporary human occupancy during a wildfire or prescribed burn event.
2.2 This guideline includes buildings expected to be occupied by potentially susceptible populations, including children and the elderly.

2.3 This guideline provides recommendations related to the design, installation, commissioning, operation, and maintenance of building envelope, ventilation, and air cleaning systems.

4. Standards Committee reviewed the background and documentation related to addendum a to 62.2 (unvented combustion heaters). A motion on this topic was postponed until the spring Standards Committee meeting and an Ad Hoc Committee, to be chaired by Wayne Stoppelmoor, has been tasked with reviewing the issues and whether or not there were sufficient efforts to resolve objections and whether or not technical issues were afforded due process.

B. RESEARCH ADMINISTRATION

The Chair David Yashar presented that there were no report or motions coming forward from RAC at this time. However, two motions will come forward under Executive Session later in the meeting.

C. TECHNICAL ACTIVITIES

Chair Jay Kohler presented the motions and information items from TAC. The full report is posted on Basecamp and listed as 04C – TAC Rprt to TechC 20.W.docx

The following motion was moved by Rick Hermans and seconded by Krishnan Gowri that:

M11 TAC recommends that Technology Council approves changes to TAC MOP which is shown on Basecamp as 04C - Att. A - TAC-MOP.W20 - 2.5.2020.docx

BACKGROUND: Changes were made to reflect current practices of TAC. Some changes are just editorial, others are related to meetings and reporting.

TECHC VOTE: 13-0-0, CNV

Jay Kohler highlighted the TC reorganization activities and reported on the success of the combined TC Chairs Breakfast. TAC is working on ways to track and document what all the TCs are doing to reduce duplication of work.

D. ENVIRONMENTAL HEALTH

Chair Wade Conlan presented the motions and information items from EHC. The full report is posted on Basecamp and listed as 04D - EHC Rprt to TechC.20.W.docx.

It was moved by Rick Hermans and seconded by Krishnan Gowri that:

M12 EHC recommends that Technology Council recommend to the BOD that SSPC 62.2 addendum a to 62.2-2019 on unvented combustion appliances be approved for publication.

BACKGROUND: Contamination from unvented combustion appliances is an important factor in indoor air quality. The Society has taken positions on this topic which are supported by this proposed change. The Board of Directors has previously approved this addendum, but it was returned on appeal. Standards Committee has certified that those deficiencies have been resolved and EHC believes the publication of this addendum should be expedited to achieve Society policy.
After a discussion on the publication, it was moved by Dennis Knight and seconded by Van Baxter to postpone the motion until the pre-Austin meeting.

**TECHC VOTE to Postpone: 11-0-2**, CNV

It was moved by Rick Hermans and seconded by Krishnan Gowri that:

**EHC recommends that Technology Council recommends to Publication & Education Council that the Residential IAQ Guide be made available for free download to the public.**

**BACKGROUND:** The Residential IAQ Guide has sold just over 100 (hard copies and downloads) sold since publication for about $8,000 in income to ASHRAE. ASHRAE members paid $150,000 to have it developed. SSPC 62.2 has moved to withdraw G24-20XX, because the information is available in the Residential IAQ Guide. Making the information in the Residential IAQ Guide would make the information vastly more broadly available for use. For example, the 2009 Commercial IAQ Design Guide is now available for free download after initially being sold for $85 with limited distribution. 18,000+ copies were distributed in the year after being made available for free.

**TECHC VOTE: 13-0-0, CNV**

*Secretary’s Note: This motion was referred to PEC.*

**E REFRIGERATION**

Rajan Rajendran gave a brief report on the activities of REF specifically highlighting the changes to the structure for the committee and there were no motions coming forward for Technology Council’s consideration. The full report is posted on Basecamp and listed as 4E-REF Rprt to TechC.19_Release1 - Copy.docx

**F RESIDENTIAL**

Paul Francisco reviewed the activities of RBC and the full report can be found on Basecamp listed as 04F_RBC_Report_to_TechC_2020-02-03_F.docx. The following were highlighted:

1. The Residential Building committee (RBC) is in the process of reaching out to residential stakeholders and organizations that are not traditionally ASHRAE members. Fifteen stakeholders were identified to be part of the initial outreach. Phone calls were made in January 2020 to about half of these organizations to identify critical needs and opportunities for collaboration and growth in the residential sector. Phone calls to the remaining organizations will be made in February 2020. Once completed the results will be compiled and compared to identify consistent themes that can be acted on.

2. The RESNET conference was identified as a high priority for ASHRAE involvement and a free booth was been secured for their February 2020 conference. The committee reviewed a flyer developed for the conference by ASHRAE marketing. The outcome of this event will be evaluated for consideration of future ASHRAE involvement in other similar residential conferences.

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3 Bill McQuade abstained due to conflict of interest and Steve Emmerich abstained due to violation of PASA concerns.
9. **EXECUTIVE SESSION**

The following motions were brought forward from RAC under Executive Session.

It was moved by Trent Hunt and seconded by Van Baxter that:

**M14** Tentative research project 1683-TRP, *Experimental Evaluation of Two-Phase Pressure Drop and Flow Pattern in U-Bends with Ammonia*, be awarded to GIK Institute of Engineering Sciences for a period of 30 months.

TechC Vote: Motion Passed

It was moved by Trent Hunt and seconded by Van Baxter that:

**M15** Tentative research project 1780-TRP, *Test method to evaluate cross-contamination of gaseous contaminant within total energy recovery wheels*, be awarded to University of Saskatchewan for a period of 15 months.

TechC Vote: Motion Passed

10. **NEXT MEETING**

Reminder that our Summer Meeting in Austin, Texas is scheduled for Wednesday, July 1, 2020 – 9:00 a.m. to 12:00 p.m.

There being no further business to come before the Council, the meeting was adjourned.