



MINUTES

Handbook Committee

June 23, 2019

Marriott East, Roosevelt

Kansas City, KS

MEMBERS PRESENT:

Don Fenton, chair
Suzanne LeViseur, vice chair, 2019A chair
Harris Sheinman, 2019A
Bryan Holcomb, 2019A
Michael Patton, 2020S chair
Caroline Calloway, 2020S
Prakash Dhamshala, 2020S
Steven Sill, 2020S
Bass Abushakra, 2021F chair
Jason Atkisson, 2021F
Guy Frankenfield, 2021F
Kevin Gallen, 2021F
Javier Korenko, 2021F
Stephanie Mages, 2021F
Scott Fisher, 2022R chair
Nicholas Shockley, 2022R
Brian Fricke, 2022R
Katherine Hammack, Board of Directors Ex-Officio (BOD ExO)

STAFF PRESENT:

Heather Kennedy, staff liaison, Editor for ASHRAE Handbook

VISITORS:

Julia Keen, ASHRAE VP, PEC VCh
David Desjardins, TC 6.5

ADDITIONAL DISTRIBUTION: Publishing and Education Council
Chapter Technology Transfer Committee

MAJOR PASSED MOTIONS	
No.	Motion
1	To approve the minutes of the committee's January 2019 meeting in Atlanta
2	To approve the proposed revisions to the Handbook ROB
3	To approve the merger of Applications Ch. 54 and Systems Ch. 6, and to remove radiant heating chapter from the 2024 Systems volume

ACTION ITEMS	
1	Investigate obtaining nametag stickers for Handbook contributors, along the lines of the research promotion (RP) stickers available in Kansas City (Kennedy).

1. Call to Order

Mr. Fenton called the meeting to order at 10:32 AM and noted that a quorum was present.

2. Introductions

Mr. Fenton welcomed all attendees. Members and visitors introduced themselves.

3. ASHRAE Code of Ethics Commitment

Mr. Fenton read the following excerpt from the ASHRAE Code of Ethics:

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

4. Approval of Minutes

It was moved and seconded

(1) to approve the minutes of the committee's January 2019 meeting in Atlanta.

MOTION (1) PASSED, voice vote.

5. Agenda Updates

To better accommodate attendees' schedules, the report from the CO (item 8 below) was moved to precede the Chair's comments (item 6).

6. Chair's Comments

6.1 Publishing and Education Council (PEC) update

Mr. Fenton thanked the HBC for doing great work and noted that revisions to Handbook MOP were being sent to the BOD for approval.

7. Board of Directors Ex-Officio (BOD ExO) Member Report

Ms. Hammack updated the committee on the BOD's recent efforts *[[att. A]]* and thanked HBC members for their hard work. She encouraged HBC members to consider what leadership roles they would like to undertake next in ASHRAE, when they roll off HBC.

8. Coordinating Officer (CO) Report

Ms. Keen noted that the proposed PEC restructuring, which intends to streamline workflow, increase collaboration, and make strategic planning more efficient, means that revisions will be needed to HBC's MOP, ROB, and Reference Manual. These documents need to be relevant and up to date with current and incoming procedures.

9. Handbook Editor's Report

Ms. Kennedy announced that the 2019 Handbook (*HVAC Applications*) was extensively revised and expanded, and was the largest Handbook volume yet at 1400 pages. This is approximately 20% growth compared to the 2015 *Applications* volume. The level of engagement from contributors is exciting, but concerns exist about costs (paper, shipping) increasing if Handbook volume growth continues at this rate.

10. Volume Subcommittee Reports

10.1 2019 HVAC Applications

Ms. LeViseur noted that the volume subcommittee did an excellent job, and reminded members of other volume subcommittees that it is not necessary to try to get all tasks done at annual or winter meetings: emails and conference calls are useful tools for coordination throughout the year.

10.2 2020 HVAC Systems and Equipment

Mr. Patton reported 7 TCs represented at the Volume/TCs meeting, and submissions were lagging. The new chilled-water chapter that had been planned for the 2020 volume will not be finished in time, and will move to the 2024 volume instead.

10.3 2021 Fundamentals

Mr. Abushakra reported that he reminded TCs that deadlines are coming up soon (in 2020). Only 3 TCs were represented at the Volume/TCs meeting, and only 4 of 6 volume liaisons. He expressed concerns about contributors being overcommitted and not showing up for early planning and coordination.

10.4 2022 Refrigeration

Mr. Fisher reported respectable turnout for his meeting from liaisons and several TC chairs.

11. Subcommittee Reports

11.1 Review

Mr. Fisher urged the Review subcommittee to send their reviews of Refrigeration chapters to the responsible TCs.

11.2 Functional

Mr. Abushakra explained that revisions to the Handbook MOP must wait until the PEC restructuring efforts are finalized and approved, to allow for how TC restructuring might affect HBC structure. He also announced that the subcommittee had, during a webmeeting, approved revisions to the Handbook ROB defining eligibility for Handbook Committee membership (e.g., voting ASHRAE member versus student) *[[att. B]]*. It was moved and seconded

(2) to approve the proposed revisions to the Handbook ROB.

MOTION (2) PASSED, 12 yea/0 nay/0 abstentions (CNV).

11.3 Electronic Media

Mr. Patton suggested that the incoming chair for Electronic Media should liaise (formally or informally) with ECC, in whatever form ECC remains after the proposed PEC restructuring.

11.4 Strategic Planning

Ms. LeViseur suggested that additional training be offered to incoming HBC liaisons, possibly on Saturdays at noon. This should be a time when existing, rolling-off, and rolling-on members could share strategies, tips, and tricks, and set up mentoring relationships.

12. Training Report

Mr. Fisher reported attendance of approximately 30, mostly from TCs. PowerPoint presentations were given on the Authoring Portal and on the general Handbook revision process and tips.

13. Information Items

13.1 Year 2018-19 MBOs

Mr. Fenton reviewed the status of his MBOs for 2018-19 *[[att. C]]*, and Ms. LeViseur presented her upcoming MBOs for 2019-20 *[[att. D]]*.

ACTION ITEM (1): Ms. Kennedy will investigate obtaining nametag stickers for Handbook contributors, along the lines of the research promotion (RP) stickers available in Kansas City.

14. Action Items

Mr. Fenton noted that there were no action items from the January 2019 meeting.

15. Old Business

(None.)

16. New Business

16.1 Proposed Merger of Radiant Heating Chapters in HVAC Systems and Equipment and HVAC Applications volumes

Mr. Desjardins of TC 6.5 proposed merging Applications Ch. 54 and Systems Ch. 6, both of which cover radiant heating, into one chapter. He cited the TC's difficulty in maintaining two separate chapters and the challenges of finding revisers on the existing schedule. He proposed leaving Systems Ch. 6 in the 2020 volume, removing it from the 2024 volume, and in the meantime revising Applications Ch. 54 to include all content for 2023. It was moved and seconded

(3) to approve the merger of Applications Ch. 54 and Systems Ch. 6, and to remove radiant heating chapter from the 2024 Systems volume

MOTION (3) PASSED, VV.

16.2 Proposed Fundamentals Chapter on Occupant Behavior in Buildings

Mr. Abushakra noted that there was no consensus among the Fundamentals volume subcommittee on whether to approve this proposed new chapter by MTG.OBB. Members of the full HBC felt that, in general, the technology is not

yet mature enough to justify a new, complete chapter in Handbook, but that content could be added to existing relevant chapters in Handbook, but there was not a consensus. Discussion was tabled until the January 2020 meeting.

17. Adjournment

Mr. Fenton thanked committee members for their efforts during the year. The meeting was adjourned at 1:03 PM.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Heather E. Kennedy", with a stylized flourish at the end.

Heather E. Kennedy

Staff liaison

Editor, ASHRAE Handbook



ASHRAE UPDATE

ExO Report to Committees

2019 ASHRAE Winter Conference Atlanta



ASHRAE Wants You!

- Nominations for appointed standing committees are sought annually
- Speak with your committee ExO if your appointed term is ending and you wish to be nominated for another Committee - **beginning July 1, 2019**
- Self-nomination is also encouraged
- Nominations are due by **mid-February 2019**
- Councils are elected by the Board of Directors, but nominations are needed



ASHRAE Nominations

ASHRAE website links are always active for member nominations to Board-elected Standing Committee and Council Positions, Appointments to Committees, and Board Officer and Director Recommendations. Once the deadline has passed, your recommendation will be held until the following year's election or appointment session.

❖ Board Officer and Director Recommendations:

Link closes for the following Society year each September 29th

ashrae.org/about/leadership/ashrae-board-of-directors/recommendations

❖ Board-elected Standing Committee and Council Nominations:

Link closes for the following Society year each September 15th

ashrae.org/bodnom

❖ Standing Committee Nominations, Appointed by the President-Elect:

Link closes for the following Society year each February 15th

ashrae.org/comnom



Presidential Ad Hocs

Standards Membership Model Ad Hoc

- Three new membership models under consideration
- Final recommendation to go before the BOD – **during 2019 Annual Conference**
- New model placed – **2020-21 (Projected)**

Smart Grid Design Guide Ad Hoc

Scope: Oversee the development and publication of a Smart-Grid Application Guide that will provide building owners, managers, and designers the guidance they need to understand the smart grid and applicable standards and regulations, and to design and operate systems in this new smart-grid environment. The guide will focus on the concrete steps needed to prepare a building for the smart grid.

- Overseen by a Presidential Ad Hoc Committee
- Chair: Steve Bushby



Proposed ASHRAE Bylaws Changes on Spring Ballot

- Nominations may be made in writing by not fewer than one percent of ASHRAE members eligible to vote. The minimum number of members required shall be based on the membership roster of the first day of that Society year. No more than 10% of the minimum number of signatures required shall be from one chapter and no more than 30% of the minimum number of signatures shall be from one region.
- One year of membership credit maximum for ASHRAE Certified Professional credential(s).



ASHRAE's Commercialism Policy

ASHRAE's Commercialism Policy allows for Society activities that fulfill the mission of technological advancement with adherence to business plans that generate income to offset operational expenses such as AHR Exposition, ASHRAE periodicals, website, and Society conference events such as the Welcome Party, luncheons, registration kits and receptions.

Principles for Managing Advertising and Sponsorships

Content should be labeled as advertising or sponsored.

Use of commercial names and logos shall not imply ASHRAE endorsement, approval or certification of products or services.

The inclusion of commercial information shall be fair and unbiased so as to avoid explicit promotion of a product or commercial entity.

Content shall adhere to accepted business practices specified by the U.S. Federal Trade Commission and recognized publishing authorities.

Activities including events at chapter meetings shall be managed to prevent an atmosphere in which commercial entities are encouraged to critique one another in the public forum.

For additional guidance:

ashrae.org/about/governance/ashrae-commercialism-policy-and-guidelines

As the business environment and communication technologies evolve, the policy is under continuous review with the aim to strike the right balance to help fulfill ASHRAE's mission.



ASHRAE HQ Update

ASHRAE has purchased a building at **180 Technology Pkwy**, approximately 10 miles north of our current location. The building will be renovated to serve as ASHRAE's new headquarters. We are excited to demonstrate leadership in our industry by transforming an existing building into a state-of-the-art built environment.



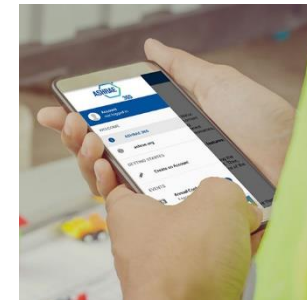
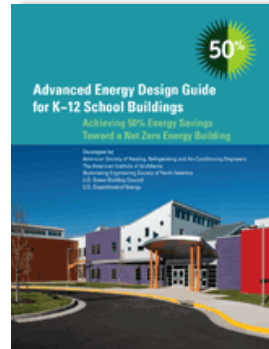
- ASHRAE is now in the beginning stages of a major capital campaign to fund these renovations.
- Move by October 2020

ashrae.org/newhq



New and Enhanced Resources

- Building EQ Web Portal – **December 2017**
- Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy – **January 2018**
- Redesigned Website (ashrae.org) – **February 2018**
- ASHRAE 365 year round app – **May 2018**
- Handbook PDFs Now in Technology Portal – **June 2018**
- New Online Comments Database – **September 2018**
- HVAC Designer certification launch – **June 2019**



Certified HVAC Designer (CHD) Certification

Industry Need & Demand

In an "Industry Need" survey, ASHRAE Member respondents agreed:

- *"The level of competence among HVAC Designers varies greatly"* – **95%**
- *"HVAC Designer certification is a worthwhile professional development goal"* – **85%**
- *"It is a tool to identify competent new hire prospects"* – **74%**

Next Steps

- CHD *Candidate Guidebook* Available – **February 1**
- CHD Application Launch – **March 1**
- CHD Practice Exam Launch – **May 1**
- Computer-based Testing Worldwide – **June 1**



Expanded Government Outreach Days

- *"Days on the Hill"* rebranded to *"Government Outreach Days"* to make more relevant for different types of government visits and regions of the world
- Expanded to Federal Outreach and Local Outreach
- **All ASHRAE Members are invited to participate – Get Involved!**
- Meetings with Government Officials are growing:
 - SY 2016-17: 8
 - SY 2017-18: 16
 - SY 2018-19: 24 (anticipated)



2019-2024 Strategic Plan

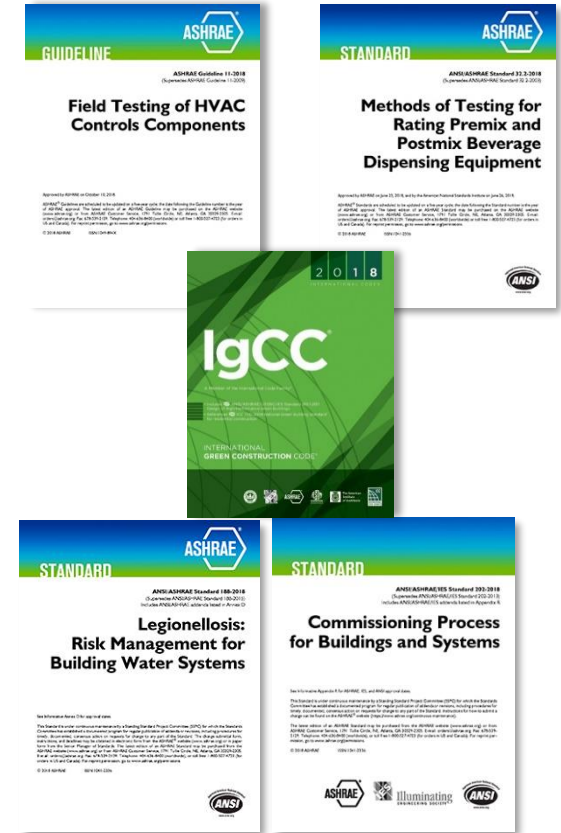
Timeline

- November 2017 - December 2017: Select Strategic Plan consultant & negotiate contract (*Complete - McKinley Advisors*)
- January 2018: Consultant presentation to BOD at ASHRAE Winter Meeting (*Complete*)
- March 2018: Board strategic planning session (*Complete*)
- June 2018: Board reviews first draft of Strategic Plan (*Complete*)
- November 2018: Board reviews and approves revised draft of Strategic Plan (*Complete*)
- **December 2018-March 2019:** Stakeholder review of and feedback on revised draft of Strategic Plan – [Including Stakeholder development of Budgets and Fiscal Impact](#)
- **April/May 2019:** Work Plan Planning Sessions with Responsible Committees & Councils
- **May 2019:** BOD approves Final Strategic Plan 2019-2024 at Spring 2019 Board Meeting
- **July 2019-June 2024:** Plan is implemented, tracked, and updated as necessary with status reported with Dashboard



Recent Publications

- 2018 International Green Construction Code (IgCC)
- ANSI/ASHRAE Standard 188-2018, Legionellosis: Risk Management for Building Water Systems
- ANSI/ASHRAE/IES Standard 202-2018, Commissioning Process for Buildings and Systems
- Stakeholder's Guide to Commissioning
- A Practitioner's ASHRAE Guideline 32-2018, Management for Sustainable High-Performance Operations and Maintenance
- Guide to Engineering Management
- ASHRAE Position Document on Climate Change
- ASHRAE Position Document on Refrigerants and Their Responsible Use
- ANSI/ASHRAE Standard 222-2018, Standard Method of Test for Electrical Power Drive Systems
- Revised editions of the following method of test standards: 32.2-2018, 41.9-2018, 72-2018, 158.2-2018, 174-2018
- ANSI/ASHRAE Standard 29-2015 (RA 2018), Method of Testing Automatic Ice Makers
- ASHRAE Guideline 11-2018, Field Testing of HVAC Controls Components
- ASHRAE Guideline 38-2018, Guideline for Using Metal Pressure Vessels to Test Materials Used in Refrigeration Systems
- Spanish Translations: ASHRAE Guideline 1.3-2018, The Strategic Guide to Commissioning



Upcoming Publications

- District Cooling Guide, 2nd edition (Spring 2019)
- District Cooling Owners' Guide (Spring 2019)
- Design Guide for Multifamily Residential Buildings (Spring 2019)
- Data Center Infrastructure Management (Datacom Series) (Spring 2019)
- Design Considerations for Datacom Equipment Centers, 3rd ed. (Datacom Series) (Spring 2019)
- Design Guide for Combustion Turbine Inlet Air Cooling Systems, 2nd ed. (Summer 2019)
- High-Performance Buildings Simplified textbook (Summer 2019)
- Advanced Energy Design Guide for Small to Medium Office Buildings: Achieving Zero Energy (Summer 2019)
- Smart Grid Application Guide for Building Professionals (Summer 2019)
- Design Guide for Duct Systems (Fall 2019)
- Design Guide for Cool Thermal Storage, 2nd ed. (Winter 2019)



New ASHRAE Learning Institute Courses

- Choosing the Right Energy Code for Your Project-IECC or ASHRAE 90.1-2016
- How Smart, Efficient, Sustainable Systems Lead to Improved Resilience
- Solar PV & Thermal Systems Analysis and Design
- ASHRAE 90.1 Code Compliance & Plan Review for Authorities Having Jurisdiction
- Introduction to Refrigerants
- Refrigerant Selection
- Refrigerant Management
- Designing for IAQ: Complying with the Requirements of Standard 62.1 (MENA) (Dubai Training Center)
- HVAC Design: Level II-Applications (MENA) (Dubai Training Center)
- New Developments in Lower GWP Refrigerants (MENA) (Dubai Training Center)
- Standard 90.1: HVAC/Mechanical Design and Appendix G (MENA) (Dubai Training Center)



Upcoming ASHRAE Learning Institute Courses

- Safe and Energy Efficient Laboratory Exhaust Stacks
- Guideline 36 Control Sequences
- The New IgCC®
- Improved Presentation Skills
- Installing DDC Control Systems
- Cold-Climate Design Guide
- Hot-Climate Design Guide



Publishing/Education Strategies to Improve Content Access

Enhance member access using online delivery

- Technology Portal for *ASHRAE Journal*, Research Reports, Conference Papers, Seminars
- Handbook PDFs added to Technology Portal to eliminate CDs
- 90.1 Portal syncs the 2016 standard with the user's manual plus red-line version

Expand content available electronically

- Free Online Access to *Science & Technology for the Built Environment*, ASHRAE's journal of archival research

Use web-based tools to optimize volunteer time

- Handbook Chapter Authoring Teams using Authoring Portal for 2019 Handbook

Customize training and translate publications applying business models

Trackable delivery of Handbooks to more countries



Questions?

Please let your ExO know how and where
you'd like to serve next!

PEC Restructuring

January 2019

Ad Hoc Members:

Julia Keen (Chair)

Dan Dettmers

Charlie Henck

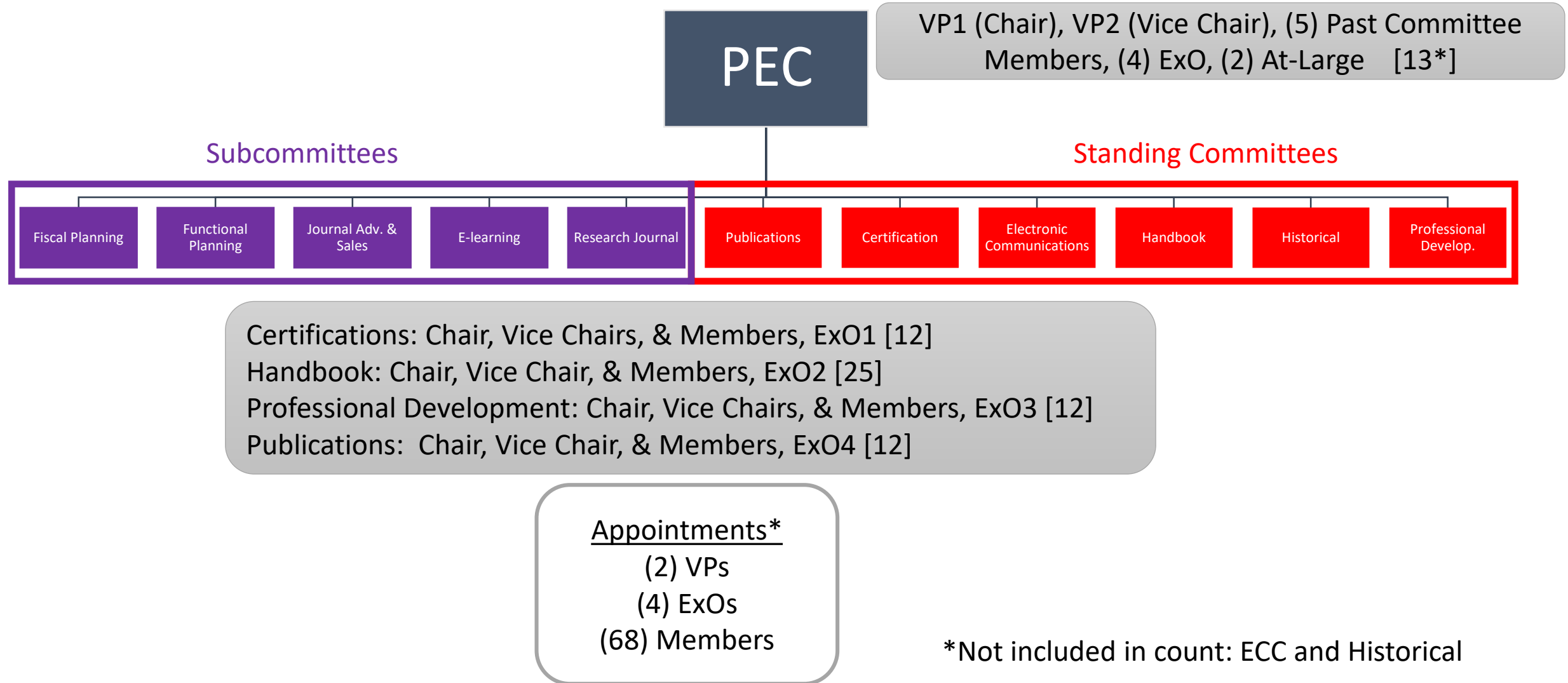
Jin Jin Huang

Restructuring Goals

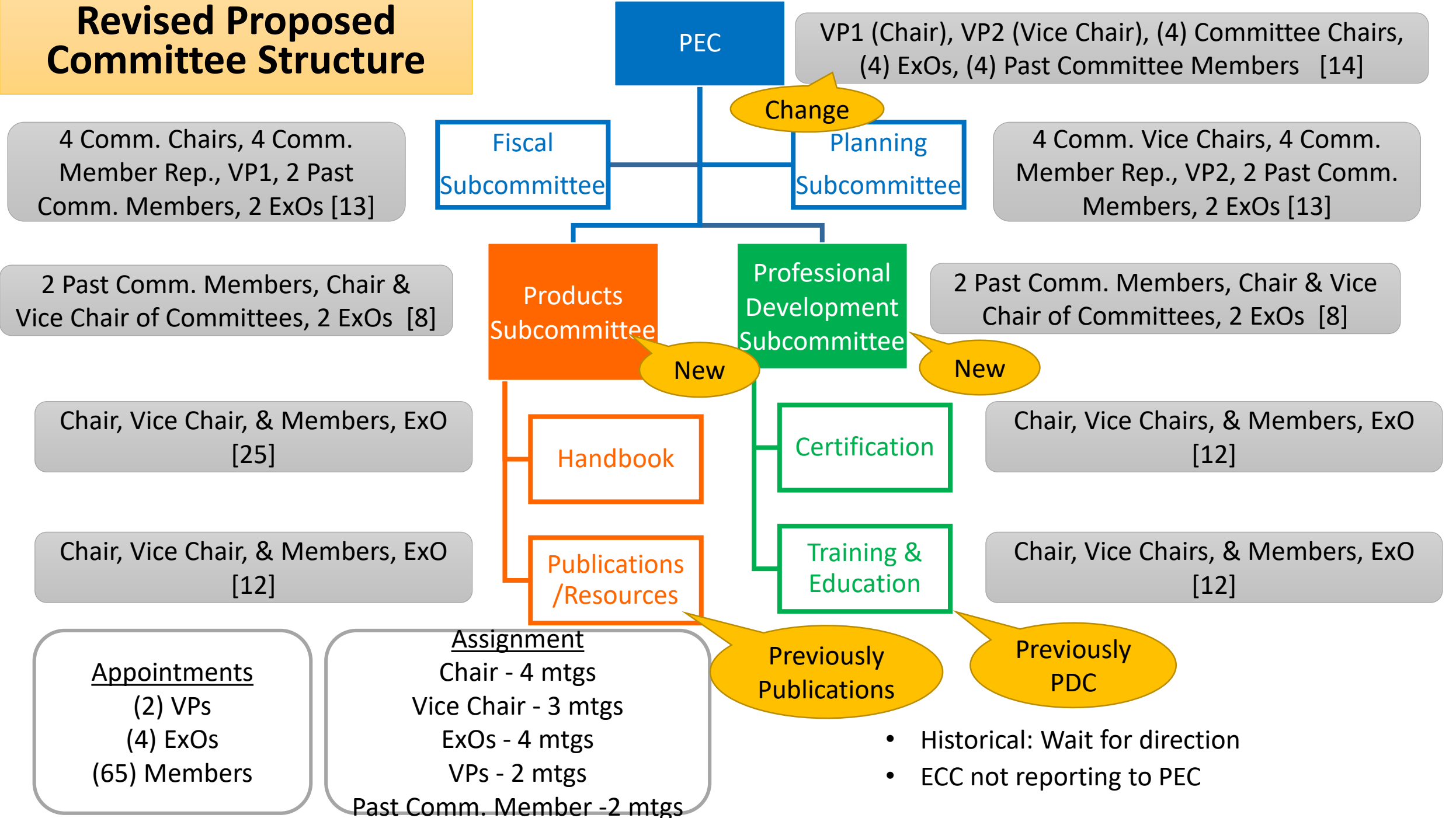
- Reshape the role of PEC and its subcommittees' functions
- Efficient use of volunteer and staff time
- More effectively use volunteer talent and knowledge to provide direction on all publication and education member products
- Improve communication and planning between all things publication and education related
- Build in an evaluation process of committee progress on Council and Society Strategic Plan
- Organize in a logical manner all ASHRAE PEC responsibilities
 - Staff transition
 - New responsibilities as ASHRAE evolves and adds services

Existing Committee Structure

Not addressed: training centers, external education, university courses, etc.



Revised Proposed Committee Structure



PEC

(Monitor and Planning)

Planning

- Set strategic direction
- Develop MBOs
- Prioritize resource allocations
- Ensure alignment with Society Strategic Plan
- Identify future PEC leadership
- Maintain MOP & ROB of PEC
- Assist with committees' MOP & ROB
- Act as a resource for rule interpretation
- Assist w/ motions
- Review MBO progress
- Recommend action when goals are not met
- Evaluate & document progress toward Society Strategic Planning goals

Fiscal

- Manage budget
 - Monitor Revenue and Expenses
 - Review for potential efficiencies
- Provide data to help drive decisions
- Advertising
 - Recognize advertising opportunities
 - Evaluate advertising and sales yield and potential
- Job board
- Supplier Directory
- Supplier Webinars

Products

(Monitor, Planning, Review of Bookstore and Portals & Point of contact for other society pubs)

Handbook

- Manage the development and revision of Handbook content
- Provide effective means for content delivery
- Assist TC's to identify new content developers (authors)

Publications / Resources

- Standards
- User Manuals
- Guidelines
- Research Project Output
- Books
- AEDGs
- Charts/Tools
- ASHRAE Transactions
- Proceedings
- ASHRAE Journal
- S&T for the Built Environment
- HPB Magazine
- ASHRAE Insights
- Electronic Pubs - Apps/Data Bases/Software

Professional Development

(Monitor and Planning)

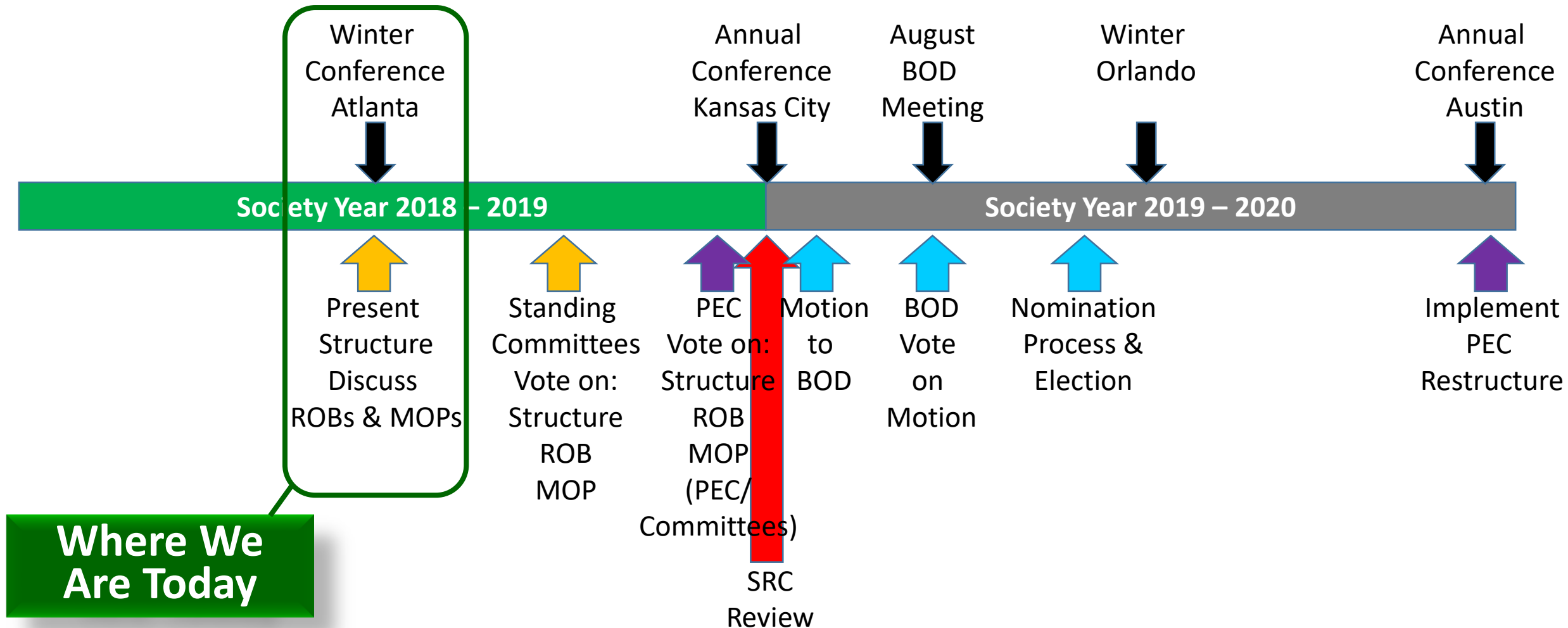
Training and Education

- E-learning
- Certificates
- Instructor Led Courses
- Self-Directed Learning
- In-Company Courses
- Chapter Resources
- Develop strategy for the evaluation of existing and need for additional training centers
- Assist in the review of training centers – effectiveness and financial impact
- Assist in identification of courses for each training center
- University Course(s)

Certification

- ASHRAE Career Enhancement Curriculum Program
- Maintain existing certifications and development of new
- Evaluate market demand
- Develop strategy for evaluation

Implementation Time Line



Deadlines and Deliverables

- PEC

- Revise PEC ROB, MOP & Reference Manual
- Vote on PEC MOP & Reference Manual Changes
- Vote on Committee MOP Changes
- Submit recommended ROB changes to SRC for review

January/February

June 2019

June 2019

March 2019

- Standing Committees

- Revise Committee MOP & Reference Manual
- Vote MOP & Reference Manual Changes
- Submit changes to PEC / Functional Committee
- Submit recommended ROB changes to SRC for review

January/February 2019

March 2019

March 2019

March 2019

- SRC

- Review changes to ROB
- Approve changes to PEC MOP

Prior to June 2019

June 2019

- BOD

- Vote on ROB changes

August 2019

HANDBOOK COMMITTEE
MBOs for Society Year 2018-2019

Chair: Don Fenton

Date: June 23, 2019

Objective	Compl Date	Fiscal Impact	Responsible Party	Status	Comment
1. Master spreadsheet for all chapters in all volumes.	Jan-19	None	Staff, chair, and vice chair	In progress: ETA April/May 2019	This would aid liaisons and staff in tracking chapters as reviewed, revised, and submitted avoiding confusion. Consider use of the HB portal for this purpose.
2. Improve connections with countries other than US and Canada regarding input to HB chapters.	Jun-19	None	Chair, staff	In progress	Different regions of the world have unique climates and thus unique HVAC&R requirements which should be better addressed by the HB's. Perhaps best for liaisons to encourage TCs to add content?
3. Re-examine promotion of on-line version of HB's	Jun-19	None	Electronic media, staff	In progress	Review of current situation should reveal new methods of promotion.
4. Provide all HB committee members with access to all chapters.	Jan-19	None	Staff	In progress (MSO investigating)	All liaisons should have convenient access to all HB chapters in order to facilitate exchange with TC 's.
5. Continue 10% HB volume improvement goal.	Jun-19	None	HB volume chairs	Ongoing	Apply results of chapter changes, revisions, and re-writes from overall spreadsheet as measure.
6. Encourage development of HB "extras" and out of sequence updates.	Jun-19	None	Electronic media, liaisons, volume chairs, staff	Ongoing	This would improve the usefulness of the HB's.
7. Develop and implement ideas that encourage TC's to submit chapters either on time or early.	Jun-19	None	Liaisons, chair, vice chair	Ongoing	Staff can only handle a limited number chapters submitted late. HB's would improve with earlier submissions.

8. Improve HB chapter review form.	Jun-19	None	Functional	In progress	The presently used chapter "checklist" should be improved so that better information is provided guiding HB chapter changes and revision.
9. Improve peer training of incoming volume subcommittee chairs.	Jun-19	None	Functional	In progress	The knowledge and experience gained by the outgoing volume subcommittee chair is passed on to the incoming volume subcommittee chair.
10. Improve ASHRAE's recognition of contributors to the HB volumes.	Jun-19	Negligible	Chair, staff	Ongoing	ASHRAE recognition of HB chapter author contributions should occur at ASHRAE meetings. Ideas include meeting ribbons or stickers for name badge, etc.

DF: hek 23 Jun 2019

HANDBOOK COMMITTEE
MBOs for Society Year 2019-2020

Chair: Suzanne LeViseur

Date: June 23, 2019

Objective		Completion Date	Fiscal Impact	Responsible Party	Status	Comment
1	Solicit ideas from volume subcommittee chairs for process improvements.		None	HBC	Continuous	
2	Improve peer-to-peer training of incoming volume subcommittee chairs.		None	Vice Chair	Continuous	Mentoring of new members
3	Review the relevance, scope, and objectives of subcommittees.		None	HBC ExCom	Continuous	Reshape HBC to best function under the new TC structure (when implemented) in a way that serves both HBC's and TCs' needs
4	Encourage TCs to develop extra features (spreadsheets, sidebar discussions, video, etc.) for Handbook Online. Suggest using YEA members		None	HBC		
5	Address volume imbalances		Could reduce mailing costs	HBC ExCom		Applications and Fundamental volumes are nearly twice the size of Refrigeration volume. Look at the possibility of shifting some material to a different volume.
6	Improve international representation /input in the handbook process		None	HBC ExCom		Continue with the effort started by Don Fenton