



Shaping Tomorrow's
Built Environment Today

MINUTES

RESEARCH ADMINISTRATION COMMITTEE MEETING SPRING MEETING

APRIL 29 & MAY 4, 2026

Note: These draft minutes have not been approved and not the official, approved record until approved by the Research Administration Committee.

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APRIL 29 & MAY 4, 2026

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PRINCIPAL MOTIONS
RESEARCH ADMINISTRATION COMMITTEE
APRIL 29 & MAY 4, 2026

NO.	PAGE	MOTION
1	2	the draft minutes of the RAC 2026 Winter meeting be approved as drafted.
2	2	that RAC approve a funded extension for active research project 1915-RP , <i>Refrigerated Facilities Doorway Infiltration Air Energy Reduction</i> , awarded to Creative Thermal Solutions, for a total additional cost to ASHRAE of \$10,000.
3	5	The following 20 students were awarded an ASHRAE Graduate Student Grant-in-Aid (GIA) for the 2026-2027 academic year:
4	6	1980-RTAR , Simplified Methods for Calculation of Heating Warm-Up Loads; sponsored by TC 4.1 Load Calculation Data and Procedure; co-sponsored; TC 8.11, Unitary and Room Air Conditioners and Heat Pumps, be accepted with comments.
5	6	2012-RTAR , Development of BIM to Energy Plus simulation workflows supporting Occupant Behavior Modeling; sponsored by TC 7.10, Occupant Behavior in Building Design and Operation, be rejected.
6	6	2013-RTAR , An Occupant Behavior Foundation Model Leveraging Large Language Models for Schedule Generation; sponsored by MTG. GenAI, Generative Artificial Intelligence; co-sponsor, 7.10, Occupant Behavior in Building Design and Operation, be accepted with comments.
7	6	2014-RTAR , Develop a Framework of Domain-Specific Gen-AI Benchmark for ASHRAE; sponsored by; TC 7.5, Smart Building Systems, be accepted with comments
8	7	2102-RTAR , <i>Creation of unified database of refrigerant correlations, and its access through GenAI trained chatbot</i> ; sponsored by; TC 8.04, Air-to-Refrigerant transfer Equipment, be returned.
9	7	2105-RTAR , <i>Overall impact of restricting the use of evaporative heat rejection equipment vs alternative heat rejection equipment</i> ; sponsored by, TC 8.06, Cooling Towers & evaporative Condensers, be accepted with comments.
10	7	2106-RTAR , <i>Creating a Globally Harmonized Climate Classification Systems for Building Design Standards</i> ; sponsored by; TC 4.02, Climatic Information, be accepted with comments.
11	7	2107-RTAR , <i>Evaluation of the ASHRAE Design Day Procedure Against Recorded Weather Data</i> ; sponsored by; TC 4.02, Climatic Information, be accepted with comments.
12	7	2108-RTAR , <i>Determining Flow Velocity Impact on Erosion</i> ; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be accepted with comments.
13	7	2109-RTAR , <i>Experimental evaluation of mixing different inhibitor-types in water-glycol mixtures</i> ; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be rejected.
14	7	2110-RTAR , <i>Eternal flow modeling of data centers – assessing the accuracy and levels of risk associated with different dispersion modeling methodologies</i> ; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be returned.
15	8	1851-WS , <i>Dielectric Properties of Lower GWP Refrigerants organic compounds</i> ; sponsored by TC 3.01, (Refrigerants and Secondary Coolants); co-sponsor TC 8.01 (Compressor Technology), be conditionally accepted.

16	8	1950-WS , <i>Effect of residential exhaust terminations on jet mechanics and resulting required intake separation</i> ; sponsored by TC 4.03 (Ventilation Requirements & Filtration), be conditionally accepted.
17	8	1956-WS , <i>Compact CFD Modeling Guidance for Thin Flow Resistances</i> ; sponsored by TC 4.10, (Indoor Environmental Modeling), co-sponsor TC 9.09, (Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment), be conditionally accepted.
18	8	1982-WS , <i>Occupant-centric Demand-Side Management for Residential Buildings</i> ; sponsored by TC 7.10, (Occupant Behavior in Building Design and Operation); co-sponsor TC 7.05, (Smart Building Systems), be returned.
19	8	1986-WS , <i>Developing and Validating Bi-Directional Semantic Mappings between ASHRAE Standard 223P and IFC</i> ; sponsored by TC 1.5, (Computer Applications); co-sponsor TC 4.07 (Energy Calculations), be returned.
20	9	RAC award 1811-TRP , <i>Determining Occupancy Patterns in Clusters of Buildings with Data Drawn from Web Based social media and Mobile Positions</i> , to Northwestern University, for a period of 24 months at a total cost to ASHRAE of \$134,815.
21	9	RAC award 1895-TRP , <i>Effect of Penetration Through Particle Pre-Filters on the Performance of Gas Filters</i> , be awarded to University of Cincinnati, for a period of 24 months at a total cost to ASHRAE of \$171,030.

LIST OF ATTACHMENTS

Attachment A: 2025-26 MBOs status report

ACTION ITEMS – 2026 Spring Meeting

No.	Responsibility	Action Item	Status
1	Staff	Send a list of recently completed research projects to Gray to recruit volunteers to write a Research Promotion slide as an example	
2	RAC	Use the Research Chairs Breakfast in Austin as a forum to gather input and clearly communicate the intent behind existing rules	
3	Gray , Landsberg, Kirkwood, Katipamula, Ziviani	Establish a training example for authoring work statements and seek TC volunteers at breakfast to participate in development.	
4	Katipamula and Wen	Draft a formal response letter to TC 1.4 summarizing RAC's discussion and planned actions	

RECURRING ACTION ITEMS (EACH MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
Chair	Report to Technology Council on RAC's MBO Status.
Research Liaisons	Remind all TC chairs and research subcommittee chairs in section that a draft of all Work Statement and RTARs, and all later versions should be sent to their Research Liaison for review before information is passed on to the Manager of Research.
RPS (Primary) RAS (Secondary)	Review RTARs
RAS (Primary) RPS (Secondary)	Review Work Statements
RAS (Primary) RPS (Secondary)	Review TRPs and URPs
RPS (Primary) (Secondary)	Review and revise the Society's Research Implementation Plan based upon accepted RTARs.
Subcommittee Chairs	Report Status of assigned MBOs.
Staff	Distribute copies of Technology Council's Action Items and Motions affecting RAC.
BOD Ex-O	Report to the RAC Chair BOD's Actions and Motions affecting RAC.
Staff	Forward URPs to RAS Chair to help identify a champion for the URP on RAC based on members background and experience. The RAC URP Champion will either help select a cognizant TC to review the URP or return the URP with a recommendation that it not be reviewed further as a possible ASHRAE research project.

RECURRING ACTION ITEMS **(ANNUAL MEETING)**

<u>Responsibility</u>	<u>Summary of Action</u>
Chair	Invite new RAC members to meeting and any training sessions at meeting.
Incoming Chair	Finalize MBOs and roster assignments. Set date for fall meeting.
RAS	Review Invited Innovative Research Grant (IRG) Full Proposals

RECURRING ACTION ITEMS
(FALL MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RAS	Plan Training Segment for Research Breakfast at Winter Meeting
RLs	Review "Service to ASHRAE Research Award" nominations submitted TC chairs and select best nomination for RAC consideration.
MORTS	Prepare semi-annual report to RAC by December 15.

RECURRING ACTION ITEMS
(WINTER MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Review New Investigator Award Nominations
RPS	Review Homer Addams Award Nominations
RPS	Review Innovative Research Grant (IRG) Pre-Proposals

RECURRING ACTION ITEMS
(SPRING MEETING)

<u>Responsibility</u>	<u>Summary of Action</u>
RPS	Review Grant-In-Aid Applications
MORTS	Invite new incoming RAC members to the Annual meeting.
MORTS	Prepare semi-annual report to RAC by May 15.
RPS	Plan Training Segment for Research Breakfast at Annual Meeting



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MINUTES
RESEARCH ADMINISTRATION COMMITTEE
APRIL 29 & MAY 4, 2026

MEMBERS' PRESENT:

Jin Wen, Chair
Roland Charneux, *Vice Chair*
Dennis Landsberg, *Chair RAS*
Chris Gray, *Chair RPS*
Srinivas Katipamula, *RL Section 1.0*
Steve Sill, *RL Section 2.0*
Zheng O'Neill, *RL Section 3.0*
Davide Ziviani, *RL Section 4.0*
Douglas Scott, *RL Section 5.0*
Matthew Mullen, *RL Section 6.0*
Chad Kirkwood, *RL Section 7.0*
Carl Huber, *RL Section 8.0*
Conor Murray, *RL Section 9.0*
Xudong Wang, *Consultant*
Patrick Marks, *BOD Ex-Officio*

GUESTS:

None

ASHRAE STAFF:

Donna Daniel
Steve Hammerling
Amber Thomas

MEMBERS ABSENT:

Wen Bin Ng, *RL Section 10.0*
Devin Abellon, *Coordinating Officer*

A. CALL TO ORDER & INTRODUCTIONS

Chair Wen called the Part A RAC meeting of the committee to order Wednesday, April 29, 2026 at 1:00 PM EDT. RAC quorum was confirmed with 11 of 14 members in attendance.

B. ASHRAE VALUE STATEMENT

In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.

[Code of Ethics](#)

[Core Values](#)

[Diversity Statement](#)

C. ADDITIONS AND/OR CHANGES TO THE AGENDA

Agenda item E.b.2, Discussion of TC 1.4 comments was moved to Part B agenda.

Scott requested agenda item M.c, URP Action Items, be moved to Austin agenda.

D. APPROVAL OF WINTER 26 MINUTES

It was moved (Gray) and seconded (Scott) that,

- (1) the draft minutes of the RAC 2026 Winter meeting be approved as drafted.

BACKGROUND: Draft minutes distributed on Basecamp on March 12th, 2026.

MOTION 1 PASSED: 10-0-1-3, (14) CNV

E. CHAIR'S REPORT

a) Disposition of Motions from Last Meeting or Letter Ballots

1. RAC Letter Ballot 2026-1, Motion 1 to revise the RAC MOP – **APPROVED by TechC.**

Updated MOP and other RAC guidance documents are posted to website and Basecamp.

2. RAC Motion 13 to revise the TechC Reference Manual to increase the RAC approved budget limit to \$450k – **FAILED at TechC.**

Reasons for negative votes at TechC included the TechC approval limit of \$500k and a lack of research projects with budgets this high.

3. No other RAC motions required higher body approval

b) Discussion Items

1. Additional funding request for ASHRAE research project 1915-RP ([see Basecamp E.b.1](#))

It was moved (Gray) and seconded (O'Neill)

- (2) that RAC approve a funded extension for active research project **1915-RP, Refrigerated Facilities Doorway Infiltration Air Energy Reduction**, awarded to Creative Thermal Solutions, for a total additional cost to ASHRAE of \$10,000.

BACKGROUND: An addendum to the scope adds additional sensors and analysis to consider minimum ventilation rates in freezing and refrigerated spaces. The \$10,000 funding increase will be funded by CEBA, so the actual cost to ASHRAE for this project will not change. The changes would not lengthen the project's time to completion. The sponsoring TC 10.2 has formally approved the proposed scope change. The principal investigator (PI) has agreed to changes. If RAC approves, we will amend the Research Agreement for the PI to sign.

MOTION 2 PASSED: 10-0-1-3, (14) CNV

2. Discussion Research Procedures brought up by TC 1.4 Chair ([see Basecamp E.b.2](#))

Item was moved to Part B meeting Item O.

3. Discussion of Indirect Cost % Cap (Action Item #10) ([see Basecamp E.b.3](#))
RAC reviewed a 10-year historical analysis of bids posted on Basecamp to evaluate whether ASHRAE should introduce a cap on indirect cost percentages for research project bids.

Gray highlighted that the Board of Directors (BOD) is currently considering a similar motion

to introduce indirect cost caps for all ASHRAE contracts, which would inherently impact research projects.

Committee members noted that introducing a strict 30% to 40% indirect cost cap could impact university bidders, whose standard rates often exceed this threshold. However, members representing academic institutions clarified that universities frequently accept caps between 20% and 30% as exceptions to their internal policies, as this range is standard for many research funding bodies.

Mullen raised a question regarding how these indirect expenses would be uniformly calculated, noting that ASHRAE would need to establish clear guidelines or potentially adopt an existing federal definition.

RAC concluded that no indirect cost cap would be imposed at this time. RAC decided to gather feedback from Technical Committees (TCs) and bidders during the upcoming Research Breakfast to better understand what cost cap thresholds would be acceptable to potential bidders and what the impact might be.

c) New & On-going Action Items Assigned by Tech. Council

None at this time.

d) New Information Items:

1. Plans for ASHRAE Annual Meeting in Austin

RAC will plan to have an ExCom meeting in Austin on Saturday morning, 7-8 AM CDT before RAC Meeting #1.

2. Project Monitoring Subcommittee (PMS) or Project Evaluation Subcommittee (PES) Training Webinars

RAC will need to set date for future training webinars. Once new PES/PMS rosters are formed after the Annual Meeting may be a good time to schedule training.

F. BOD EX-OFFICIO & COORD. OFFICER – MARKS & ABELLON

Marks reported the Committee only registration cost was reduced for Standing Committee members from \$250 to \$95 for Austin. This registration includes a virtual session.

The Future of ASHRAE Annual Conference (FOAC) ad hoc committee has been actively meeting to evaluate the structure of future ASHRAE conferences. The committee released preliminary ideas, which include transitioning the Annual Meeting into a primarily virtual event, with exceptions for the Board of Directors (BOD), Executive Committee (ExCom), and Standing Committees. The FOAC committee has sought feedback on these preliminary concepts from Technical Committee (TC) and Program Committee (PC) leadership.

G. ACTION ITEM TRACKING AND PRELIMINARY REVIEW OF W26 ACTIONS & 25-26 MBOs

ACTION ITEMS – 2026 Winter Meeting

No.	Responsibility	Action Item	Status
1	Staff	Staff was asked to update RAC guidance documents (MOP, Reference Manual, Research Manual) on ASHRAE website, Basecamp, etc.	Complete
2	Staff- RAC	Revise RAC Reference Manual to include ASHRAE Artificial Intelligence policy to help ensure compliance in reviewing research and award proposals	On-going – Staff to send for Austin
3	Staff- RAC	Add section in IRG procedures to indicate only 1 st two pages of pre-proposals would be reviewed.	On-going – Staff to send for Austin
4	Staff	Increase promotional efforts on Homer Addams award, inform the PI, define when a project is completed and 2-year window starts.	Complete
5	Wen Bin Ng	Coordinate preliminary RAC review of URP-2009.	On-going
6	Wen Bin Ng	Coordinate preliminary RAC review of URP-2010.	On-going
7	Staff	Send Xudong Wang the ASHRAE procedures for sponsoring research from organizations outside of ASHRAE	Complete
8	Scott Charneux, Ng	Participate on subcommittee to review current URP procedures and see if things can be streamlined	On-going
9	Staff	Compile a history of URPs submitted and approved to help inform this URP subcommittee	Complete
10	Staff	Explore the issue of indirect cost percentages of ASHRAE research bids, discuss with other ASHRAE staff and report back to RAC at future meeting	Complete
11	Ziviani	Send staff a sample of what other organizations request for their proposals for Current & Pending notification	Complete
12	Staff	Contact five TRP-1895 bidders to see if their bids were good through the spring	Complete
13	Gray	Work with the 1895 PES and TC to make sure the bids are scored that the TC would recommend a winning bidder for RAC's spring meeting	Complete
14	Staff	Post Research Portal training to Basecamp in Spring	On-going
15	Gray, (Scott, Mullen)	Review the Research Portal development.	On-going (<i>Create roadmap living document of upgrades</i>)
16	RAC	Review and comment on Research Promotion draft deliverable slide for future meeting.	Complete
17	Staff	Review and ensure RAC RLs had access to the Research Subcommittee Chair Basecamp	Complete

Staff was asked to send a list of recently completed research projects to Gray to recruit volunteers to write a Research Promotion slide as an example (**Action Item #1**).

MBOs will be discussed as they arise on the agenda. A status report on RAC MBOs for 2025-2026 will be reported to OPS and is shown in **Attachment A**.

H. TRPs Bid or Rebid in Spring 2026

The following projects went out for bid in spring. Contractors can be selected by RAC at the Annual Meeting:

- a) **1939-TRP**, *A tool to evaluate weather inputs for robust building performance analysis and design*; Sponsoring Committee: TC 4.02, Climatic Information, Co-Sponsors: TC 2.05, Global Climate Change; Estimated Duration: 30 months. Estimated Cost to ASHRAE: \$225,000
- b) **1955-TRP**, *Healthcare Anteroom Ventilation*; Sponsoring Committee: TC 9.6, Health Care Facilities, co-sponsored by: SSPC 170, Ventilation of Health Care Facilities. Estimated Duration: 24 months. Estimated Cost to ASHRAE: \$256,685
- c) **1999-TRP**, *Updating climatic design conditions for the 2029 ASHRAE Handbook – Fundamentals and ASHRAE Standard 169*; Sponsoring Committee: TC 4.2, Climatic Design Information, co-sponsored by: TC 4.1, Load Calculation Data and Procedures. Estimated Duration: 24 months. Estimated Cost to ASHRAE: \$200,000
- d) **2000-TRP**, *Develop cost and performance indexes to evaluate effectiveness of virtual airflow meters in HVAC application*; Sponsoring Committee: TC 7.5 - Smart Building Systems. Estimated Duration: 24 months. Estimated Cost to ASHRAE: \$275,000

I. Grant-in-Aid Award Applications (69 Applicants) – RPS Chair Gray Lead

RPS reviewed and scored 69 applicants for the 2026-27 Grant-in-Aid Award.

It was moved (RPS) that,

- (3) The following 20 students were awarded an ASHRAE Graduate Student Grant-in-Aid (GIA) for the 2026-2027 academic year:
 - 1. Rosina Adhikari, Pennsylvania State University
 - 2. Mohammadreza Azaddel, Oklahoma State University
 - 3. Jordan Cross, Purdue University
 - 4. Ehuie Ebewe, Purdue University
 - 5. Felix Ekufu, University of North Carolina at Charlotte
 - 6. Aaron Farha, Purdue University
 - 7. Saeed Farhoodi, Illinois Institute of Technology
 - 8. Hang Guan, Texas A&M University (1 LCM)
 - 9. Xin Guo, Syracuse University
 - 10. Hueongseok Lee, Purdue University
 - 11. Seungmin Lee, North Carolina State University
 - 12. Brian Magnuson, Purdue University
 - 13. Jun Park, Oklahoma State University
 - 14. Arya Parsaei, Carleton University
 - 15. Nathaniel Smith, Texas A&M University
 - 16. Xiaoyue Yan, Massachusetts Institute of Technology
 - 17. Yearin Yang, Concordia University
 - 18. Yuanzhi Yang, Purdue University
 - 19. Zeinab Zadeh, Concordia University
 - 20. Yuhang Zhang, Texas A&M University (2 LCM)

Hang Guan and Yuhang Zhang of Texas A&M University hold the added distinction of being named the 2026-2027 Life Member Club grant recipients as the top one and two rated applicants, respectively. These two grants are supported by a financial contribution from the club.

MOTION 3 PASSED: 10-0-1-3, (14) CNV

Research Promotion and ASHRAE Foundation have inquired about the possibility of increasing the Graduate In-Aid (GIA) award amount. It was noted that this grant is highly popular among young ASHRAE researchers, but the funding amount has remained stagnant at \$10,000 for the past 20 years. RAC will review at a future meeting.

J. RTAR Review (11 new & revised RTARs) – RPS Chair Gray Lead

RPS chair Gray would develop a summary of comments for inclusion in letters to TCs to communicate results of RAC review

It was moved (RPS) that,

- (4) **1980-RTAR**, *Simplified Methods for Calculation of Heating Warm-Up Loads*; sponsored by TC 4.1 Load Calculation Data and Procedure; co-sponsored; TC 8.11, Unitary and Room Air Conditioners and Heat Pumps, be accepted with comments.

MOTION 4 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (5) **2012-RTAR**, *Development of BIM to Energy Plus simulation workflows supporting Occupant Behavior Modeling*; sponsored by TC 7.10, Occupant Behavior in Building Design and Operation, be rejected.

MOTION 5 PASSED RPS: 5-0-0, CV

It was moved (RPS) that,

- (6) **2013-RTAR**, *An Occupant Behavior Foundation Model Leveraging Large Language Models for Schedule Generation*; sponsored by MTG. GenAI, Generative Artificial. Intelligence; co-sponsor, 7.10, Occupant Behavior in Building Design and Operation, be accepted with comments.

MOTION 6 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (7) **2014-RTAR**, *Develop a Framework of Domain-Specific Gen-AI Benchmark for ASHRAE*; sponsored by; TC 7.5, Smart Building Systems, be accepted with comments.

MOTION 7 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (8) **2102-RTAR**, *Creation of unified database of refrigerant correlations, and its access through GenAI trained chatbot*; sponsored by; TC 8.04, Air-to-Refrigerant transfer Equipment, be returned.

MOTION 8 PASSED RPS: 5-0-0, CV

It was moved (RPS) that,

- (9) **2105-RTAR**, *Overall impact of restricting the use of evaporative heat rejection equipment vs alternative heat rejection equipment*; sponsored by, TC 8.06, Cooling Towers & evaporative Condensers, be accepted with comments.

MOTION 9 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (10) **2106-RTAR**, *Creating a Globally Harmonized Climate Classification Systems for Building Design Standards*; sponsored by; TC 4.02, Climatic Information, be accepted with comments.

MOTION 10 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (11) **2107-RTAR**, *Evaluation of the ASHRAE Design Day Procedure Against Recorded Weather Data*; sponsored by; TC 4.02, Climatic Information, be accepted with comments.

MOTION 11 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (12) **2108-RTAR**, *Determining Flow Velocity Impact on Erosion*; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be accepted with comments.

MOTION 12 PASSED RAC: 10-0-1-3, (14) CNV

It was moved (RPS) that,

- (13) **2109-RTAR**, *Experimental evaluation of mixing different inhibitor-types in water-glycol mixtures*; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be rejected.

MOTION 13 PASSED RPS: 5-0-0 CV

It was moved (RPS) that,

- (14) **2110-RTAR**, *Eternal flow modeling of data centers – assessing the accuracy and levels of risk associated with different dispersion modeling methodologies*; sponsored by; TC 9.09, Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment, be returned.

MOTION 14 PASSED RPS: 5-0-0 CV

RECESS

RECONVENE

Chair Wen called the Part B RAC meeting of the committee to order Monday, May 4th, 2026, at 11:00 AM EDT. RAC quorum was confirmed with 13 of 14 voting members in attendance.

K. Work Statement Review (5 new & revised WSs) – RAS Chair LANDSBERG Lead

RAS chair Landsberg would develop a summary of comments for inclusion in letters to TCs to communicate results of RAC review.

It was moved (RAS) that,

- (15) **1851-WS**, *Dielectric Properties of Lower GWP Refrigerants organic compounds*; sponsored by TC 3.01, (Refrigerants and Secondary Coolants); co-sponsor TC 8.01 (Compressor Technology), be conditionally accepted.

MOTION 15 PASSED RAC: 12-0-1-1, (14) CNV

It was moved (RAS) that,

- (16) **1950-WS**, *Effect of residential exhaust terminations on jet mechanics and resulting required intake separation*; sponsored by TC 4.03 (Ventilation Requirements & Filtration), be conditionally accepted.

MOTION 16 PASSED RAC: 12-0-1-1, (14) CNV

It was moved (RAS) that,

- (17) **1956-WS**, *Compact CFD Modeling Guidance for Thin Flow Resistances*; sponsored by TC 4.10, (Indoor Environmental Modeling), co-sponsor TC 9.09, (Mission Critical Facilities, Data Centers, Technology Spaces and Electric Equipment), be conditionally accepted.

MOTION 17 PASSED RAC: 12-0-1-1, (14) CNV

It was moved (RAS) that,

- (18) **1982-WS**, *Occupant-centric Demand-Side Management for Residential Buildings*; sponsored by TC 7.10, (Occupant Behavior in Building Design and Operation); co-sponsor TC 7.05, (Smart Building Systems), be returned.

MOTION 18 PASSED RAS: 5-0-1 CNV

It was moved (RAS) that,

- (19) **1986-WS**, *Developing and Validating Bi-Directional Semantic Mappings between ASHRAE Standard 223P and IFC*; sponsored by TC 1.5, (Computer Applications); co-sponsor TC 4.07 (Energy Calculations), be returned.

MOTION 19 PASSED RAS: 5-0-1 CNV

L. Carry Over TRPS to be awarded:

- a) **1811-TRP**, *Determining Occupancy Patterns in Clusters of Buildings with Data Drawn from Web Based social media and Mobile Positions*, sponsored by TC 1.5, (Emerging Computing

Applications) co-sponsor, TC 7.10, (Occupant Behavior in Building Design and Operation)

It was moved (Katipamula) and seconded (Scott) that,

- (20) RAC award **1811-TRP**, *Determining Occupancy Patterns in Clusters of Buildings with Data Drawn from Web Based social media and Mobile Positions*, to Northwestern University, for a period of 24 months at a total cost to ASHRAE of \$134,815.

MOTION 20 PASSED RAC: 12-0-1-1, (14) CNV

- b) **1895-TRP**, *Effect of penetration through particle pre-filters on the performance of gas fillers*; sponsored by TC 2.3, (Gaseous Air Contaminants and Gas Contaminant Removal Equipment; co-sponsors TC 2.4, (Particulate Air Contaminants and Particulate Contaminant Removal Equipment) & GPC 35, (Method for Determining the Energy Consumption caused by Air-Cleaning and Filtration Devices)

It was moved (Katipamula) and seconded (Gray) that,

- (21) RAC award **1895-TRP**, *Effect of Penetration Through Particle Pre-Filters on the Performance of Gas Filters*, be awarded to University of Cincinnati, for a period of 24 months at a total cost to ASHRAE of \$171,030.

MOTION 21 PASSED RAC: 12-0-1-1, (14) CNV

M. Unsolicited Research Projects (URP)

- a) **2002-URP**, *Engineering Equations for Moist Air Transport Properties Research* - Matthias Kunick

RAC approved sending to TC 1.1 in Las Vegas. TC to consider at next meeting for RAC to consider at Annual Meeting.

- b) **2009-URP** - *Impact of an UVC-based air purifier on airborne surrogates of eukaryotic viruses significant for pig and farmers' health* – Caroline Duchaine,

2010-URP - *High-Sensitivity IEQ Monitoring via Air Conditioner Condensate Analysis* – Andrew Fix.

2009-URP and 2010-URP were sent to RL (Ng) to coordinate RAC review and determine if it should be sent to TC for evaluation. A subcommittee was asked to review by May 6th to help inform a recommendation to RAC to rediscuss at Annual Meeting.

- c) Action Item 8, 9
Scott noted that his subcommittee has met to discuss possible changes to the URP review process, but more discussion is needed

N. Consultants' Reports

Wang (AHRI) did not attend the meeting.

O. UNFINISHED OR OUT-OF-SEQUENCE BUSINESS

- a) Research Procedures brought up by TC 1.4 Chair ([see Basecamp E.b.3](#))

Katipamula summarized feedback from TC 1.4 on the research process:

- Over-Emphasis on Lowest Bidder: The scoring metrics heavily reward the lowest cost or lowest dollar-per-point ratio. This often disqualifies highly qualified PI's who cannot compete

on cost.

- Over-Reliance on Volunteers: The process places a high burden on all-volunteer PES and PMS to ensure project success and tightly monitor inexperienced teams.
- Information Asymmetry: Written proposals give PES members limited information, occasionally leading to erroneous selections
- Lack of Performance Tracking: There is currently no mechanism to track or share a bidder's past poor performance or incomplete deliverables with a new PES.
- Recommendations from TC 1.4:
 - Realign scoring processes to mirror other organizations (DOE, NYSERDA), where technical merit dominates and cost effectiveness is limited to a percentage of the total score.
 - Change the default selection of the lowest bidder or cost-per-point method to a weighted system where these are factors

RAC engaged in a lengthy discussion and review of the issues raised by TC 1.4. Key points from the discussion included:

- Reinforcing Roles: RAC must continue to emphasize its role in administering funds responsibly while guiding TCs to draft clearer work statements and sharper scoring criteria to better differentiate bidders.
- Procedural Flexibility: It was noted that current bid analysis guidelines *do* allow for the selection of a non-lowest responsive bid, but this needs to be better communicated.
- Proposed Process Improvements:
 - Consider implementing a PES interview process to vet bidders beyond written proposals.
 - Develop PMS/PES training modules featuring quizzes and highlighted case examples.
 - Evaluate whether RAC should fundamentally open up and reevaluate its philosophy regarding lowest-cost bids.

RAC decided to use the Research Chairs Breakfast in Austin as a forum to gather input and clearly communicate the intent behind existing rules (**Action Item #2**).

A subcommittee was formed (**Gray**, Landsberg, Kirkwood, Katipamula, Ziviani) to establish a training example for authoring work statements and seek TC volunteers at breakfast to participate (**Action Item #3**).

Katipamula and Wen would draft a formal response letter to TC 1.4 summarizing RAC's discussion and planned actions (**Action Item #4**).

P. NEW BUSINESS

- a) No new business

ADJOURN

The meeting of the Research Administration Committee was adjourned at approximately 12:45 PM EST on Monday, May 4, 2026

ATTACHMENT 1
Research Administration Committee MBOs 2025-2026

MBO Submissions to Planning Committee **Last submission date:** 4/30/2026

Generation date: 7/3/2025

Committee: Research Administration Committee

Chair: Wen Jin

Vice-chair: Charneux Roland

MBO #	Description	Metric (how do we determine success?)	Completion % /Date	Financial Assist Req'd?	Staff Assist Req'd?	MBO Comments
1	Update RAC MOP, Reference Manual to specify rules for formation/operation of RAP to develop research strategic plan	Updates to governing documents available on the website	6-30-2026		Yes	Request was for standing RAP subcommittee of RAC. Draft revisions to RAC guidance documents have been made but more RAC and RAP discussion is needed to define RAP's role and responsibilities outside of RSP development. UPDATE: RAC working with RAP to determine roles and responsibilities to incorporate into guidance documents
2	Establish a standing RTAR/WS writing mentorship program.	Potential actions: standing RTAR/WS help desk or office hour during ASHRAE meetings; Panel discussions to share the best practices; list of "all-star" authors for potential review.	6-30-2026		Yes	One key issue contributing to delays in the RTAR/WS approval process is the lack of clarity and effectiveness in authors' writing. RAC often struggles to understand the significance, objectives, and overall intent of the proposed project. To address this, establishing an author mentorship program would help authors, especially first-time or inexperienced authors to improve the quality and clarity of proposals, ensuring they communicate critical information more effectively and streamline the review process. UPDATE: RAC is compiling a list of potential members and recruiting members at Research Breakfast. RAC also considering 'office hours' to address questions.

3	Establish a routine to review budget guidelines	Updates to governing documents available on the website	6-30-2026		Yes	We may need to raise the current budget cap from 350k to 375k to reflect the inflation. RAC can institute a policy to review this every year or couple of years to consider increasing costs to perform ASHRAE research UPDATE: RAC passed motion in LV to increase limit to \$450k that did not pass. RAC will reconsider if another motion is appropriate
4	Establish a central location for all training materials.	Updates to RAC pages on ASHRAE webpage	6-30-2026		Yes	Update training materials and post current versions to ASHRAE webpage. UPDATE: training materials available on website and Research Subcommittee Chairs Basecamp
5	Improving RAC feedback on RTARs/WSs	Quarterly updates to TCs on RTARs, WSs. Post training and resources to ASHRAE website and Basecamp	6-30-2026			Another factor that may contribute to delays in the RTAR/WS approval process is a limited understanding of the context and key points raised during RAC's discussions. While review comments and RL communications provide some insight, they may not capture the full scope of the debate. Providing a clear and concise summary of the RAC panel discussion could help authors better understand the concerns and expectations, thereby improving their responses and reducing approval delays. There are also potential actions that we could take to help TCs and authors to take actions long-before the RTAR/WS deadlines. UPDATE: RAS/RPS chairs now being asked to summarize comments after discussion to develop comprehensive list of comments to be addressed for approval.

6	Identify the best mechanism to provide a data repository for RPs	Create the framework design or identify existing infrastructure.	6-30-2026		Yes	There is a need for standardized requirements or guidelines for documenting/formatting of data resulting from ASHRAE research. RAC can explore establishing new contract language to get data in a more generally usable format. RAC to explore how data from research projects can be submitted in a universal or accessible format and document in Research Manual RAC formed a subcommittee to review current requirements, language from other organizations that address these issues, and draft language that would help keep data from ASHRAE research projects available and useable. Inquiry made with staff for data repository. A subcommittee is reviewing draft language from other organizations and language for ASHRAE Research Agreement. UPDATE: RAC is discussing with ASHRAE Staff and IT.
7	Establish new requirements for lay description of research projects and, best research findings from Research chairs.	Streamline reporting requirements for RPs	6-30-2026			RAC sought feedback at Research Breakfast and from RP on how ASHRAE can get information about completed research out to members and public in layman's terms. RAC members would review and draft changes to Research Agreement deliverables as appropriate to implement this requirement. UPDATE: Draft template for a slide to eventually incorporate into Research Agreement is available. RAC reaching out to PIs of recently completed projects to get some examples

