



**TECHNOLOGY
COUNCIL
Annual Indianapolis Meeting
June 26, 2024**

NOTE: These are not official minutes until approved by Technology Council.

MOTIONS

Technology Council Annual Conference Indianapolis Motions
June 26, 2024

Motion Number	Motion
1	<p>Technology Council recommend to the Board of Directors that the Rules of the Board be revised as follows:</p> <p><u>2.106.001.12 Indoor Environmental Quality Global Alliance (IEQ-GA)</u></p> <p><u>2.106.001.12.1 Membership</u> a. <u>ASHRAE is a founding Full Member of the Indoor Environmental Quality Global Alliance (IEQ-GA) a consortium of organizations incorporated in Belgium and shall pay annual dues to maintain its continuing membership.</u></p> <p>b. <u>Membership is subject to review every five years, to be completed in each calendar year ending in either 4 or 9.</u></p> <p><u>2.106.001.12.2 Representation</u> a. <u>ASHRAE shall appoint a representative and an alternate representative to IEQ-GA to serve terms of up to three years.</u></p> <p>b. <u>The representative and alternate representative shall be recommended by the Environmental Health Committee and confirmed by Presidential appointment when renewal of representatives is required.</u></p> <p>c. <u>ASHRAE shall fund travel costs for its representative to attend one in-person meeting of IEQ-GA per year.</u></p> <p><u>2.106.001.12.3 Oversight</u> <u>Responsibility for monitoring of IEQ-GA shall be assigned to Environmental Health Committee</u></p>
2	<p>DRSC recommends to Tech Council to recommend to the Board Of Directors (BOD) ExCom approve a revision to the <i>Energy Efficiency in Buildings</i> position document title, purpose and scope (TPS) as shown:</p> <p>Title: Energy Efficiency in Buildings</p> <p>Purpose: To inform ASHRAE members, policymakers, regulators and the public at large about ASHRAE's positions on energy issues related to the built environment as a contribution toward the development of sound public policy.</p>

	<p>Scope: Articulate ASHRAE's positions on building energy issues as they relate to energy efficient and sustainable design and construction practices in buildings, including positions on:</p> <ul style="list-style-type: none"> • Energy <u>efficiency</u> <u>consumption</u> related to the built environment; • The relationship between energy efficiency and <u>improved</u> <u>indoor</u> environmental quality (IEQ) in <u>high performing</u> buildings; • Building energy codes and standards; • Research and education of building designers, owners and operators. • The relationship between energy efficiency and <u>decarbonization</u> to reduce building impacts on climate change.
<p>3</p>	<p>DRSC recommends to Tech Council to recommend that the BOD ExCom approve the <i>Climate Change</i> position document title, purpose and scope (TPS) as shown:</p> <p>Title: Climate Change</p> <p>Purpose: To inform ASHRAE members, policymakers, regulators, and the public at large about the importance of action to address climate change.</p> <p>Scope: This position document provides:</p> <ul style="list-style-type: none"> • Background on the topic of climate change and how it relates to ASHRAE's interests. • An explanation of the relationship between climate change and human activities and decisions, particularly design and energy-use choices in the built environment. • Recommendations to improve awareness of the urgency of curbing greenhouse gas emissions, and to facilitate research, design practices, and policymaking related to climate change within the building sector.
<p>4</p>	<p>DRSC recommends that Tech Council recommend that the BOD approve a revision to the <i>Filtration and Air Cleaning</i> position.</p>
<p>5</p>	<p>The following Title, Purpose and Scope (TPS) be approved and a new Standard Project Committee be formed.</p> <p>Title: Sustainability Assessment for Mechanical, Electrical, and</p>

	<p>Plumbing Products</p> <p>Purpose: This standard specifies the process for developing a lifecycle assessment-based product claim for Mechanical, Electrical, and Plumbing assemblies.</p> <p>Scope:</p> <p>2.1 This standard applies to product assemblies in which multiple raw materials are combined or processed into a single unit.</p> <p>2.2 This standard is intended for use by manufacturers and by ANSI-accredited program operators and independent verifiers participating in the preparation of a lifecycle assessment-based product claim.</p> <p>2.3 The process includes:</p> <ul style="list-style-type: none"> (a) creating or adopting the necessary product category rules (PCRs) (b) performing a life-cycle assessment (LCA) in accordance with the PCRs (c) reporting the LCA results in the product claim document (d) registering the product claim document for public access (e) updating PCRs and re-assessing products as needed <p>2.4 This document is intended to supplement ISO 14025 and related standards where an existing product claim is 1) unavailable for individual components or 2) incompatible with the documentation requirements of the final assembly.</p>
6	<p>The following Title, Purpose and Scope (TPS) be approved and a new Standard Project Committee be formed.</p> <p>Title: Acceptable Performance Standard for District Cooling Systems</p> <p>Purpose:</p> <ol style="list-style-type: none"> 1. To establish the minimum acceptable performance requirements of district cooling system, for siting, design, construction, and operation and maintenance of components including, plant systems, distribution systems and energy transfer stations. 2. To minimize emissions from district cooling plants and plant systems, conserve water resources, materials, and resources, and construction and plans for operation. <p>Scope: This standard provides:</p>

	<p>2.1 minimum energy-efficient requirements for the design and construction, and a plan for operation and maintenance of</p> <ul style="list-style-type: none"> a. new district cooling plants, equipment and their component systems, b. new portions of district cooling plants and their component systems, c. new equipment or component systems specifically identified in this standard that are part of a site, and d. new components, systems and equipment for existing district cooling plants. <p>2.2 criteria for determining compliance with these requirements.</p> <p>2.3 establish minimum criteria for the design of critical components.</p> <p>2.4 The provisions of this standard do not apply to:</p> <ul style="list-style-type: none"> a. low rise residential, single-family houses b. district cooling plants that do not serve more than one building or are not defined as district cooling. c. Industrial focused process cooling plants that do not supply space cooling for human comfort applications. <p>2.5 Where specifically noted in this standard, certain other plants or elements of plants or sites shall be exempt.</p> <p>2.6 This standard shall not be used to circumvent any safety, health, or environmental requirements of the final assembly.</p>
7	<p>ICC be approved as a cosponsor of proposed ASHRAE Standard 242, <i>Standard Method for Calculation of Building Operational Greenhouse Gas Emissions</i>, with ASHRAE as the lead.</p>

ACTION ITEMS
Technology Council Annual Meeting Indianapolis
June 26, 2024

AI#	Responsibility	Status	Description
<u>1</u>	Staff	New	To send EHC's 2024 Trends and Research Gaps report to RAC and TAC.
<u>2</u>	TAC	New	To look at the "H" in ASHRAE and the emerging trend of electrification of heating for comfort and process cooling. TAC to make recommendations for support of "H".
<u>3</u>	Staff	New	To send RBC, TAC, and RAC's Strategic Plan to Society Planning Committee.
<u>4</u>	Staff & Tech Council Leadership	New	To work with RAC to make sure RAP process is in the correct location in the rules.

ACTION ITEMS
Technology Council Spring Web Call
March 11, 2024

AI#	Responsibility	Status	Description
<u>1</u>	Staff	Complete	To send the ASHRAE Global HVAC&R Summit Final Report with Tech Council assignments to Tim Wentz.
<u>2</u>	Staff	Complete	To send the ASHRAE Global HVAC&R Summit Final Report with Tech Council assignments to the Standing Committee Chairs.
<u>3</u>	Wade Conlan	Complete	To arrange a working session between the Energy Efficiency in Buildings PD Committee and those who have opinions about the revised position document.
<u>4</u>	James Bennett	Complete	To share TAC inputs to the Strategic plan with the Society Planning Committee.
<u>5</u>	Standing Committees	Complete	To keep Susanna Hanson informed on Strategic Plan input.
<u>6</u>	Stephanie Reiniche	Complete	To record sentiments from this meeting regarding DEI for Ashish to bring to the Board.
<u>7</u>	Tech Council	Ongoing	To update the Tech Council Reference Manual to reflect the process for handling projects from

		the CEBD.
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ACTION ITEMS
 Technology Council Winter Conference Chicago
 January 24, 2024

AI#	Responsibility	Status	Description
<u>1</u>	Staff	Complete	Send the Global HVACR Summit Action Item list to Tim Wentz to review.
<u>2</u>	Staff	Complete	Circulate this list to all members in Tech Council.
<u>3</u>	Steve Sill	Complete	Identify which items in the Global HVACR Summit Action Item list that Tech Council should be focusing on.
<u>4</u>	Staff	Complete	Send Global HVACR Summit Action Item list with proposed assignments to the Society Planning Committee.
<u>5</u>	Stephanie Reiniche	Complete	Talk to Joslyn Ratcliff about what software/web service PC chairs should use for document collaboration and/or storage so it complies with the rules.
<u>6</u>	Standards	Complete	Collect information from the project chairs and SPLS Liaison about concerns with the publication process and provide to Staff.
<u>7</u>	RAC	Ongoing	Make sure their strategic planning group does not absolve so that tracking of the initiatives can be reported.
<u>8</u>	Wade Conlan	Complete	Relay that the previous survey was more grassroots oriented and less Tech Council oriented.
<u>9</u>	Wade Conlan	Complete	Lead this ad hoc to determine how the CEBD work will flow within the Council.

ACTION ITEMS
 Technology Council Fall Virtual Meeting
 October 09, 2023

AI#	Responsibility	Status	Description
1	Stephanie Reiniche	Complete	Add formal communication for the HVAC summit to the leadership agenda.
2	Amber Thomas	Complete	Send out MBOs to TechC and PLC.

ACTION ITEMS
Technology Council Annual Meeting
June 28, 2023

AI#	Responsibility	Status	Description
1	EHC	Complete	Connect with Paul Francisco and other standing committees who have stated an interest in being involved in the revision of the Unvented Combustion Devices and Indoor Air Quality PD.

Action Items
Technology Council Spring Virtual Meeting
April 17, 2023

AI#	Responsibility	Status	Description
1	Amber	Complete	Send out the feedback on Society addressing AI technology.

Minutes
Technology Council

<u>Voting Members Present:</u> Ashish Rakheja, Chair Wade Conlan, Vice Chair Carl Huber Christopher Phelan Costas Balaras Dru Crawley Larry Smith Luke Leung Mike Pouchak Paul Francisco Richie Mittal Steve Sill Susanna Hanson Olu Soluade – GTIC Chair Bill Murphy – RAC Chair Bill Healy – RBC Chair Steve Kujak – REF Chair Doug Fick – StdC Chair James Bennett – TAC Chair	<u>Staff</u> Stephanie Reiniche, DOT Ryan Shanley, SMOS Steve Hammerling, MOT Derrick Nesfield, MOSP Amber Thomas, Administrative Assistant
<u>Non-voting Present:</u> Rachel Romero – RBC Vice Chair	<u>Guests</u> Devin Abellon Steve Bushby Dimitris Charalambopoulos Doug Cochrane Mark Fly Jeanette Hay Carol Marriott Mohammed Murtaza Robert Romero Patrick Ryan Joseph Sanders Heather Schopplein Chandra Sekhar David Shaeffer Max Sherman
	<u>TechC Voting Absent:</u> Bill Bahnfleth – EHC Chair X

TechC Non-Voting Absent:

Natascha Milesi-Ferretti – RAC Vice Chair
Kevin Mercer – TAC Vice Chair
Marwa Zaatari -EHC Vice Chair
Doug Scott – REF Vice Chair

1. CALL TO ORDER/OPENING COMMENTS

Chair Rakheja called the meeting to order at 8:00 A.M. ET. The commitment to care, the commitment to the Code of Ethics and the ASHRAE Core Values were shared during the meeting.

Secretary's Note: Quorum was met with 18 voting members, including the Chair at the start of the meeting.

All reports referenced in the minutes are on Basecamp in the folder “2024-06-26 Annual Conference Indianapolis.”

2. REVIEW OF AGENDA

A. Agenda Review

The agenda was approved as presented.

3. MINUTES/ACTION ITEMS

A. Action Items – 03A

The action items were updated as shown above in the action item table.

B. TechC MBOs 2023-2024 – 03B

These were discussed later in the meeting.

4. SUBCOMMITTEE REPORTS

A. Operations (OPS)

Susanna Hanson, OPS Chair, presented the report. The report is posted on Basecamp as *04A_OPS Report to Tech Council.docx*.

It was moved by Ms. Hanson that:

M1 Technology Council recommend to the Board of Directors that the Rules of the Board be revised as follows:

2.106.001.12 Indoor Environmental Quality Global Alliance (IEQ-GA)

2.106.001.12.1 Membership

a. ASHRAE is a founding Full Member of the Indoor Environmental Quality Global Alliance (IEQ-GA) a consortium of organizations incorporated in Belgium and shall pay annual dues to maintain its continuing membership.

b. Membership is subject to review every five years, to be completed in each calendar year ending in either 4 or 9.

2.106.001.12.2 Representation

a. ASHRAE shall appoint a representative and an alternate representative to IEQ-GA to serve terms of up to three years.

b. The representative and alternate representative shall be recommended by the Environmental Health Committee and confirmed by Presidential appointment when renewal of representatives is required.

c. ASHRAE shall fund travel costs for its representative to attend one in-person meeting of IEQ-GA per year.

2.106.001.12.3 Oversight

Responsibility for monitoring of IEQ-GA shall be assigned to Environmental Health Committee

Background:

At the ASHRAE Board of Directors meeting held on November 8th and 9th of 2018, two motions related to IEQ-GA were approved. The first motion was for ASHRAE to participate in the incorporation of the Indoor Environmental Quality – Global Alliance (IEQ-GA) and continue its membership, subject to review every five years. The fiscal impact was \$5,000 per year for members fee and travel costs. The second motion had IEQ-GA being assigned to EHC for monitoring, reporting and recommending candidates to serve as the ASHRAE representative.

The intent of the proposed changes is to formalize this and include these BOD actions in the Rules of the Board.

OPS Vote: 8-0-0, CV

TechC Vote: 17-0-0, CNV

Ms. Hanson highlighted the following information items:

1. Standards Committee approved the co-sponsorship request that ICC be approved as a cosponsor of Proposed ASHRAE Standard 242P, *Standard Method for Calculation of Building Operational Greenhouse Gas Emissions*, with ASHRAE as the lead following ASHRAE's ANSI development procedures. This will be forward to Tech Council for approval and reported to the Board as an information item.
2. In the Fall of 2022, ASHRAE received multiple appeals relating to 62.2 proposed addendum j. An appeals panel was formed, and the panel reviewed all submitted appeals and a rebuttal of the appeals from the project committee chair. Based on the evidence presented the appeals panel determined there were no procedural violations, hence the appeals were dismissed. The appellants then filed a claim with the ANSI ExSC. Based on the evidence and ASHRAE's rebuttal, the ANSI ExSC also dismissed the appeal. The appellants have filed a claim with ANSI Appeals Board. The ANSI Appeals Board reversed the ANSI ExSC ruling and a hearing has been scheduled for September 18, 2024, at ANSI DC Headquarters.
3. RBC approved its Strategic Plan by a vote of 9-0-0, CNV. The strategic plan was developed during monthly planning sessions with the goal of providing more consistency for completing MBO tasks as members change over time.

Additionally, when revising the Technology Council MOP, a lot of things were moved to the Reference Manual. There will be a 30-day comment and review period after the meeting.

B. Special Projects

Steve Sill, Special Projects Chair, presented the report. The report is posted on

Basecamp as 04B_SpcProj_Report_to_TechC-2024_03_10_v2 (3).docx.

Mr. Sill highlighted that the Special Projects Subcommittee began reviewing the Center of Excellence for Building Decarbonization's (CEBD's) future projects list. This will be shared with Tech Council and the liaisons to the CEBD.

C. Document Review Subcommittee (DRSC)

Wade Conlan, DRSC Chair, presented the report. The report is posted on Basecamp as 04C-DRSC Rpt to TechC.A.24.docx.

It was moved by Mr. Conlan that:

M2

DRSC recommends to Tech Council to recommend to the Board Of Directors (BOD) ExCom approve a revision to the *Energy Efficiency in Buildings* position document title, purpose and scope (TPS) as shown:

Title:

Energy Efficiency in Buildings

Purpose:

To inform ASHRAE members, policymakers, regulators and the public at large about ASHRAE's positions on energy issues related to the built environment as a contribution toward the development of sound public policy.

Scope:

Articulate ASHRAE's positions on building energy issues as they relate to energy efficient and sustainable design and construction practices in buildings, including positions on:

- Energy efficiency consumption related to the built environment;
- The relationship between energy efficiency and improved indoor environmental quality (IEQ) in high-performing buildings;
- Building energy codes and standards;
- Research and education of building designers, owners and operators.
- The relationship between energy efficiency and decarbonization to reduce building impacts on climate change.

BACKGROUND: The Position Document Committee approved changes to the previously approved TPS to help assure that the revision to the PD will be within the approved scope. The revision to the PD is currently in development.

TechC Vote:17-0-0, CNV

It was moved by Mr. Conlan that:

M3

DRSC recommends to Tech Council to recommend that the BOD ExCom approve the *Climate Change* position document title, purpose and scope (TPS) as shown:

Title:
Climate Change

Purpose:
To inform ASHRAE members, policymakers, regulators, and the public at large about the importance of action to address climate change.

Scope:
This position document provides:

- Background on the topic of climate change and how it relates to ASHRAE's interests.
- An explanation of the relationship between climate change and human activities and decisions, particularly design and energy-use choices in the built environment.
- Recommendations to improve awareness of the urgency of curbing greenhouse gas emissions, and to facilitate research, design practices, and policymaking related to climate change within the building sector.

BACKGROUND: The Climate Change PD was initially published in 1992 but has not had a TPS approved by ExCom. A PD committee revising the current *Climate Change* PD has reviewed the *Energy Efficiency in Buildings* and *Decarbonization* PDs. They have developed and approved this proposed TPS.

Tech C Vote: 17-0-0, CNV

It was moved by Mr. Conlan that:

M4 DRSC recommends that Tech Council recommend that the BOD approve a revision to the *Filtration and Air Cleaning* position.

BACKGROUND: The PD is included as **04C-Att.A**. Changes made to the PD since the version was sent to Tech Council and BOD members on June 18th are shown in track changes.

MOTION 3 VOTE: 6-0-0 CNV PASSED

TechC Vote: 17-0-0, CNV

Mr. Conlan reported that an EHC subcommittee is considering drafting a proposal for a new position document related to Ozone/Indoor Chemistry. A subcommittee was tasked with developing a title and scope for a formal PD proposal if deemed appropriate.

5. STANDING COMMITTEE REPORTS

A. Standards Committee (StdC)

Doug Fick, Chair of StdC, presented the report. The report is posted on Basecamp as *05AStdC Report to TechC.March24.docx*.

It was moved by Mr. Fick that:

M5 The following Title, Purpose and Scope (TPS) be approved and a new Standard Project Committee be formed.

Title: Sustainability Assessment for Mechanical, Electrical, and Plumbing Products

Purpose: This standard specifies the process for developing a lifecycle assessment-based product claim for Mechanical, Electrical, and Plumbing assemblies.

Scope:

2.1 This standard applies to product assemblies in which multiple raw materials are combined or processed into a single unit.

2.2 This standard is intended for use by manufacturers and by ANSI-accredited program operators and independent verifiers participating in the preparation of a lifecycle assessment-based product claim.

2.3 The process includes:

- (a) creating or adopting the necessary product category rules (PCRs)
- (b) performing a life-cycle assessment (LCA) in accordance with the PCRs
- (c) reporting the LCA results in the product claim document
- (d) registering the product claim document for public access
- (e) updating PCRs and re-assessing products as needed

2.4 This document is intended to supplement ISO 14025 and related standards where an existing product claim is 1) unavailable for individual components or 2) incompatible with the documentation requirements of the final assembly.

Background: This TPS has to be approved by Technology Council. This TPS was submitted by Bill McQuade for consideration at the Annual 2024 meeting. PPIS assigned TC 7.6, *Building Energy Performance* as the cognizant committee. Ivan Rydkin was recommended as Chair. There are at least five members willing to volunteer.

Staff has been talking to both CSA and AHRI to co-sponsor the standard. We would like this to be a multi-national standard and CSA is working on getting answers to additional questions that have resulted from the discussions. We believe they will cosponsor but wanted this submitted to ANSI as soon as possible with the intent of adding co-sponsors in the near future. The goal is for all manufacturers to use the same product category rules.

Standards recommends coordinating with the Handbook committee and reaching out to TC 2.8 as they may have an RTAR building lifecycle.

StdC Vote: 22-0-1, CNV

(Secretary's note: Justin Prosser abstained because it was not clear if PPIS had adequately considered existing ISO and other international standards already published within the same scope.)

TechC Vote: 17-0-0

It was moved by Mr. Fick that:

M6

The following Title, Purpose and Scope (TPS) be approved and a new Standard Project Committee be formed.

Title: Acceptable Performance Standard for District Cooling Systems

Purpose:

3. To establish the minimum acceptable performance requirements of district cooling system, for siting, design, construction, and operation and maintenance of components including, plant systems, distribution systems and energy transfer stations.
4. To minimize emissions from district cooling plants and plant systems, conserve water resources, materials, and resources, and construction and plans for operation.

Scope:

This standard provides:

2.7 minimum energy-efficient requirements for the design and construction, and a plan for operation and maintenance of

- e. new district cooling plants, equipment and their component systems,
- f. new portions of district cooling plants and their component systems,
- g. new equipment or component systems specifically identified in this standard that are part of a site, and
- h. new components, systems and equipment for existing district cooling plants.

2.8 criteria for determining compliance with these requirements.

2.9 establish minimum criteria for the design of critical components.

2.10 The provisions of this standard do not apply to:

- a. low rise residential, single-family houses
- d. district cooling plants that do not serve more than one building or are not defined as district cooling.
- e. Industrial focused process cooling plants that do not supply space cooling for human comfort applications.

2.11 Where specifically noted in this standard, certain other plants or elements of plants or sites shall be exempt.

2.12 This standard shall not be used to circumvent any safety, health, or environmental requirements of the final assembly.

Background: This TPS will has to be approved by Technology Council. This TPS was submitted by Stephanie Reiniche for consideration at the Annual

meeting. PPIS assigned TC 6.02, *District Energy* as the cognizant committee. Steve Tredinnick was recommended as the Chair of the proposed new project committee. There are at least five members willing to volunteer.

TechC Vote: 17-0-0

It was moved by Mr. Fick that:

M7

ICC be approved as a cosponsor of proposed ASHRAE Standard 242, *Standard Method for Calculation of Building Operational Greenhouse Gas Emissions*, with ASHRAE as the lead.

Background: The SPC 240 leadership team, including ICC, was approached as ASHRAE was developing the proposed TPS for Standard 242 to solicit potential members for the soon to be developed committee. Shortly after that conversation, ICC approached ASHRAE staff to request being added as a cosponsor to the standard. Having ICC as a cosponsor will allow for consistent requirements across already cosponsored standards (189.1 and 242) plus 90.1 and the IECC. ICC understands that the initial standard will be an ASHRAE only standard, and the intent is to submit it for ANSI consideration once published. ICC also understands that it is a condensed (proposed 18 month) timeline and agrees with that the aggressive schedule. ICC has approved the proposed roster on the good faith this request will move forward. This will follow the proposed ASHRAE process and ASHRAE will be the lead. This will also help defer some meeting costs as this will now also open DC as a potential meeting location for the committee. This has also been communicated with the proposed Chair and Vice Chair of the committee.

TechC Vote: 17-0-0

Mr. Fick highlighted the following information items:

1. Standards Committee approved the following for publication:
 - a. *ANSI/ASHRAE Addendum ad to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants*
 - b. *ANSI/ASHRAE/IES Addendum s to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*
 - c. *ANSI/ASHRAE/IES Addendum g to ANSI/ASHRAE/IES Standard 90.2-2018, High-Performance Energy Design of Residential Buildings*
 - d. *ANSI/ASHRAE/IES Addendum i to ANSI/ASHRAE/IES Standard 90.2-2018, High-Performance Energy Design of Residential Buildings*
 - e. *ANSI/ASHRAE/IES Addendum j to ANSI/ASHRAE/IES Standard 90.2-2018, High-Performance Energy Design of Residential Buildings*

- f. ANSI/ASHRAE/IES Addendum n to ANSI/ASHRAE/IES Standard 90.2-2018, *High-Performance Energy Design of Residential Buildings*
- g. ANSI/ASHRAE/ASHE Addendum h to ANSI/ASHRAE/ASHE Standard 189.3-2021, *Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities*

2. In the Fall of 2022, ASHRAE received multiple appeals relating to proposed addendum j to Standard 62.2. An appeals panel was formed, and the panel reviewed all submitted appeals and a rebuttal of the appeals from the project committee chair. Based on the evidence presented the appeals panel determined there were no procedural violations, hence the appeals were dismissed. The appellants then filed a claim with the ANSI ExSC. Based on the evidence and ASHRAE's rebuttal, the ANSI ExSC also dismissed the appeal. The appellants have filed a claim with ANSI Appeals Board. The ANSI Appeals Board reversed the ANSI ExSC ruling and a hearing has been scheduled for September 18, 2024, at ANSI DC Headquarters.

B. Research Administration Committee (RAC)

Bill Murphy, Chair of RAC, presented the report. The report is posted on Basecamp as *05B-RAC-Info.Items.A24.docx*.

Mr. Murphy Highlighted the following information items:

1. RAC reviewed 7 work statements and 1 work statement publication at the 2024 Annual Meeting. 3 were conditionally accepted, 1 work statement publication was conditionally accepted for bid and 4 were returned.
2. RAC is developing some improvements to the research development process in the following areas:
 - Request confirmed potential bidder information and contacts to increase research project bids.
 - Improve process to identify and confirm potential research project co-funding sources.
 - Offer budget estimating guidelines to TCs to improve budget accuracy.
 - Online database for RTARs is close to completion. Tool for WS development will be done next.

C. Technical Activities Committee (TAC)

James Bennett, the Chair of TAC, presented the report. The report is posted on Basecamp as *05C-TAC Rprt to TechC.A24.docx*.

Mr. Bennett highlighted the following information items:

1. The Online Rostering tool update was implemented for the 2024-2025 roster update. TAC is collecting feedback.

2. TAC assigned four liaisons to the Center of Excellence for Building Decarbonization (CEBD).
3. TAC continues to consider balance on Functional Groups (FG) and is considering how the online roster tool can be utilized to help assure FG balance.
4. TAC is assisting the effort to connect CTTC and TAC activities toward recruiting FG members from local chapters and regions. TAC has selected a member to be appointed Liaison to CTTC if CTTC desires.
5. TC title/scope changes:
 - Technical Committee 3.1 is concerned with all properties, and functions, ~~service practices to maintain tight systems and handling~~ of refrigerants and secondary coolants, including commercial and experimental materials. It is also concerned with service practices to maintain tight systems, handle leak detection and minimize refrigerant emissions.

TAC will follow up with Standards, Handbook, and RAC to ensure continuity of any items affected by the merger of TC 3.8 into TC 3.1.

 - TC 8.1, Positive Displacement Compressors-Compressor Technology
Scope: TC 8.1 is concerned with the design, performance, features, and operating characteristics, and standards of all types of ~~positive displacement~~ compressors for use with refrigerants.
 - TC 8.2, Centrifugal Machines-Vapor Compression Cooling and Heat Pump Chillers
Scope: TC 8.2 is concerned with ~~packaged equipment~~ cooling and heat pump chillers ~~which that~~ involves centrifugal or positive displacement compressors, including those with heat exchangers, drivers, controls, split evaporators and condensers, and other accessories, which are specific to ~~packaged centrifugal equipment.~~
6. TAC voted to disband the following:
 - TRG9.Cold Climate Design
The activities of maintaining the Cold Climate Design Guide will be covered by TC 9.8, Specialized Buildings.
7. TAC reassigned TC 1.10, Combined Heat and Power to Section 6 as TC 6.4, Combined Heat and Power

D. Environmental Health Committee (EHC)

Bill Bahnfleth, the Chair of EHC, was absent so Max Sherman, Vice Chair of EHC, presented the report. The report is posted on Basecamp as *05D-EHC Rprt to TechC.24A.docx*.

Mr. Sherman highlighted the following information items:

1. EHC approved the final report from the Epidemic Task Force (ETF) at its March 24 meeting. This is included as **05D-Att. A**.
2. EHC approved its 2024 Trends and Research Gaps report (**05D-Att. B**). EHC is responsible (per ROB 2.406.001) for identifying major environmental health trends impacting the practice of HVAC&R, informing the ASHRAE leadership and membership of these trends and their potential impacts, and making recommendations on new activities and policies in response to these trends.
3. Updates on the following Position Documents were reported to Document Review Subcommittee:
 - Unvented Combustion Devices and Indoor Air Quality
 - Limiting Indoor Mold Growth and Dampness in Buildings Systems
 - Combustion of Solid Fuels and Indoor Air Quality in Primarily Developing Countries
 - Human Health and Wellness in the Built Environment
 - Indoor Carbon Dioxide
 - Filtration and Air Cleaning

A1

An action item was assigned to Staff to send EHC's 2024 Trends and Research Gaps report to RAC and TAC.

E. Refrigeration/CPCC (REF-CPCC)

Steve Kujak, the Chair of REF-CPCC, presented the report. The report is posted on Basecamp as 05E-REF-CPCC Rprt to TechC.24A.docx.

Mr. Kujak highlighted the following information items:

1. REF-CPCC has been discussing the "H" in ASHRAE and the emerging trend of electrification of heating for comfort and process cooling as part of decarbonization of the built environment. After review of various TC scopes, there is a lack of heating focus to support this trend. There are pockets of aligned TC scopes, but heating with vapor compression will likely evolve into own technology sector with subcategories, much like refrigeration and air conditioning. REF-CPCC recommends to Tech Council to provide directional support of "H" in HVAC&R for CPCC.

A2

An action item was assigned to TAC to look at the "H" in ASHRAE and the emerging trend of electrification of heating for comfort and process cooling. TAC to make recommendations for support of "H".

F. Residential Building Committee (RBC)

Bill Healy, the Chair of RBC, presented the report. The report is posted on Basecamp as *05F_RBC Report_to_TechC_2024-06-26.docx*.

Mr. Healy highlighted the following information items:

1. Residential Buildings Committee (RBC) approved the final copy of their Strategic Plan by a vote of 9-0-0, CNV. The Strategic Plan is a 5-year MBO plan with the goal of providing more consistency for completing MBO goals as members change over time.
2. The committee presented the 2023-2024 Residential Buildings Service Award to Iain Walker. The award recognizes excellence in volunteer service within ASHRAE focused on residential building issues over previous two society years.
3. The Communications Subcommittee completed the new RBC website templates for residential content and committee operations. The committee approved the templates by a vote of 9-0-0, CNV.

A3

An action item was assigned to Staff to send RBC, TAC, and RAC's Strategic Plan to Society Planning Committee.

A4

An action item was assigned to Staff and Tech Council Leadership to work with RAC to make sure RAP process is in the correct location in the rules.

G. Global Technical Interaction Committee

Olu Soluade, the Chair of GTIC, submitted the report after the meeting. The report is posted on Basecamp as *05G_GTIC Report to TechC Annual Meeting June 2024.docx*.

Mr. Soluade reported that the main purpose of GTIC is to make ASHRAE global and not just North America-centered.

One of the assignments that has come to GTIC is for the committee to review the technical support requests from NOUS (National Ozone Units) and interact with other committees for any help.

6. SPECIAL COMMITTEE/LIAISON REPORTS

A. Government Affairs Committee (GAC) Liaison Report

Christopher Phelan, GAC Liaison, presented the report. The report is posted on Basecamp as *06A_GAC Report to TECH COUNCIL – JUNE 2024-Indy.docx*. The following information items were highlighted:

1. Thank you! The GAC really wants to thank the entire Technology Council for your work in developing important technical resources to make buildings more sustainable and healthy. ASHRAE resources are in demand by government entities, and we appreciate all you do in your developing technical resources. If Tech Council has new resources that it wants GAC to advocate for, please let the GAC know (through your staff liaison would work best, or send email to GovAffairs@ashrae.org.) Thank you!
2. Government Outreach Events (GOE): The GAC set a goal of 100

Government Outreach Events to be held during Society Year 2023-2024. As of June 18, a total of **129 GOEs** have been reported as being conducted in the 23-24 Society Year. These GOEs comprised 349 discrete meetings involving 375 ASHRAE members and 543 government officials.

B. Finance Liaison Report

Mr. Rakheja referenced the *Board of Directors Open Session Agenda Sunday 2024 June 23 REV2.pdf*, specifically Item 15 and 16. Some items that were highlighted included a new revenue from the Foundation fund to expedite standards and surrendering TAG administration for BIM TAG to another organization.

C. Society Planning Liaison Report

Devin Abellon reported on this later in the meeting.

D. Society Rules Committee

SRC met and is working on specific edits with respect to the Nominating Committee.

E. DEI

The Cultural Appreciation Event – This year there was a showcase of Indian Culture at the Hindu temple from Monday night with 100 paid attendees. The event included a tour and several demonstrations of activities and art from the Hindu community. This was a sold-out event.

F. CEBD

The TFBD is now transitioning to the Center of Excellence for Building Decarbonization. The CEBD will focus on strategy, thought leadership, collaboration and public advocacy.

7. AD HOC REPORTS

A. CEBD Transition in Tech Council

The CEBD is asking councils to administer projects. Therefore, the Special Projects incoming chair, Costas Balaras, has a list of projects to look at and decide whether there is some buy in from different cognizant bodies. Special Projects now has more members than it has in the past, including liaisons from committees reporting to tech council. The CEBD will fund these projects.

B. World of Tech – Smith

The World of Tech has moved under TAC. John Constantinide will be the chair

of CTTC and this no longer needs to be an action item.

8. STRATEGIC PLANNING

Devin Abellon reported that the draft of the Strategic Plan is currently being worked on. At the recent Board retreat, the draft of the Strategic Plan was presented. The four proposed strategic goals are Accessibility, Impact-focused Engagement, Agility, and Industry Leadership. In the next few months, the strategic goals and objectives will be finalized, and then specific initiatives for each of these goals will be created. Any questions on the Strategic Plan should go to Devin Abellon or Dunstan Macauley.

Paul Francisco suggested that it could be really impactful to cultivate relationships and partnerships with unrepresented populations and disadvantaged communities to empower DEI.

9. DOT REPORT

Stephanie Reiniche reported that ASHRAE is now at full staff.

- A. Faith Patrick is taking Steve Hammerling's former position as Technical Services Engineer starting July 1.
- B. Leigh Lan Walker will be the Manager of Building Decarbonization starting July 1.
- C. One more person will be coming to the Technology department as a result of the Board approving the addition of 11 positions at Headquarters.

10. NEW BUSINESS

There was no new business.

11. 2023-2024 MBOs

Ashish Rakheja reviewed the MBOs from the 2023-2024 Tech Council Society Year.

12. THANK YOU/WELCOME

- A. **Thank Council Members Rolling Off** – Chair Rakheja thanked everyone for their participation especially those members whose term ended after the Annual meeting.
- B. **Presentation of Certificates** – Chair Rakheja presented certificates to all the members rolling off and expressed his thanks. Wade Conlan thanked Chair Rakheja for his service to Tech Council.
- C. **Welcome Incoming Members** – Wade Conlan welcomed all the new members to Tech Council.
- D. **MBOs for 2024-2025 Society Year – Conlan** – Mr. Conlan reviewed the Tech Council MBOs for 2024-2025 Society Year.

13. EXECUTIVE SESSION

There were no items for executive session.

14. NEXT MEETING

A doodle will be shared to set the Fall Tech Council meeting.

15. ADJOURN

The meeting was adjourned at 11:16am ET.