



MINUTES

EXECUTIVE COMMITTEE MEETING

March 9-10, 2019
Chateau Elan Inn
Braselton, GA

Note: These draft minutes were approved at the June 22, 2019 ExCom meeting and are the official, approved record of this meeting.

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 March 9-10, 2019

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Principal Motions
Executive Committee Meeting
March 9-10, 2019

No – Pg. **Motion**

- 1 – 1 that a consent motion for the meeting minutes listed below be approved:
- Saturday, January 12, 2019
 - Wednesday, January 16, 2019
 - Thursday, January 17, 2019

MOTION PASSED (Unanimous, CNV)

- 2 - 7 that the ASHRAE President sign a Memorandum of Agreement with SAREK

MOTION PASSED (Unanimous, CNV)

Action Items Update
Executive Committee Meeting

<u>No – Pg.</u>	<u>Responsibility</u>	<u>Summary of Action</u>	<u>Status</u>
5 –	Boyce	(Carryover) Work with Members Council on a policy statement for regions to travel for potential joint CRCs using normal regional flight costs. (Ongoing: 6/2018, Ongoing: 11/2018; Ongoing; 3/2019)	<u>Ongoing</u>
6 –	Boyce	(Carryover) Work with GAC (formerly GGAC) to develop a reporting strategy for motions and recommendations coming from the committee to EXCOM and the Board. (Ongoing; 11/2018; Working on a strategy Ongoing; 3/2019)	<u>Ongoing</u>
8 –	Schwedler	(Carryover) Develop criteria for when it would be appropriate to pay volunteers for the development of standards. (Ongoing: 11/2018; Ongoing; 3/2019)	<u>Ongoing</u>
10 –	Boyce	(Carryover) Work with Members Council to evaluate participation in the World Student Competition and develop the program to identify a participant from ASHRAE. (Ongoing: 11/2018; Ongoing 3/2019)	<u>Ongoing</u>
14 –	Littleton	Draft a diversity policy to apply to staff (Ongoing 1/2019).	<u>Ongoing</u>
16 –	Schwedler	Report back to ExCom on the status of increasing the energy efficiency requirement of the LEED rating system with USGBC. (Mr. Schwedler to provide the wording to ExCom- Ongoing; 3/2019)	<u>Ongoing</u>

Action Items Update
Executive Committee Meeting

1 - 2	Littleton/Wright	Add depreciation of the recently purchased HQ building in its current form and the projected budget deficit for 2021-2022 to the budget report.	<u>Ongoing</u>
3 - 3	Knight	Work with Ms. Calad on the orientation modules	<u>Complete</u>
4 - 3	Keen	Work with ECC on editing their MOP and ROB	<u>Ongoing</u>
5 - 4	Mehboob/Gulledge/Knight	Connect with Colin Goodwin on BSRIA's collaboration opportunities with ASHRAE	<u>Ongoing</u>
6 - 4	Littleton	Defer discussion on how to keep the AEDG Steering Committee going to the March ExCom Agenda	<u>Ongoing</u>
7 - 5	Hayter	Work with Tim Wentz to explore alternatives for the ASHRAE/CIBSE liaison committee structure and relationship with input from ExCom	_____

8 - 5	Boyce	Ask Members Council to make sure that the revisions to the MCO reflected the ability of Sections to affiliate with national associations; ensure that the affiliation of a Section with a national association is in the best interests of the Society.	_____
9 - 6	Littleton	Adjust the verbiage to the proposed guidelines for the Commercialism policy	<u>Ongoing</u>
10 - 6	Littleton	Prepare a thank you letter to Daikin from President Hayter for the Plenary sponsorship.	<u>Ongoing</u>
11 - 6	Hayter	Appoint a work group of Board members to work on adding the sponsorship guidelines to the commercialism policy.	<u>Complete</u>
12 - 7	Keen /Knight	Work with Ms. Calad and Mr. Fick on new board member training modules	_____
13 - 7	Gulledge/ Schwedler	Attend the MCAA and ACCA conferences respectively	<u>Complete</u>
14 - 7	Boyce	Appoint an ASPE Liaison Committee with Russell Lavitt as chair to explore development of an ASHRAE/ASPE work plan.	_____
15 - 8	Mehboob	Notify ExCom by February 6 about input received from the Historical Committee about the change in their structure.	<u>Complete</u>
16 - 8	Keen	Notify Society Rules Committee about changes that are needed to the Historical Committee ROB and MOP	<u>Complete</u>
17 - 10	Boyce	Ask SRC to review the background of the motion from the PEAC to approve creation of the application guide	_____
18 - 10	Neme	Check the Rule of the Board Election procedure to ensure that the motion from the Foundation Trustees regarding adding two new Trustees is in compliance with the Rules.	<u>Ongoing</u>
19 - 10	Littleton	Work with JEPC Chair Bill Harrison to engage CEC and ExCom in strategies related to the AHR Expo contract renegotiation.	<u>Ongoing</u>
20 - 11	Littleton	Ask Meetings team to start the AASA meeting earlier to provide more time for discussion.	_____

Action Items
Executive Committee Meeting
March 9-10, 2019

1 - 2	Littleton	Work with Blake Ellis to calculate the effect of a new dues formula over the next five years and update the spreadsheet for ExCom to review.	_____
2 - 2	Gulledge	Discuss with Finance Committee fees charged to developing economies; ask that they recommend a better formula to Members Council that covers ASHRAE's actual expense to provide service;	_____

		ASHRAE should not subsidize developing economies.	
3 - 3	Members Council Chair/PubEd Council Chair	Schedule a conference call to discuss if we need a different web cast model (have we outgrown it?)	_____
4 - 3	Littleton	Check the 2008 AHR revenues and report how they were affected, if at all, by the economic downturn.	_____
5 - 3	Littleton / CEC	Work with CEC to review the value of social events (Welcome Party and Members Night Out). Report to ExCom in June	_____
6 - 3	Gulledge	Chair an Ad Hoc Committee on conference sponsorship; propose a change and makeup of the committee by end of December 2019; develop sponsorship package by Orlando meeting.	_____
7 - 3	ExCom	Report to the Board in June about the Rule of the Board regarding oversight of our processes we have not been keeping up with by mistake.	_____
8 - 3	Gulledge	Work with Finance Committee to determine if a 15% increase in registration fees for the Winter and Annual Conference will work (registration contingency)	_____
9 - 4	Knight	Work with CEC on an attendance contingency formula to determine if it would work.	_____
10 - 5	Finance Committee	Ask Finance Committee to revise their ROB and MOP; schedule a review of the ROBs every three years to be sure business practices don't drift; determine a schedule for a deep dive analysis; add lessons learned; and add this to the Finance Reference Manual and Audit Committee checklist.	_____
11 - 5	ExCom	Review the color-coded spreadsheet with results from the council and committee assessment process and send Dennis Knight input.	_____
12 - 5	Schwedler	Check the transportation reimbursement rule for the Standards Appeals Board members and let ExCom know.	_____
13 - 5	Littleton/Meetings Staff	Move the DAL meeting in Kansas City scheduled for Friday to Saturday.	_____
14 - 5	Knight / Wright	Meet with Craig Wright to determine 1) Spending on 2014 strategic plan; 2) Effect of RBC becomes a MTG; 3) Estimate within 30% of costs; 4) Sunsetting removed; 5) Decide what continues; what does not continue.	_____
15 - 5	Littleton	Include the \$150k expense reduction in the budget; make the budget projection update based on ExCom's discussion of lean assessment cuts of \$262,800.00.	_____
16 - 6	Littleton	Prepare a background and future plan for the Brussels office presence for the March 22 Board call.	_____
17 - 6	Schwedler	Contact Tech Council regarding forming a working group to determine a strategy for a recommendation to allow an alternate standard for a carbon metric.	_____
18 - 6	Littleton	Work on developing an online tool to orchestrate notification to DRCs when officers visit chapters.	_____

19 - 6	Littleton	Let REHVA know that ASHRAE declines to be a judge at the REHVA competition.	_____
20- 6	Littleton	After legal review, ask staff to draft a message about the Bylaws change from the Board and send to Dunstan Macauley for his review then send to ExCom for final approval.	_____
21 - 7	Littleton / Gupta	Mr. Littleton and Mrs. Gupta will work on finalizing the agreement with ACREX.	_____
22 - 7	Littleton	Work on a better MOU with CAR	_____
23 - 7	Littleton	Work on developing a better MOU with ISHRAE	_____
24 - 7	Littleton/Comstock	Eurovent/AHRI - ASHRAE would like to have a representative in this group. Mr. Littleton will contact Steve Urich and make this request.	_____
25 - 7	Hayter	Sign the MOU with SAREK	_____
26 - 7	Littleton	Contact Bruno Martinez to learn more about CONFEA	_____
27 – 8	Littleton	Send ExCom the draft MOU edited by nbi.	_____
28 - 8	Littleton	Mr. Knight reported that AIA met with ASHRAE in Atlanta; the MOU is not ready for a vote; they are not responsive to communications; This should be deferred until the June meeting.	_____
29 - 8	Boyce	ROB 2.106 changed regarding related groups - this change should be rejected; Talk with AiCARR at the REHVA meeting and report back to ExCom.	_____
30 - 8	Littleton	Defer a decision about the REHVA MOU until June.	_____
31 – 8	Boyce	Develop a list of Corporate visits for 2019-20	_____
32 - 8	Schwedler	Add cyber attacks to the new Board member training.	_____
33 - 9	Boyce	Remind Members Council to move along in developing a guidance document for CRCs	_____
34 - 9	Littleton	Work on the commercialism policy guidelines; send to ExCom for their review	_____
35 - 10	Neme	Contact SRC to see if there is another option for Foundation, such as becoming an appointed committee.	_____
36 - 10	Neme	Contact Foundation leadership and ask that they submit a motion to ExCom with background as to why they wish ExCom to recommend to the Board that the election results be changed.	_____
37 - 10	Mehboob	Contact BSRIA and discuss a possible MOU with ASHRAE	_____
38 - 10	Hayter / Mehboob	Recommend to the Board that the changes to the Historical Committee be approved.	_____
39 - 10	SRC	Ask SRC to review the changes to Historical Committee; assist with rewriting the ROB and MOP.	_____
40 - 10	Schwedler	Plan face to face new Board training in May or June.	_____
41 - 11	Hayter/Boyce/Staff	Schedule a conference call with Bill Klock and Doug Cochrane to discuss BEQ; have them join the EXAIL call on April 1.	_____
42 - 11	Neme	Change the EXAIL conference call from April 3 to April 1 starting at 10:00 am EDT.	_____

43 - 11	Neme	Send ExCom Action Items from this meeting as soon as possible and attach the President's Travel Report to these minutes	_____
44 - 11	Gulledge / Cochrane	MCAA Canada requested a speaker for their April 16 th conference; suggested Doug Cochrane be asked to be speaker.	_____
45 - 11	Boyce	Send notes from the APPA meeting to ExCom	_____
46 - 11	ExCom	Send Mr. Boyce any region visits you would like to attend.	_____
47 - 12	ExCom	Discuss a possible MOU with ESIG at the next ExCom meeting.	_____



**MINUTES
EXECUTIVE COMMITTEE MEETING**

Chateau Elan
Braselton, GA
March 9-10, 2019

MEMBERS PRESENT: Sheila J. Hayter, President
Darryl K. Boyce, President-Elect
Charles E. Gullett III, Treasurer
Julia A. Keen, Vice President
M. Dennis Knight, Vice President
Farooq Mehboob, Vice President
Mick C. A. Schwedler, Vice President

STAFF PRESENT: Jeff H. Littleton, Executive Vice President
Claire Neme, Coor., Stdg. Committee Noms.&Plng.

CALL TO ORDER – Hayter

President Sheila Hayter called the meeting to order at 8:05 am.

ASHRAE CODE OF ETHICS COMMITMENT – Hayter

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>.)

REVIEW OF AGENDA – Hayter

Ms. Hayter asked if there were additions or corrections to the agenda as presented. Ms. Keen asked to add item 8G under Unfinished Business: Final Decision on Historical Committee. Mr. Schwedler asked to add item 8H under Unfinished Business: New Board Orientation; and item 8I added under Unfinished Business: BEQ Committee. All were in agreement and the agenda was approved as amended.

APPROVAL OF MINUTES

Ms. Keen moved and it was seconded:

- (1) that a consent motion for the meeting minutes listed below be approved:
- Saturday, January 12, 2019
 - Wednesday, January 16, 2019
 - Thursday, January 17, 2019

MOTION PASSED (Unanimous, CNV)

REVIEW OF ACTION ITEMS

Action items that are ongoing are included in the action item list at the beginning of the minutes. Updates are included where possible.

REPORT FROM THE TREASURER

Mr. Littleton reported on Society prioritizations and strategies resulting from the councils' lean assessments of their programs and services. This will provide a foundation for the new strategic plan funding opportunities.

Revised Budget Forecast: \$31,016,900; includes a 1% forecasted loss.

- Major revenue streams:
 - Dues \$7,777
 - Publications \$3,494
 - Advertising \$4,331
 - Meetings \$1,666
 - Education \$1,746
 - AHR Expo \$5,742
 - RP \$2,526
 - Total \$27,282

The above account for 85-90% of ASHRAE's consolidated revenues

- Meetings }
- Expositions } \$7,408 - ASHRAE'S CORE CAPABILITIES
- Education }
- Big Picture Trends:
 - Dues: CPI dues increases too low:
 - Reduced income by \$150k annually; close to \$1 million
 - If dues were raised by \$10 instead of by \$2, we would have \$2.859 million.
 - Membership Models Ad Hoc Committee is reviewing our current dues structure.

After further discussion, it was suggested that ASHRAE increase its dues by \$10 and adjust the formula accordingly. Mr. Littleton was asked to work with Blake Ellis to calculate the effect of a new dues formula over the next five years and update the spreadsheet for ExCom to review.

AI 1

Mr. Littleton pointed out an error in the member dues forecast presented in January. Dues revenues were overstated; this was discussed with staff and dues revenue has been reduced by \$167,000.

Mr. Mehboob expressed concern that ASHRAE should not be subsidizing developing economies members when fees are charged, ASHRAE's cost of providing the service should be considered before setting the fee amount. Mr. Gulledge agreed to take an

AI 2

action item to discuss this issue with Finance Committee and ask that they recommend a better formula to Members Council.

Mr. Littleton stressed the importance of ASHRAE determining how to increase the value proposition to members if higher dues will be implemented going forward.

Mr. Littleton also pointed out that publication sales revenue may be disrupted in the future due to potential changes in standards copyrights.

Advertising revenue:

- 2014 – \$4.270 million
- 2020 – \$4.515 million

Mr. Littleton reported as follows:

- The budget forecast was too aggressive; Mr. Littleton apologized for the inaccuracy of the budget three-year outlook.
- The gap created by staff was funded by the AHR Expo.
- Royalties from AHRI Expos have been filling in the revenue gaps; Over the past 7 years, \$2.327 million annually was used to pay for extra costs not otherwise funded.

Webcasts cost \$88,000. Do we need a different model?

Ms. Hayter asked chairs of Members Council and Publishing and Education Council to consider developing a new webcast model; she asked that a conference call be scheduled for them to discuss this issue and report back to ExCom.

AI 3

Mr. Littleton was asked to check the 2008 AHR revenues and report how they were affected, if at all, by the economic downturn.

AI 4

Conference Revenues:

Expenses for Kansas City were as follows:

- If we increased the registration fee margin by 15%, it would add \$285,000 over expenses and reduce the subsidy from the AHR Expo.
- Instead of \$55, if registrants paid \$70, it would reduce our costs from \$80,000 to \$61,000.
- The formula for calculating fees was designed to break even: total expense was divided by anticipated attendees for an average of the past two years.

Review of Council Financial/SP Recommendations

Mr. Littleton agreed to take an action item to update the spreadsheet to work with CEC to determine the value of social events (Welcome Party and Members Night Out).

AI 5

Conference Sponsorships:

After review of the amount charged versus ASHRAE's actual costs for social events, it was agreed that the registration fee is too low. Mr. Gullledge and Mr. Boyce felt additional sponsorships are needed to fill the gap.

AI 6

Ms. Hayter asked Mr. Gulledge to chair an Ad Hoc Committee to propose a new sponsorship package by the end of December 2019 and have it available for the Orlando meeting in January 2020.

Ms. Hayter asked ExCom to report to the Board in June about the Rule of the Board regarding oversight of our processes we have not been keeping up with by mistake. AI 7

Mr. Gulledge agreed to work with Finance Committee to determine if a 15% increase in registration fees for the Winter and Annual Conference will work (registration contingency). AI 8

Mr. Knight will work with CEC on an attendance contingency formula to determine if it would work. AI 9

Mr. Littleton suggested added costs that could be considered in the lean assessment review is the VIP attendee event costs as follows:

- W 2019 - \$69,790
- W 2018 - \$73,302
- W 2017 - \$84,420

Education Summary:

Mr. Littleton reported education performance is good and offers the best opportunity for growth.

- 2017-18 - \$1,700 (actual)
- 2018-19 - \$2,080 (budget)

It is likely that demand in this area will grow with the new CHD program.

Expenses Summary:

Mr. Littleton reported salary expenses as follows:

- 2014 \$6,988,000
- 2015 \$7,020,000
- 2016 \$7,835,000
- 2017 \$8,222,000
- 2018 \$8,880,000
- 2019 \$8,911,000
- 2020 \$9,168,000

Total salaries up by \$2,180,000; dues up only \$799.00; increased by 11 staff in five years.

2019-20 Society Year:

- 3% average increase; \$100k savings
- Transition spot bonus to spot time off - \$30k savings (\$10k in 2018-19)
- Reduced professional development \$32k to \$10k
- Reduced SAC from \$25k to \$10k; total \$167k reduction
- New HQ, strong market, lower increases; may lose 10-15 positions

2018-19 Forecast Changes

- Changes after Atlanta Conference:
 - Revenue forecast reduced by \$492k
 - Expense forecast reduced by \$167k
 - Shift from \$77k surplus to a \$248k deficit
 - Topical conferences not in budget; staff error; revenue/expense offset
 - Atlanta conference registration shortfall

2020-2021 and 2021-2022 Budget Changes:

- \$10 dues increases with flat membership levels
- 15% margin on meetings income
- Salary increases lowered to 3%; no bonus pool, no headcount adds
- Chapter/society opportunity funds eliminated
- AHR Expo royalties raised

Ms. Hayter felt that finding this financial oversight now is an opportunity to have Finance Committee revise their ROB and MOP; schedule a review of the ROBs every three years to be sure business practices don't drift; determine a schedule for a deep dive analysis; add lessons learned; and add this to the Finance Reference Manual. Mr. Knight added it might be well to also add it to the Audit Committee check list.

AI 10

Program Prioritization for March 22 Board Meeting (**See Attachment A**)

Mr. Knight prepared a color-coded spreadsheet with results from the council and committee assessment process. Items were coded in green (implement), yellow/orange (needs further discussion) and red (do not implement). He asked for ExCom input. Several ideas were raised including but not limited to:

AI 11

- Calculate an administration fee for support of the ASHRAE Foundation and bring it back to ExCom for review.
- Social event benefits might be reduced for Board meetings; offer beer and wine only.
- The cost of VIP events could be reduced.
- Reduce or eliminate staff activities
- Cancel Braves tickets
- Reduce or eliminate Chapter Opportunity Fund
- Make *Insights* printing 100% electronic
- Reduce travel costs for ExCom and Committees

AI 12

Mr. Schwedler was asked to check the transportation reimbursement rule for the Standards Appeals Board members.

Ms. Hayter asked staff to move the DAL meeting in Kansas City scheduled for Friday to Saturday. AI 13

Mr. Knight agreed to meet with Mr. Wright to determine:

- Spending on 2014 strategic plan
- Effect of RBC becomes a MTG
- Estimate within 30% of costs
- Sunsetting removed
- Decide what continues; what does not continue

AI 14

Mr. Littleton was asked to include the \$150k expense reduction in the budget. Mr. Gullidge asked that the budget projection update be made based on ExCom's discussion of lean assessment cuts of \$262,800.00. AI 15

Brussels Staff Presence Update

Mr. Littleton was asked to prepare a background and future plan for the Brussels office presence for the March 22 Board call. AI 16

Mr. Mehboob stressed the importance of making the decision about continuing the Brussels staff presence based on merit.

EXECUTIVE SESSION – March 10, 2019

EXECUTIVE SESSION ENDS – March 10, 2019

Open Session Continues – March 10, 2019

NEW BUSINESS

Should ASHRAE be Considering Carbon as a Metric?

Mr. Schwedler asked that item 7A on the agenda be revised as follows: 7A. Should ASHRAE be Considering Carbon as a Metric ~~on Standard 90.1?~~

Legislation on zero energy is starting; ASHRAE cannot direct Standard 90.1 on what to do; how do we raise urgency level? Ms. Keen suggested an alternate standard could be developed for a carbon metric. Mr. Boyce felt adding a carbon metric could expand the relevancy of 90.1. Mr. Schweder agreed and suggested ExCom recommend allowing carbon as an alternate calculation. Mr. Littleton suggested going to Standards Committee for input, possibly a working group could determine a strategy. All agreed and Mr. Schwedler took an action item to contact Technology Council about forming a working group for this purpose. AI 17

Members Council Referral-Inform DRC of Regional Activities

Ms. Hayter asked for input on how to notify DRCs if ASHRAE leadership is traveling to visit their region. Mr. Littleton took an action item to work on an online tool to orchestrate notification to DRCs when officers visit chapters. AI 18

PEC Referral - Sponsor Script Approval

Ms. Keen asked for input on who should approve the plenary script, staff or a volunteer? It was suggested not to allow microphone time for Kansas City. Mr. Littleton checked and the microphone time has already been sold for KC. No further discussion was held.

Hosting REHVA World Student Competition in 2020

ASHAE was asked by REHVA staff to judge student competition at the June 2020 REHVA meeting. After some discussion, it was the consensus that staff would decline to host the REHVA competition. AI 19

Board Commentary for Spring Member Ballot

Ms. Hayter asked the group how to send a message from the Board in April to support the ASHRAE Bylaws change. After some discussion, it was agreed that after legal review, staff will draft a message from the Board and send to Dunstan Macauley for his review then send to ExCom for final approval. AI 20

Agreement for ASHRAE Sponsorship of ACREX

A new agreement is needed by the end of the month for the ACREX endorsement contract. This will be for a one or two year contract. Ms. Hayter suggested the \$30,000 should cover our expenses to participate, including shipping. Mr. Littleton and Mrs. Gupta will work on finalizing this agreement. AI 21

Also to negotiate a long term sponsorship agreement with CAR. AI 22

Mr. Littleton was asked to work on a better long term agreement with ISHRAE and bring back to ExCom for review. AI 23

Task Force for ISO 813/ASHRAE 34

Mr. Schwedler pointed out that a task force was formed on refrigeration standards 813 and 34 (refrigeration safety classification). Members included Daiken, Carrier and York; however, Trane representation is not included on the task force. This may allow for a competitive advantage. No action was needed on this item, it is for information only.

Eurovent/AHRI Certification Alignment

Ms. Hayter reported AHRI met with 12 VRF members to work on creating one test for two certifications. The next meeting of the VRF group will be held at the China refrigeration show. Mr. Comstock will brief ExCom after this meeting. ASHRAE would like to have a representative in this group. Mr. Littleton will contact Steve Urich and make this request. AI 24

MOU Updates

Proposed MOU with SAREK

Ms. Hayter indicated she will sign the MOU with SAREK if she is there during her travels. She called for a motion from the group.

AI 25

Mr. Mehboob moved and it was seconded

(2) that the ASHRAE President sign a Memorandum of Agreement with SAREK

MOTION PASSED: (Unanimous – CNV)

Proposed MOU with CONFEA

CONFEA has requested that ASHRAE sign a memorandum of agreement with them. Ms. Hayter asked if anyone had more information about CONFEA. After further discussion, this item was tabled and Mr. Littleton asked to contact Mr. Bruno Martinez (bruno@petinelli.com) to learn more about this group.

AI 26

Proposed MOU with nbi

Ms. Hayter asked the group about nbi. Mr. Schwedler pointed out that Mr. Ralph Dinola with nbi and his company are competitors and were recently low bidder for a multi-family residential building guide. Mr. Schwedler recommended ASHRAE sign the MOU with them because they have good data. Ms. Hayter asked that Mr. Schwedler talk with Mr. Dinola about developing a work plan with them. They have a Net Zero Energy conference in October and ASHRAE was asked to be on the program (AEDG). Mr. Littleton will send ExCom the draft MOU that was edited by nbi.

AI 27

Proposed MOU with AIA and Related Work Plan

Mr. Knight reported that AIA met with ASHRAE in Atlanta; the MOU is not ready for a vote; they are not responsive to communications; Mr. Knight suggested this should be deferred until the June meeting. AIA will have a conference in Las Vegas in June; should we have an ASHRAE representative there? After some discussion, it was agreed to defer a decision about this until after the Washington DC leadership meeting.

AI 28

AiCARR MOU and MCO

Mr. Boyce pointed out that the language in ROB 2.106 changed regarding related groups and that AiCARR proposed a revision - this revision should be rejected; He agreed to talk with AiCARR at the REHVA meeting and report back to ExCom

AI 29

REHVA MOU

It was agreed to defer a decision about this MOU until June.

AI 30

EXAIL Action Items

All action items are complete.

Mr. Boyce was asked to develop a list of corporate visits for 2019-20.

AI 31

Phishing Attacks – Training for Board Members

Ms. Hayter is aware of these types of cyber attacks that are occurring; we are not able to stop all of them. Junior Board members may not be aware and they need to be informed. Ms. Keen suggested this be added to the new Board member training module.

AI 32

Society Representation at Topical Conferences

Mr. Giometti, staff liaison of Conferences and Expositions Committee notified ExCom that ASHRAE representation has been requested for three topical conferences as follows:

- September 25-27, 2019 ASHRAE Building Performance Analysis conference in Denver, CO (opening remarks requested on September 25th); Mr. Knight will attend this conference.
- November 19-21, 2019 7th International Conference on Energy Research and Development in Kuwait City (opening remarks on November 19th); Mr. Walid will be asked to attend this conference.
- December 9-12, 2019 Buildings XIV Conference in Clearwater Beach, Florida (opening remarks on the morning of December 9). Mr. Boyce will attend this conference. (Used to be sponsored by the U.S. DOE; 2019 is the first time ASHRAE is organizing this conference.)

UNFINISHED BUSINESS

Joint CRC Strategies

Mr. Mehboob suggested CRC session guidance is needed including lessons learned from Bangkok. Members Council will be assigned an action item to move along on this assignment to create a manual for CRC guidance in regions.

AI 33

Future of the AEDG Program

What is next in this program? Ms. Keen suggested asking what people want. Ms. Hayter asked how we should prepare to continue this effort after AEDG is achieved? Some suggestions were:

- Survey members
- Carbon is the next step
- Zero energy for health care facilities
- Energy/carbon resilience
- Partnership with EPA

Mr. Schwedler: from a building energy standpoint, the steering committee has reached the end of its course. Mr. Phoenix would like to step down from chair position; Mr.

Schwedler does not wish to continue as the ASHRE Representative; title and scope needs to change.

Mr. Littleton suggested a joint buildings task force: 1) solar; 2) grid buildings interaction; 3) energy operations.

Revised Commercialism Guidelines

Mr. Littleton will work on the guidelines; ExCom can review and refer this to PEC.

AI 34

Transition from Amex to ATC Travel Management

American Express has not provided service at our expectation level. It is recommended to change from Amex to ATC Travel Management.

- Service will improve
- Both will be available to members during transition time
- Need to resolve the final payment to ASHRAE for their portal hacking incident

It was the consensus to change from Amex to ATC Travel Management for our financial travel services.

Foundation Election Request

ExCom asked staff to determine what other options may be available to resolve the issue for the Foundation without changing results of the election by moving two Alternates to voting Members. One possibility may be to make the Foundation an appointed committee. Staff was asked to contact Society Rules Committee and ask what options we may consider. A similar issue occurred last society year regarding the election results. Also, staff was asked to contact the Foundation and request that they prepare a motion for ExCom's review that includes background as to why this change is needed.

AI 35

AI 36

ASHRAE/BSRIA Cooperation

Mr. Mehboob agreed to contact Colin at BSRIA and discuss a possible cooperative agreement and bring back a recommendation to ExCom.

AI 37

Historical Committee

Mr. Mehboob reported on the results of the review of the future of Historical Committee:

- It is recommended that HC continue to report to PEC through the relevant subcommittee in the proposed restructuring plan.
- The functions of HC pertaining to "Grass Roots" to be moved to Members Council with reporting from the Regions routed through the RMCR.
- "Grass Roots" responsibilities be transferred to staff wherever feasible so as to not add to the workload of MC and RMCR's.
- The size of HC be reduced to seven members as that number has been demonstrated to be sufficient to carry out the committee's work.

- Archiving of Historical material is critical a policy, procedure and facility for this needs to be established. Consideration be given to a Historical Centre in the new Head Office building.
- HC must develop a plan to generate some revenue from its activities. A \$70,000/year HC is a bit of a luxury.
- Staff succession planning needs to begin.

It was the consensus that ExCom recommend to the Board that the changes to the Historical Committee be approved. AI 38
AI 39

New Board Orientation

If the motion is passed by the Board on March 22, Mr. Boyce asked Mr. Schwedler to plan face to face new Board training in May or June. Mr. McQuade, Mr. Dean and Ms. Calad will be asked to participate in development of the training. AI 40

BEQ Committee

Mr. Gullede asked how do we help BEQ to bring in revenue? What is the value proposition of continuing it? As of 2021, \$1.2 million will be invested in BEQ. Mr. Littleton added that \$200,000 was invested in the BEQ portal to generate revenue; but there is no return on the investment. It was not set up to sell it; we are not selling the reports; only selling the labor involved. Mr. Boyce will ask the BEQ Committee about its current status and how it intends to proceed so ExCom can make a decision about it. He will schedule a conference call with Bill Klock to discuss. AI 41

Ms. Hayter asked that the EXAIL call scheduled for April 3 be changed to April 1 with a new time of 10:00 am EDT. Staff took an action item to do so and to ask Bill Klock and Doug Cochrane to join the call. Staff took an action item to send out ExCom meeting action items immediately and attach the President's Travel Report to these minutes. AI 42
AI 43

OTHER BUSINESS

FOR INFORMATION ONLY

NCEES-POLC Report (**Attachment B**)

NCEES – Jim Purcell discussed the current status of NCEES and its activity around the world. Threats to Licensure is now referred to as Threats to Public Protection.

The 2020 POLC Meeting will be held on a Friday next year in Atlanta, GA on March 6th or March 13th 2020. Exact date to be announced later.

Jim Purcell (President NCEES) has requested that NCEES be invited to attend our annual meetings. See the full report from Dennis Wessel in Attachment B.

President's Travel Report (**Attachment C**)

President Hayter presented her travel report. See Attachment C.

REPORT ON INTER-SOCIETY VISITS

ACCA: Mr. Schwedler reported ACCA would like funds for three standards we co-sponsor. JEPC agreed to negotiate with ACCA (Steve Urich and Barton) for \$50,000; need to discuss with Mr. Stephens.

MCAA: Mr. Gullledge sent his report to ExCom on Friday. He will chair a sponsorship ad hoc committee to determine sponsorships that are possible. We need to enhance how students are treated at job fairs and competitions. MCAA Canada requested a speaker for their April 16 conference. It was suggested that Doug Cochrane be asked to be speaker.

AI 44

BOMA: Mr. Boyce reported attending the BOMA meeting; repurposing buildings was discussed; he suggested we might consider using our new building as a case model.

APPA: Mr. Boyce will send his notes from the APPA meeting.

AI 45

Mr. Boyce asked that ExCom members send him any regions ExCom members would like to be assigned to visit.

AI 46

ESIG asked ExCom for approval to develop a memorandum of agreement with them. This will be discussed at the next ExCom meeting.

AI 47

FINAL REVIEW OF ACTION ITEMS

All action items are complete.

FUTURE MEETINGS

Kansas City Annual Meeting, June 22, 2019

ADJOURNMENT

The meeting was adjourned on Sunday, March 10, 2019 at 2:01 PM.



Jeff H. Littleton, Secretary

- Attachments: A. Lean Assessment and Budget Priorities Spreadsheet
B. Notes from NCEES-POLC Meeting
C. President's Travel Report

Attachment B

ExCom Minutes-March 9-10, 2019

Notes from 2019 NCEES POLC Meeting – Saturday March 9, 2019

Dinner on Friday evening sponsored by ASME – Bob Luna and Dave Soukup – Discussion centered around having the push for requiring a master’s degree for licensing. The group supports no requirement for a master’s degree to have a professional engineering license. The most vocal group supporting this push is ASCE.

Started meeting at 9:00 am. 5 societies who were invited did not attend.

After a short introduction by Jim Purcell (NCEES President), we started society reports regarding activities in 2018. ASHRAE was the 6th society to report. I do not have notes from every society in attendance and my notes below are not complete reflections of each report.

ASEE – Martin Gordon brought up the history of Engineering Technology and that these programs were developed to help teach people to be engineers. The engineering technology council of ASEE supports a path for licensure for baccalaureate graduates in engineering technology programs. Currently 22 states do not allow licensure for graduates of engineering technology programs. Jim Butler added that NCEES does support licensure for graduates of engineering technology programs and they are working on making this stance more prevalent in their guidelines.

ASCE – Dr Monte Phillips discussed threats to licensure by states. There are significant threats to licensure in 15 states. Consumer choice bills and proposals regarding licensure are being presented in these states. ASCE has committees and an educational webinar to promote licensure of engineers as well as 2 publications to promote licensure. Guidelines for Mentorship do exist as an ASCE 2-sided brochure. Also, eMentoring is a good option.

(https://www.asce.org/uploadedfiles/education_and_careers/mentoring/content_pieces/asce-mentor-guide.pdf). Also... <https://collaborate.asce.org/mentoring/home>. NSPE (Mark Golden) brought up 4 states that are specifically promoting Consumer Choice bills to allow people to practice without a license. Based on what was mentioned in the report it would be a good idea to research a MOU regarding sharing of best practices with ASCE. ASCE supports the requirement to have a master’s degree in engineering as a minimum for state professional licensure in structural and civil engineering.

ASME – Bob Luna mentioned that ASME Members who pass the FE exam renew their membership at a higher rate than those who do not pass the exam (did not provide specifics %’s). ASME does not support the requirement of an advanced degree beyond a bachelor’s degree for licensure. ASCE and ASME are on significantly opposite sides of the argument for degree requirements for licensure. ASME has set-up a pilot virtual study group for study of the PE exam (early results show that it was successful).

IEEE – Nikhil Bodhandar in October IEEE adopted a licensure statement. Majority of members work in industrial applications and do not seek licensure.

IISE – Joe Michaels stated that IISE does not support Master’s degree for professional licensure.

ISA – Gerald Wilbanks spoke and mentioned that ISA promotes licensure heavily. Members are a mix of mechanical, electrical, and civil engineers. ISA currently promoting a Control Systems PE Exam. Recently opened an office in Brussels. Areas of expertise deal with automation for manufacturing,

utilities, and HVAC. Gerald mentioned that if you see knobs and dials and blinking lights on a device that they are probably involved in some way.

NAFE – Arthur Schwartz presented first. Mentioned that NAFE has seen significant growth internationally. They had 5 current or past NAFE Society Presidents in the room at the NCEES Meeting (very involved in other societies). Most NAFE members practice in the court systems. In July 2018, NAFE published the opinion that their members should follow the guidelines of respective states in regards to licensure. They have not taken an opinion in regards to Master Degree requirements.

NSPE – President Elect David Martini discussed the need to be proactive in lieu of reactive. They are currently working on their new strategic plan. NSPE sees the need to more heavily promote diversity. Mark Golden (NSPE) discussed that the attitude toward licensure has changed over the past few years. There is a lot of support for not requiring licensure across the United States. We need to change the way that the public views professional engineering and licensure. We have a lot of disagreement in regards to licensure within POLC organizations. Please do not lose track of the big picture that licensure is important (whether it requires a Master's degree or beyond). The uninformed, general public does not see value in licensure. We as professional engineering societies need to address this problem.

SFPE – Brian Meacham spoke in support of requirements of Master's degree for licensure. He said that the official view of SFPE was that there was no official policy regarding requiring a Master's degree; however, since there was only 1 undergraduate fire protection engineering program in the United States most of SFPE's members get their Master's Degree in Fire Protection Engineering to get the training to pass the PE exam. Because of this he felt that requiring a Master's Degree for licensure was reasonable.

NCEES – Jim Purcell discussed the current status of NCEES and its activity around the world. Threats to Licensure is now referred to as Threats to Public Protection.

The 2020 POLC Meeting will be held on a Friday next year in Atlanta, GA on March 6th or March 13th 2020. Exact date to be announced later.

Jim Purcell (President NCEES) has requested that NCEES be invited to attend our annual meetings.

Meeting adjourned at 4:20 pm.

Report of President Sheila Hayter
ASHRAE Travel for July 1, 2018
Through _____ March 6, 2019 _____

Date	Meeting	Location	Comments
July 8 - 11	Purdue Conferences, Purdue Student Branch	West Lafayette, IN	Three concurrent conferences, more than 800 attendees, very technical program, I gave comments during the opening session describing ASHRAE and how ASHRAE's priorities align with the conference focus areas.
July 12 - 15	Senior Officers Planning Meeting	Estes Park, CO	Three-days of planning discussions for the 18/19 Society Year. Notes shared with the ExCom members.
July 19	NREL Energy Execs Leadership Academy	Golden, CO	Summarized how my background working in a research environment and my connection with the day-to-day of industry are complimentary. Presentation contained a mini-version of my presidential address.
July 20 – 29	South Africa Chapter Chartering and Stakeholder Meetings and students at the University of Pretoria	Johannesburg and Cape Town, South Africa	Chartered a new ASHRAE chapter in South Africa and supported the chapter leadership in nurturing relationships between the ASHRAE chapter and organizations located in South Africa having overlapping interests with ASHRAE. The chapter organized 12 separate meetings with stakeholders during the week (including meeting with students and faculty at the University of Pretoria) in addition to the formal event for the chapter chartering activities. Gave the presidential address during the chartering event.
July 30	CIBSE volunteer senior leaders	Windsor, UK	On my way back from South Africa, Tim Wentz and I met with the current and a recent past president of CIBSE during a layover in the UK. The purpose of this meeting was to discuss the effectiveness of on-going collaborative activities and strategize for which new activities should be prioritize in the near future.
August 2 – 5	Region IX CRC	Sioux Falls, SD	Participated in CRC activities, gave the presidential address
August 14 – 19	Region XIII CRC	Hong Kong	Participated in CRC activities, gave the presidential address, gave a presentation on retro-commissioning during the tech session plenary
August 20 – 23	Electrification 2018	Long Beach, CA	First EPRI conference focused on the potential for a 100% electrified economy. 5 concurrent tracks (one of which addressed buildings) and an expo. I believe the buildings track could be improved if ASHRAE involved with planning/facilitating it. Nearly 2000 attendees. Next

			Electrification conference in April 2020 in Charlotte, NC.
August 27	IR-Trane leadership meeting	St. Paul, MN	Senior officers visited Ingersoll Rand-Trane leadership. The purpose of the meeting was for both organizations to increase familiarity about activities in areas of mutual interest and to discussion potential collaborations. I presented a short version of my presidential address.
September 4 – 9	Region XIV CRC	Loughborough, UK	Participated in CRC activities, gave the DL presentation, “Integrating RE in Buildings,” during the CRC technical session, gave the presidential address as the CRC luncheon keynote
September 10 – 15	SHASE Annual Conference and Japan Chapter	Nagoya, Japan	Gave a presentation on grid-efficient buildings and urbanization during the conference “international day.” Attend ASHRAE Japan Chapter meeting. Attended conference social events.
September 24	Minnesota Energy Expo (Minnesota Chapter)	Minneapolis, MN	Attended 12 th Annual Minnesota Energy Expo, jointly sponsored by the Minnesota ASHRAE Chapter and the Association of Energy Engineers Twin Cities chapter. Presented in 3 sessions: presidential address as luncheon keynote, panelist on the “Beneficial Electrification” panel, and a DL talk on Integrating RE in Buildings. Conference featured 3 program tracks and an expo.
September 25	National Sanitation Foundation	Ann Arbor, MI	Senior officers met with leaders from the National Sanitation Foundation (NSF) to discuss NSF’s efforts to develop a standard addressing prevention of legionella in buildings systems.
October 1 – 4	AHR-Mexico and Mexico City Chapter	Mexico City, Mexico	The AHR-Expo is the largest expo for the HVAC industry in Latin America having 9,809 attendees and 3766 exhibitors at this year’s event. I participated in the technical program accompanying the expo, represented ASHRAE during the expo ribbon cutting event, and networked with ASHRAE members and potential members from Mexico and other Latin American nations. I participated in two separate technical program sessions. I gave the presentation, “Integrating RE in Buildings” during one session and I was a panelists discussion challenges facing women in the HVAC and construction industries during a second session. I was also stationed at the ASHRAE booth within the expo where I answered questions about ASHRAE’s

			activities supporting industry challenges, spoke with individuals interested in becoming ASHRAE members, and assisted with the sales of ASHRAE publications.
October 5 – 9	Region-at-Large CRC	Antalya, Turkey	Participated in CRC activities, gave the presidential address
October 10 – 13	CIBSE Young Engineer Awards event and CIBSE Council meeting	London, UK	My activities with CIBSE included serving as a member of the jury to select the CIBSE Graduate of the Year; sitting on a panel for a session during the CIBSE Young Engineers Awards event that addressed questions regarding how professional competence is managed and monitored and technical standards within the engineering profession are upheld; addressing the CIBSE Council; participating in meetings to evaluate on-going and plan new collaborative activities between ASHRAE and CIBSE; and attending a formal event for recognizing contributions of individual CIBSE members. In addition to the CIBSE events, I also met with staff from BSRIA to strategize about ASHRAE/BSRIA partnership opportunities and met with leaders from the Institute of Refrigeration (IOR),
October 15 – 20	International Sustainable Energy Congress, Colombia Chapter, students at Universidad El Bosque in Bogota and Univalle in Cali	Bogota and Cali, Colombia	Attended the International Sustainability Conference held at Universidad El Bosque in Bogota where I gave the presidential address and the presentation, "My Road to Leadership in ASHRAE." Attended a chapter seminar held on the Univalle campus in Cali where I gave the presidential address. Attended the Colombia Chapter meeting where I gave the presidential address. Participated in meetings with AICAIR leadership to discuss how to leverage existing ASHRAE resources to help buildings professionals in Colombia enhance their knowledge about incorporating energy efficiency, indoor air quality, and thermal comfort strategies into their projects and to help these professionals inform subnational policy makers interested in policy related to the built environment
October 24	Corpus Christi College	Oxford, UK	The purpose of the meeting was to strategize opportunities to combine expertise about human behavior (expertise represented by the Corpus Christi College faculty in attendance) and building performance (represented by ASHRAE) to address

			challenges that are anticipated to occur as the buildings sector and energy sector converge as means for how energy is generated, distributed, and stored are evolving.
October 25 – 26	UN Environment Ozone Action Branch	Paris, France	Attend the annual planning meeting between ASHRAE and the UN Environment Ozone Action Branch. The purpose of the meeting was to discuss the activities completed during the past year that occurred under the ASHRAE/UNE Ozone Action partnership and to plan the activities to occur during the next year. Under the ASHRAE/UNE Ozone Action partnership, ASHRAE assists UNE Ozone Action in building capacity in developing economy nations related to safe use and handling of emerging refrigerants and knowledge building about efficient and sustainable alternatives for designing, constructing, and operating refrigeration systems. This work is in support of meeting the Kigali Agreement objectives for reducing the use of ozone-depleting refrigerants while still providing refrigeration systems for the food chain, medical, and other needs.
November 1 - 7	Montreal Protocol 30 th Meeting of the Parties (MOP) and events organized by the Ecuador Chapter including the Escuela Politécnica Nacional ASHRAE student branch and students at Universidad San Francisco de Quito	Quito, Ecuador	Attend the Montreal Protocol 30 th Meeting of the Parties (MOP) and represent ASHRAE leadership on a panel held with the UNE OzoneAction team during a side session held in conjunction with the MOP30 events. Approximately 100 people attended this side event. Participated in a full-day of activities organized by the ASHRAE Ecuador Chapter that included meeting students at two universities in Quito (Escuela Politécnica Nacional (EPN, ~20 students) and Universidad San Francisco de Quito (USFQ, >100 students)) and be the keynote speaker during the ASHRAE Ecuador Chapter meeting (~30 attendees). During all three chapter events, I presented my ASHRAE presidential address. During the student events, I also described the benefits of being an ASHRAE student member as well as benefits to young professionals.
November 8 - 12	Fall BOD and ExCom meetings	Atlanta, GA	Led ASHRAE Board and ExCom meetings. Met w/staff to discuss various topics.
November 15	Pikes Peak Chapter visit	Colorado Springs, CO	Visited the Pikes Peak Chapter. Approximately 35 people attended the meeting. Presented my ASHRAE presidential address. Region IX

			Member Promotion RVC and chair of the Member Promotion Committee, Michelle Swanson, accompanied me on the visit.
November 18-21	Stakeholder meetings and Ottawa Valley Chapter and the Carleton University Student Branch	Ottawa, Ontario	Visited national government and industry organizations whose interests align with ASHRAE's mission (Efficiency Canada, Parliamentary Information and Research Service, Treasury Board on Canada Secretariat, Health Canada, Engineers Canada, and Natural Resources Canada). Topics discussed during these meetings included how ASHRAE can support these organizations in meeting their objectives and ASHRAE providing expertise related to each organizations' priorities related to the buildings industry and the built environment. Testified before the House of Commons, Committee on Natural Resources on the, "Economic Opportunities for Energy Efficiency in Canada." Participated in activities organized by the ASHRAE Ottawa Valley Chapter, including a monthly chapter meeting (attended by more than 70 chapter members) and being the guest speaker for an event organized by the ASHRAE Carleton University Student Branch (attended by 50 – 60 students). For both chapter events, I presented my ASHRAE presidential address.
November 26 - 29	Stakeholder meetings	Washington, DC	Visited 13 national government and industry organizations whose interests align with ASHRAE's mission (APPA, Senator Cory Gardner, District of Columbia Dept of Energy and Environment, BOMA, NASEO, AIA, Alliance to Save Energy, Senator Michael Bennet, White House Council on Environmental Quality, Smart Cities Council, Institute for Market Transformation, ICMA, National Governors Association). Topics discussed during these meetings included how ASHRAE can support these organizations in meeting their objectives and ASHRAE providing expertise related to each organizations' priorities related to the buildings industry and the built environment. High level of interest expressed for both the Society theme and BEQ, with several organizations inquiring about how to incorporate BEQ into their own programs.

			Another recurring theme was the need for a zero-energy standard or resources describing how to achieve zero energy using ASHRAE products.
November 30	Honeywell and Price senior leadership team meetings	Atlanta, GA	Senior officers visited Honeywell and Price. The purpose of the meetings was to increase familiarity about activities in areas of mutual interest and to discuss potential collaborations. High level of interest expressed by Honeywell in collaborating with ASHRAE on grid integrated efficient buildings. Price expressed concern about the length of time needed to develop/revise standards. Price also expressed a desire to gain direction for how grid integrated efficient buildings will impact its product development.
December 3 - 4	Clean Energy Education and Empowerment (C3E) Women in Clean Energy Symposium	Palo Alto, CA	Attended the Clean Energy Education and Empowerment (C3E) Women in Clean Energy Symposium. Attendees were mid-career and above women who are leaders in clean energy fields. New connections I made during the event were with leaders in the buildings, power sector, and energy storage industries, all of which may be helpful connections to have as ASHRAE continues to explore the best way to establish leadership in the buildings-to-grid space.
December 5	Rocky Mountain ASHRAE Chapter and Northern Section visits	Fort Collins/Denver, CO	Participated in activities organized by the ASHRAE Rocky Mountain Chapter, including the Northern Section meeting held in Fort Collins (15 attendees) and the monthly chapter meeting held in Denver (~70 people attendees). It was Past Presidents Night and I was the speaker for the event. For both events, I presented my ASHRAE presidential address. Region IX DRC, Trent Hunt, also attended both events.
December 10 - 15	Region X chapters visits (Golden Gate, San Jose, San Joaquin, SoCal, Tri-County, Orange Empire, San Diego, Tucson, Central Arizona) and stakeholder visits	California and Arizona	Attended monthly meeting and holiday events for 9 Region X chapters (Golden Gate, San Jose, San Joaquin, SoCal, Tri-County, Orange Empire, San Diego, Tucson, Central Arizona). Participated in a "Coffee w/Sheila" event organized by the Golden Gate Chapter. Visited Point Energy Innovations, Southern California Edison (SCE), P2S Inc, Los Angeles Cleantech Incubator (LACI), and Los Angeles Department of Water and Power (LADWP). I presented my ASHRAE presidential address at many of the chapter

			<p>events. SCE meeting, attended by about a dozen thought leaders, resulted in a high level of interest to contribute to ASHRAE development of a grid-interactive smart buildings guideline and a net zero standard. Meeting with several start-up innovators at LACI revealed a need for ASHRAE to proactively engage with start-ups creating buildings-related products. LACI management team expressed interest about ASHRAE's buildings-to-grid capabilities. All audiences with whom I met during the week actively engaged in conversations about this year's Society Theme.</p>
January 10 - 17	ASHRAE Winter Conference	Atlanta, GA	<p>Attend the 2019 Winter Conference. Provided comments/presentations during the following events: Host Committee Reception, Plenary Session, XXX. Social Media Island. Coffee w/Sheila press meeting. Social Media Takeover on Saturday. VIP meetings: SHASE, CAR, Daikin, Empower, IFMA, AIA,.....</p>
January 21 – 25	Region XII chapter visits (Miami, Gold Coast, Southwest Florida, Florida West Coast, Central Florida, Jacksonville, Space Coast)	Miami, Fort Lauderdale, Fort Meyers, Tampa, Orlando, Jacksonville, Cocoa Beach, Florida	<p>Attended monthly meetings for 7 Region XII chapters (Miami (45 attendees), Gold Coast (42), Southwest Florida (32), Florida West Coast (55), Central Florida (55), Jacksonville (30), and Space Coast (40) chapters). I visited student branches at Florida International University (18 attendees), Florida Atlantic University (21), University of Central Florida (13), and Embry Riddle (50). I presented my ASHRAE presidential address at all of these chapter and student branch events (11 presentations). Also visited the Bonita Springs High School where they have and HVAC track for students and members from TLC Engineering Solutions in Tampa (10 attendees). Region XII DRC Dan Rogers accompanied me on all these visits.</p>
January 26 – February 3	Region XII chapter and student branch visits (Brasil Chapter, Curitiba Chapter)	Fortaleza, Annapolis, Brasilia, and Curitiba, Brazil	<p>I traveled to several cities in Brazil to participate in events organized by the ASHRAE Brasil Chapter.</p> <ul style="list-style-type: none"> • January 28, 2019 – Fortaleza <ul style="list-style-type: none"> ○ Fortaleza Student Branch at the Universidade Federale do Ceara – met with students and faculty to discuss opportunities for students engaged with ASHRAE, gave the “Building Our New Energy Future” presentation, toured

			<p>the laboratory facilities for students studying building sciences (20 attendees)</p> <ul style="list-style-type: none"> ○ Municipality of Fortaleza – discussed how ASHRAE can support energy efficiency priorities in Fortaleza (6 attendees) ○ Dinner with the student branch and Brasil Chapter members located in Fortaleza (13 attendees) <ul style="list-style-type: none"> ● January 29, 2019 – Brasilia <ul style="list-style-type: none"> ○ Conselho Federal de Engenharia e Agronomia (Federal Council of Engineering and Agronomy) – discussed how ASHRAE can support energy efficiency priorities of the Council (5 attendees) ○ Brasilia Student Branch at the University of Brasilia – toured the laboratory facilities for students studying building sciences (12 attendees) ○ Dinner with the student branch, Brasil Chapter members located in Brasilia, and other stakeholders located in Brasilia (25 attendees) ● January 30, 2019 – Annapolis (driving distance from Brasilia) <ul style="list-style-type: none"> ○ Annapolis Student Branch technical event held at the Flamboyant shopping mall – gave the “Building Our New Energy Future” presentation (40 attendees) ○ Annapolis Student Branch at the UniEvangelica – met with students and faculty to discuss opportunities for students engaged with ASHRAE, gave the “Building Our New Energy Future” presentation (31 attendees) ● January 31, 2019 – Brasilia <ul style="list-style-type: none"> ○ Brasilia Student Branch technical event held at the University of Brasilia – gave the “Building Our New Energy Future” presentation (50 attendees) ○ National Secretariat of Policies for Women – met with the directors of the
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			<p>Department of Thematic Actions and the Department of Labor policies and Women’s Economic Autonomy to discuss ASHRAE’s “Women in ASHRAE (WIA)” activities and how the ASHRAE Brasil Chapter may be able to support efforts in Brazil to encourage and retain women in STEM professions (3 from the Secretariat plus 2 ASHRAE representatives)</p> <ul style="list-style-type: none"> • February 1 – 2, 2019 – Curitiba <ul style="list-style-type: none"> ○ TROX factory tour – toured the TROX manufacturing facilities ○ Curitiba Student Branch “Talk Show” event – participated in an event during which I shared my experiences as ASHRAE President and my career path and for Curitiba ASHRAE Student Branch members to ask me questions (30 attendees) ○ Smart Energy meeting – met with the Smart Energy director to discuss how the ASHRAE Brasil Chapter and Smart Energy can collaborate, Smart Energy is an organization that encourages sustainable development in Brazil (Met with the director plus 1 ASHRAE member) ○ Escola Tecnica Profissional – gave the presentation, “Integrating Renewable Energy in Buildings” to students, faculty, and members of the ASHRAE Brasil Chapter, toured the teaching facilities supporting hands-on learning about building systems (50 attendees) ○ Dinner with the Curitiba Student Branch, Brasil Chapter members located in Curitiba, and other stakeholders (30 attendees) <p>Region XII DRC Dan Rogers accompanied me on all visits.</p>
February 6	Region VIII Chapter Visits (Central Oklahoma, Tulsa)	Oklahoma City and Tulsa, OK	Attended monthly meetings for Central Oklahoma (Oklahoma City) 90 attendees) and Tulsa (Tulsa) (50

			<p>attendees). I made brief comments at both chapter meetings and shared a short summary of the Society theme, "Building Our New Energy Future." Visited the NORTEK coil plant near Oklahoma City and participated in a tour attended by OSU and OU students and faculty and NORTEK leaders, including NORTEK CEO (26 attendees). Visited the AAON laboratory facilities. Tour hosted by ASHRAE Member Mark Fly and attended by students and faculty from OSU and OU. Accepted a mock check representing AAON's \$20K donation to ASHRAE RP.</p>
February 7 – 8	Salt Lake City Chapter visit	Salt Lake City, UT	<p>Attended monthly meeting for the Utah Chapter. I presented my ASHRAE presidential address, "Building Our New Energy Future," at the chapter meeting (65 attendees) and gave the presentation, "Grid Efficient Buildings and Urbanization," during the tech session preceding the chapter meeting (35 attendees). Met with the ASHRAE student branch at the University of Utah (12 attendees) where leaders moderated a discussion to advise students about pursuing careers in the buildings industry. The night before the chapter and student branch meetings, I attended a dinner with chapter leaders (12 attendees).</p>
February 11 – 15	Region XI chapter visits (Manitoba, Regina, Vancouver Island, Victoria, Portland) and attended other events organized by the chapters	Winnipeg, Manitoba; Regina, Saskatchewan; Vancouver and Victoria, British Columbia; Portland, Oregon	<p>Attended monthly meetings for the Manitoba (30 attendees), Regina (60 attendees), Vancouver Island (60 attendees), Victoria (35 attendees), and Portland (55 attendees) chapters. Presented, "Building Our New Energy Future," at all chapter meetings. Attended meetings with student branches at University of Regina (U of R) (10 students and 5 chapter members attending) and University of British Columbia (UBC) (12 students and 2 faculty advisors attending). At U of R I gave presentations summarizing the value of being a student member and included a shorter version of my presidential address, "Building Our New Energy Future." At UBC I discussed my student and career experiences and answered questions from the students. Presented at women in engineering events held at the U of R (co-sponsored between the ASHRAE Regina Chapter and the Association of Professional Engineers and Geoscientists of Saskatchewan</p>

			<p>(EPAGS) (30 attendees) and a breakfast organized by the Portland Chapter (20 attendees) where my presentation was to share my experiences about being a woman leader in engineering and then answered audience questions. Other events I attended included: lunch with chapter leaders followed by the BOG meeting for the Regina Chapter; UBC campus energy plant tour and tour of the sustainability center; Integral Group office visit in Vancouver where I presented, "Building Our New Energy Future," to about 45 engineering staff and met with senior leaders in the office; met with 2 representatives from the British Columbia Ministry of Municipal Affairs and Housing to discuss the new provincial-wide building code in British Columbia that requires compliance with ASHRAE Standard 90.1-2016; met with 2 representatives from the Buildings Code Division of the Oregon Department of Consumer and Business Services to discuss progress for establishing a state-wide building code in Oregon that requires compliance with ASHRAE Standard 90.1. Region XI DRC Russell Lavitt accompanied me on all these visits.</p>
<p>February 18 – 20</p>	<p>Big Sky Chapter and events at Montana State University</p>	<p>Bozeman and Billings, MT</p>	<p>Participated in the following events organized by Kevin Amende of the Big Sky Chapter.</p> <ul style="list-style-type: none"> • Breakfast with Brett Gunnink, Dean of the Norm Asbjornson College of Engineering at Montana State University, and Kevin Amende. Discussed recruiting and retaining students of diverse backgrounds into engineering programs • Coffee with Dan Stevenson, Vice President of University Services, Megan Sterl, Engineering and Utilities Manager, and Kevin Amende to discuss advanced strategies implemented on the MSU campus supporting the 2018-19 Society theme, "Building Our New Energy Future" • Coffee with ASHRAE student member Megan Oaklief, secretary/treasurer of the MSU student branch • Guest presenter for the ETME 422, "Principles of HVAC 1" class

			<p>(48 students present). Presentation summarized the value of being a student member and included a shorter version of my presidential address, "Building Our New Energy Future."</p> <ul style="list-style-type: none"> • Norm Asbjornson Hall mechanical system and MUS campus utility tunnel tour with Megan Sterl and Kevin Amende • Met with Christine Foreman, Associate Dean for Student Success, Norm Asbjornson College of Engineering • Guest speaker for the Master Class for MSU Honors students and other attendees (25 students present). Discussed my student and career experiences and answered questions from the moderators and audience. • Women in Engineering student dinner (11 attendees) • Guest speaker at event open to MSU students and Bozeman community (45 attendees) • Breakfast with Big Sky chapter leaders located in Bozeman (8 attendees). Discussed plans to establish the home city for the chapter from Billings to Bozeman. • Big Sky Chapter meeting in Billings. Presented my DL presentation, "Integrating RE Systems into Buildings" (21 attendees) • Visited with representatives from the mechanical group at CTA Architects/Engineers (5 present) • Met with Big Sky chapter leaders located in Billings to discuss plans to establish the home city for the chapter from Billings to Bozeman
<p>February 23 – March 2</p>	<p>Falcon Chapter, Western India Chapter, ACREX Expo</p>	<p>Dubai, UAE; Ahmedabad and Mumbai, India</p>	<p>Traveled to Dubai, UAE to participate in meetings with the ASHRAE Vice President, Farooq Mehboob, and the RAL DRC Dr. Ahmed Alaa Eldin Mohamed. Discussions during these meetings addressed topics including: on-going and planned ASHRAE activities in the RAL; strategies for greater ASHRAE member engagement in the RAL; strategies for strengthening the leadership skills of RAL volunteer leaders and for developing new leaders in the region; and potential partnerships to nurture within the RAL.</p>

		<p>Traveled to Ahmedabad and Mumbai, India to participate in events planned by the Western India ASHRAE Chapter (Ahmedabad) and to represent ASHRAE leadership at the ACREX Expo (Mumbai). Activities I attended in each location include:</p> <p>February 26 – Ahmedabad</p> <ul style="list-style-type: none"> • Visited buildings research facilities at the CEPT University • Met with CEPT University buildings research program and engineering college leaders to discuss strategies for how the CEPT research facilities could be used to support ASHRAE interests • Presented my ASHRAE Presidential address, “Building Our New Energy Future,” to a group of engineering and architecture students from CEPT Universities and two other universities (60 attendees) • Met with ASHRAE volunteer leaders from the Western India Chapter and the Region-at-Large to discuss activities they are currently engaged in leading and to strategize on how to increase ASHRAE member engagement in these activities (15 attendees). Identified the need to more strongly communicate the value of being an ASHRAE member to encourage more ISHRAE members to also be ASHRAE members. • Attended a dinner with the Western India Chapter members and their companions, networked with those present at the dinner. (45 attendees) <p>February 27 to March 1 – Mumbai</p> <ul style="list-style-type: none"> • Attended all special events representing ASHRAE leadership during the ACREX India 2019 Expo. Special events included the Curtain Raising, Opening Ceremony, Presidential Luncheon, Awards of Excellence, Hall of Fame, and the “aQuest” student quiz show events. The ACREX India 2019 Expo is south Asia’s largest exhibition on air-conditioning, heating, ventilation, and intelligent buildings. • Participated in a number of meetings and side events including: <ul style="list-style-type: none"> ○ Press conference with the India Society of Heating, Refrigerating, and Air-Conditioning Engineers (ISHRAE) ○ Meeting with the ISHRAE leadership to discuss collaborations with ASHRAE ○ Meeting with representatives from the India Bureau of Energy Efficiency (BEE) to discuss their
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**REPORT TO THE BOARD OF DIRECTORS
From the Building EQ Committee
As of March 22, 201**

Recommendations for Board Approval:

1. None

Information Items:

1. The Building EQ Committee continues to promote the Building EQ Portal and program through a variety of initiatives. Active opportunities and those currently being explored include:
 - **APPA** – The organization remains highly interested in promoting Building EQ on their campuses through both the facility side and the academic side. The laboratory methodology was implemented into the Portal primarily to help make the program more attractive to universities.
 - **University of Central Florida (UCF)** – Twelve buildings have been entered, submitted, and approved in the Portal, so far. UCF is planning to do ASHRAE Level 1 Energy Audits for all buildings on campus using the Building EQ as the audit tool.
 - **Carlton University** – Several campus buildings are in process on the Portal. They are planning to do Building EQ IO assessment on all buildings on campus.
 - **Brevard County Schools** – There is a pilot program underway in collaboration with the Florida Institute of Technology (FIT). The school district is planning to move all historical data (10 years) for all 80 schools in the county from Energy Star to Building EQ as a long term way to compile and compare performance over time. In addition, the energy manager for the county schools wants to feature this program in a seminar for the Orlando Winter Meeting.
 - **Hydro Quebec** – The utility is planning to initiate use of the Building EQ program with their customer base as soon as French Translation is finalized into the Portal. They paid the local chapter to do the original translations.
 - **Argentina Green Building Council (AGBC)** – The organization is very interested in using Building EQ for their country modified to use local baselines and site/source information. ASHRAE is working with them now to determine exactly what they need, how much it would cost, and how long it would take to make the changes. Once that is determined an official proposal will be provided to them. This is a potential licensee program where AGBC would pay for the changes specific to their needs.
 - **Michigan Utility** – The Building EQ committee was approached by an ASHRAE member who works for the utility, is working on an Energy Efficiency program for their 300,000 customer base, and is interested in using Building EQ as the EEM tool for that program. The utility program is still being designed so discussions with them are still in the early stages.

- **BuildingSync** – This is a standardized language for commercial building energy audit data that software developers can use to exchange data between audit tools and that was developed using the standard energy data terminology defined in the Building Energy Data Exchange Specification (BEDES). A use case for Building EQ is currently being developed. This will allow Building EQ to import data from the DOE Asset Score Audit Tool and from localities like New York City that have a mandatory audit program. The next step would be for Building EQ is to develop the ability to export the audit information from Building EQ to these other programs.
- **LEED** – An ASHRAE member has submitted a proposal to USGBC to name Building EQ as an alternate compliance pathway for the energy audit pre-requisite for LEED O+M. The proposed language is:

EA PREREQUISITE: ENERGY EFFICIENCY BEST MANAGEMENT PRACTICES Requirements

Conduct an ASHRAE Building EQ In Operation assessment that assists with an energy audit that meets both the requirements of an ASHRAE Level 1 Energy Audit as defined in ASHRAE Standard 211-2018 *Energy Audits for Commercial Buildings* or equivalent. Projects in Europe may use the energy audit procedure defined in EN 16247-2:2014.

- **District of Columbia** – Building EQ recently did a demonstration for city officials. They talked about how Building EQ might help them with enforcement of city ordinances requiring buildings to improve energy performance.
2. The Building EQ Committee has also identified other possible avenues for exploration and is working on plans for follow-up. These opportunities include:
- **Alliance to Save Energy** – The organization’s leadership has offered to help publicize Building EQ through their blogs and webinars.
 - **Standard 211** – Anyone who has purchased this standard may be interested in the fact that Building EQ is a tool that helps with Level 1 Energy Audits as defined in the standard. The possibility of announcements to these purchasers are being explored.
 - **Natural Resources Canada (NRCan)** – The organization is part of Canada’s “Build Smart” strategy, which is working to boost energy efficiency in buildings through building codes, re-commissioning, building energy labeling, sharing energy use data, and expanded benchmarking. Building EQ may be a useful tool to help NRCan with these initiatives.
 - **ISHRAE (India)** – The organization has expressed interest in Building EQ as they find India’s current program, BEE star (their equivalent of ENERGY STAR) to be significantly lacking as it does not provide an apples to apples comparison of buildings.
 - **Saudi Arabia** – An inquiry from Saudi Arabia was received recently asking whether or not the tool could be used there. The answer sent back was yes.
 - **Durham, NC** – Recent conversations suggest that the city is in the process of auditing all their buildings and is working on an ordinance with some fairly aggressive

energy efficiency targets. The city engineer may be interested in using Building EQ or making its use a requirement for consultants.

- ***NYSERDA/Long Island Chapter*** – An ASHRAE member has noted that there is interest from NYSERDA and a New Jersey utility. Both organizations have funding opportunities and requirements for benchmarking and energy audits. The goal is get them to standardize around Standard 211 and Building EQ.
 - ***University of Arizona*** – The organization is interested in using Building EQ on their campus who has also requested some upgrades to the Portal
 - ***California PolyTech State University*** – A professor at the school is currently teaching the adapt Building EQ course and has asked for a “sample project” to be used by in the class.
 - ***Wisconsin Chapter*** – The chapter has a government outreach visit planned. In preparation for that visit, one of the chapter members requested information on how Building EQ compared to other programs in the marketplace (specifically, Building iQ and HVAC TSPR).
 - ***SoCal Chapter*** – They have requested a panelist for their April meeting to discuss Building EQ as it compares to LEED and Well Buildings.
 - ***Society of American Military Engineers (SAME)*** – An ASHRAE member submitted a proposal to present a session at their joint conference with the message that Building EQ is a tool to assist with improving energy resiliency because energy performance contributes to resiliency.
 - ***IFMA/BOMA*** – Building EQ is a natural fit with these organizations as it helps buildings become more energy efficient and to comply with benchmarking and auditing ordinances. The Building EQ program could support the energy feature in BOMA’s 360 program.
3. The Building EQ committee continues to assess how the program fits into the marketplace and is focusing efforts to better describing that fit in all promotional materials.
 4. The French Translation is nearing completion despite some unforeseen delays and is now targeted to be fully on-line later this Spring.

March 21, 2019
Date

Bill Klock
Chair