

**Building EQ Committee
December 15, 2020 Web Meeting
Meeting Minutes**

Participants: John Constantinide, Rob Risley, Chris Balbach, Daniel Redmond, Michael Deru, Mahroo Eftekhari, Anoop Peediyakkan, Charles Eley, Trent Hunt, Bruce Hunn, Hugh Crowther, Doug Cochrane, Bill Dean

Guests: Stephen Roth

Staff: Stephanie Reiniche, Emily Porcari, Lilas Pratt (staff liaison)

Principal Motions¹

Motion #1: Rob Risley moved, and Charles Eley seconded that the minutes from September 14, 2020 meeting be approved.

Vote: Motion passed by unanimous voice vote, 6-0-0, CNV

Motion #2: Technical Dev SubC moves that the language as noted below be approved for inclusion in the BEAP Candidate Handbook.

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

Motion #3: The Technical Dev SubC moves that the language as noted below be approved to be sent to all Portal Users in an email blast and shared with the ASHRAE Journal Staff for inclusion in one of the regular ASHRAE newsletters.

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

Motion #4: Rob Risley moved, and Chris Balbach seconded that the Draft Digital Twin Market Entry Proposal be approved for dissemination to Chuck Gullledge.

Vote: Motion passed by unanimous voice vote, 8-0-0, CV

Motion #5: Chris Balbach moved, and Daniel Redmond seconded that all three SOPs as modified during the meeting be approved for publication and dissemination.

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

New and Open Action Items

December 15, 2020 Web Meeting

- ✓ **AI 1:** Lilas Pratt to send approved language for BEAP Candidate Handbook to Tim Kline in Certification. (Note: Email with language sent on 1/5/2021.)
- **AI 2:** Lilas Pratt to request an email blast on the Standard 211 Interpretation and send the same information to ASHRAE Journal staff.

¹ All votes are recorded as yes-no-abstain.

- ✓ **AI 3: Chris Balbach** to reach out to Han Li and Tianzhen Hong about collaboration between LBNL, DOE, and ASHRAE on the applied deployment of the system level KPI concepts. (Note: conference call conducted on December 22, 2020)
- **AI 4: Lilas Pratt** to finalize the approved SOPs per the modifications specified in the meeting, post them on Basecamp and the BEQ web page, and send copies to appropriate committee staff liaison.
- **AI 5: Bill Dean** to take the MOU prioritized list to ExCom for their review and input.
- **AI 6: Committee members** to a SWAT analysis (strength, weakness, opportunities, and threats) on each of the following organizational placement options for Building EQ by February 15, 2020: **(NOTE: Action Item on HOLD pending further notice)**
 - Members Council: Trent, Bruce, Daniel, Mahroo
 - Technology Council: Charles, Chris, Anoop
 - Pub-Ed Council: Hugh, Doug, Michael

December 11, 2020 Technical Development Subcommittee Web Meeting

- **AI 1: Michael Deru, Chris Balbach, and Lilas Pratt** to set up a meeting to discuss status of data centers

November 12, 2020 Technical Development Subcommittee Web Meeting

- **AI 3: Technical Development SubC** to determine what system level KPI information would be useful to Portal users and whether or not the database information is robust enough to be used to generate targets for those KPIs. **On-going**

September 14, 2020 Web Meeting

- **AI 3: Trent Hunt and Lilas Pratt** to put together an email regarding chapter presentations to send out to chapter program chairs and RVCs.

February 2, 2020 Business Development Subcommittee Orlando Winter Meeting

- **AI 2: Lilas Pratt** to mine some data from the list of universities downloading course material and provide to the committee for follow-up by the committee. **On-hold**

January 13, 2019 Atlanta Winter Meeting

- **AI 1: Lilas Pratt** to contact Montana University regarding ASHRAE use of their one hour course. **On-hold**

January 12, 2019 Business Development Subcommittee Meeting

- **AI 3: Lilas Pratt** to develop French Portal examples (screens/reports/etc.) for use on sales calls to Hydro Quebec. **On-hold**

Meeting Minutes

1. Call to Order – **Meeting Convened at 12:02pm EST.** Quorum was established.
2. Report from the Chair

- a. University of Nebraska Master Plan
 - John Constantinide reported that the University of Nebraska has specified the use of Building EQ as part their strategies to promote energy efficiency and sustainability. He noted that this is an exciting development for the Portal.
3. Report from the Coordinating Officer
 - Bill Dean reported that the BOD met yesterday primarily for election purposes.
 - Overall, the attitude towards Building EQ is softening somewhat.
 - The current lean assessment is at a macro level and is not as focused on the small dollar values that the Building EQ program represents.
4. Approval of minutes
 - September 14, 2020 web meeting
(File: [bEQCommittee_14Sep2020_AM_MtgMinutes_Draft.pdf](#))

Motion #1: Rob Risley moved, and Charles Eley seconded that the minutes from September 14, 2020 meeting be approved.

Vote: Motion passed by unanimous voice vote, 6-0-0, CNV

5. Review of [Action Items](#)
 - In regard to the September meeting action item on Hydro Quebec, it was noted that the main contact with the utility has retired and a new contact has not really been identified. Ron Gagnon is investigating and will get back to the committee.
6. Life to Date Portal Statistics as of November 30, 2020
 - Users: 1266 (1141 at beginning of SY)
 - Projects: 828 (736 at beginning of SY)
 - Submitted/Approved projects: 51 (51 at beginning of SY)
 - Reports purchased: 7 (\$1150) (7 at beginning of SY)
 - Paid credentials: 49 (32 at \$15 + 17 at \$25 = \$905) (46 at beginning of SY)
7. Technical Development Subcommittee Report
 - a. BEAP Certification Candidate Handbook Language on Building EQ ([Attachment A](#))
 - Chris Balbach provided background on the proposed language and noted that the language was approved by the SubC 3-0-0, CNV.
 - The final language approved by the committee needs to be sent back to ASHRAE Certification staff for inclusion in the BEAP handbook.

Motion #2: Technical Dev SubC moves that the language as noted below be approved for inclusion in the BEAP Candidate Handbook.

Note: Acceptable commercial energy audits include, but are not limited to, those conducted in compliance with ASHRAE Standard 211 using the ASHRAE Building EQ Portal for completed In Operation projects. Documentation of completed projects includes the Building EQ Narrative and Spreadsheet Audit Reports

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

- b. Standard 211 Interpretation Announcement Language ([Attachment B](#))
- Chris Balbach provided background on the text that was developed for an email blast to go to all Portal Users announcing the recently approved Standard 211 interpretation on energy audit remote site visits.
 - The blurb will also be sent to the ASHRAE newsletters and the ETF as this is a helpful development during pandemic conditions.
 - Chris noted that the language was approved by the SubC 3-0-0, CNV

Motion #3: The Technical Dev SubC moves that the language as noted below be approved to be sent to all Portal Users in an email blast and shared with the ASHRAE Journal Staff for inclusion in one of the regular ASHRAE newsletters.

Subject: Remote Site Visits for ASHRAE Energy Audits

A new interpretation has just been published for Standard 211 Commercial Building Energy Audits that allows for remote site visits when conducting energy audits during pandemic conditions.

These new parameters for site visits can be applied to all In Operation projects on the ASHRAE Building EQ Portal (www.ashrae.org/BuildingEQ). The Building EQ In Operation Assessment can be used to efficiently deliver an ASHRAE Level 1 Energy Audit aligned with ASHRAE Standard 211 with two auto populated reports available for all approved projects.

This interpretation alleviates the limits on physical site access due to the Covid-19 pandemic that subsequently limit the ability for building energy audits to be conducted. Remote site visits can now be conducted through the use of digital tools and live video conferencing as part of an audit process in conjunction with a facility representative who is physically on site.

Please review the full text of this interpretation here: <https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-interpretations/interpretations-for-standard-211-2018>

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

- c. Digital Twins Document (File: [DRAFT_DigitalTwin_MktEntry_Proposal_11-6-20.docx](#))
- The Building EQ Committee was asked to develop a strategy on getting ASHRAE involved in Digital Twins including needed stops, options, and cost estimates.
 - John Constantinide developed a draft proposal which was discussed in an October meeting with Dennis Knight (MTG-BIM) and Dru Crawley (Chair, Stds Committee).
 - The goal in this proposal was to not have ASHRAE be a competitor in the market, but rather a neutral third party or arbiter in the market.
 - Feedback was solicited from the participants on that call and from the Building EQ Committee.
 - The final draft was distributed to the committee with the agenda for this meeting.

Motion #4: Rob Risley moved, and Chris Balbach seconded that the Draft Digital Twin Market Entry Proposal be approved for dissemination to Chuck Gullledge.

Vote: Motion passed by unanimous voice vote, 8-0-0, CV

d. System Level KPIs

- Chris Balbach reported on the subcommittee meeting featuring speakers from LBNL who reviewed the information in their paper, *System-level key performance indicators for building performance evaluation*.
- He noted that in that paper, the authors recommend outreach to ASHRAE on the applied deployment of these concepts. The suggestion is that Building EQ reach out to LBNL to ask about initiating that collaboration.
- There is a lot of excitement about the possibilities for Building EQ in conjunction with these efforts.
- The largest barrier is a way to implement the work. The Subcommittee will continue to explore and prioritize options.

8. Business Development Subcommittee Report

a. Standard Operating Procedure Documents (see documents sent separately)

- Trent Hunt provided background on the three SOPs that have been developed: Student Branches, University Outreach, Government Outreach.
- The Student Branch SOP is focused on student chapters using Building EQ to work on Building EQ projects under a qualified professional.
- The University and Government Outreach SOIPs are focused on how to reach out to get these entities involved with the Building EQ Portal.
- The committee reviewed the SOPs and provided feedback and changes. It was noted that the Student Branch SOP needs to include utility bill assessment and should also include a step to formally ask the building for that information and other building documents.

Motion #5: Chris Balbach moved, and Daniel Redmond seconded that all three SOPs as modified during the meeting be approved for publication and dissemination.

Vote: Motion passed by unanimous voice vote, 7-0-0, CV

b. Society MOUs (File: [MOU List_Prioritized_9Dec20.xls](#))

- Trent Hunt reported that the Subcommittee reviewed the current priority spreadsheet and noted that the top five suggested organizations are listed first: AIA, ASHE, NYSERDA, NASEO, ATECYR (Spain).
- The next Step is for Bill Dean (BEQ Coordinating Officer) to take the list to ExCom for their review and input. There may be some back and forth with ExCom before the list of organizations and suggested actions are finalized.
- ExCom will make the initial contact with organizational liaison for each MOU.

c. Awards/Competition Status/Updates

- The Student Building EQ Competition has been pushed to the 21-22 SY due to the current workload of the Student Activities Committee.
- Energy Genius Award has been submitted to CTTC under the category for Personal Awards for Specific Student Activities. CTTC will discuss the award at their Winter meeting in January.

9. New Business

- a. Building EQ Organizational Placement
(File: [BuildingEQ_OrgPlacement_Draft2_11-13-20.doc](#))
 - John Constantinide noted that the BOD has raised the question as to where the Building EQ best fits into the ASHRAE organizational structure.
 - The options are outlined in the proposal as a list of pros and cons.
 - The committee reviewed the information and provided their initial thoughts on the various options in an open brainstorming session.
 - The discussion is recapped in [Attachment C](#).
 - As the committee breaks into small groups to research these options, Bill Dean will be available as a resource to all the groups as he has experience on all three Councils.
- b. Potential Building EQ Portal Revenue Streams – discussion deferred

10. Upcoming Meetings – Virtual Winter Meeting

- BEQ Business Development SubC, January 12, 2021, 11:00am-12:30pm
- BEQ Technical Dev (Method) SubC, January 14, 11:00am-12:30pm
- Building EQ Committee, January 18, 1:00pm-3:00pm

11. Adjourn – **Meeting adjourned at 1:30pm EST**

Attachment A – BEAP Certification Handbook Language

From: John Constantinide
Sent: Tuesday, December 1, 2020 4:25 PM
To: Chris Balbach
Cc: Rob Risley; Pratt, Lilas
Subject: FW: Building EQ Language

Chris,

I had a conversation with Tim Kline about the BEAP recertification requirements prompted by someone in my region, and the conversation led to asking if the BEAP Certification Handbook could spell out commercial energy audits completed with the assistance of Building EQ as a compliance pathway for certification or recertification. Since Tim knows the language of certifications, he provided the statement in his e-mail below as follows.

Note: Acceptable commercial energy audits include, but are not limited to, those conducted in compliance with [ASHRAE Standard 211 using the ASHRAE Building EQ Portal for completed In Operation projects](#). Documentation of completed projects includes the [Building EQ Narrative and Spreadsheet Audit Reports](#). requirements.

To provide context, the note would be placed in the BEAP Candidate Handbook, Page 5, in the section titled, “2. Five (5) Commercial Energy Audits,” and in Page 13, in the section titled, “1. Five (5) Commercial Energy Audits.” I attached the handbook for your reference.

The intent is to have professionals providing commercial energy audit experience for their BEAP certification/recertification use Building EQ In Operation project submissions as a compliance pathway for proof of experience. Since Building EQ In Operation ratings assist with the completion of ASHRAE Standard 211-compliant Level 1 Energy Audits, we meet that requirement. Spelling that out in the Handbook will bring additional exposure to, and hopefully increased use of, the Building EQ portal by ASHRAE Certified BEAPs.

Would you please have the Technical Development Subcommittee review this statement for its suitability and provide revisions to the Full Committee meeting in December or January? If you need additional information for clarification to the subcommittee, please let me know.

From: Kline, Tim
Sent: Tuesday, December 1, 2020 3:57 PM
To: John Constantinide
Subject: Building EQ Language

Hi John,

Good speaking with you this afternoon- how does this blurb sound?

Note: acceptable commercial energy audits include, but are not limited to, those conducted in compliance with ASHRAE [Building EQ In Operation](#) requirements.

Attachment B – Standard 211 Site Visit Announcement

Subject: Virtual Site Visits for ASHRAE ~~Level 1~~ Energy Audits

A new interpretation has just been published for Standard 211 *Commercial Building Energy Audits* that allows for virtual site visits when conducting energy audits during pandemic conditions.

These new parameters for site visits can be applied to all In Operation projects on the ASHRAE Building EQ Portal (www.ashrae.org/BuildingEQ). The Building EQ In Operation Assessment can be used to efficiently deliver an ASHRAE Level 1 Energy Audit aligned with ASHRAE Standard 211 with two auto populated reports available for all approved projects.

This interpretation alleviates the limits on physical site access due to the Covid-19 pandemic that subsequently limit the ability for building energy audits to be conducted. Virtual site visits can now be conducted through the use of digital tools and live video conferencing as part of an audit process in conjunction with a facility representative who is physically on site.

Please review the full text of this interpretation here: <https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-interpretations/interpretations-for-standard-211-2018>

Attachment C – Committee discussion on Organization Placement

- Rob: likes the idea of having access to all the councils, but if had to move under a Council would advocate for being under Members Council.
- Chris: not a lot of understanding of the ramifications of the various decisions and feel unqualified to state a preference at this time.
- Trent: likes the idea of reporting to all three councils, but if had to pick one would advocate for members council. Also like the option of reporting to the digital transformation group which basically allows for reporting to all three councils
- Hugh: Digital Transformation Group is intended to be an Ad hoc to carry out some changes in the organization long term. It is not really intended to have committees report to it. The committee needs to ask to participate in that transformation process. Building EQ provides a product and where it belongs in Pub-Ed.
- Michael: Agree with the analysis by Hugh that it belongs in Pub-Ed.
- Charles: Understand the connection to Pub-Ed, but also see a pretty strong connection to Technology Council along with committees under the council that work with Building EQ. Have also noticed over the years that the committee has a lot of turnover in both leadership and membership.
- Anoop: Liked the idea of the digital transformation group, but now that is off the table needs to look into all the options once again.
- Daniel: Would suggest Members Council as primary suggestion and Pub-Ed council as a secondary suggestion.
- Bill: the committee needs to decide what BEQ is. If it is a member benefit, then members council. If it is a product, then Pub Ed Council. If it is more like the creation of standards, then Technology Council.
- Bruce: At the very beginning, the BOD and ExCom would appropriate due to policy issues that were involved. But now, Building EQ has become more of a member service and uptake on use is going to come from ASHRAE members.
- Doug: There are definitely aspects that relate to each council and reporting to the BOD is not longer a good option. The product that we have is the web which is Technology. Pub-Ed has already laid out a plan to how it fits there. The concern with Members council is that because there are no RVCs, not sure that Members Council can properly support.
- Lilas: Suggests that as product, Building EQ would be best served under Pub-Ed Council as they have the resources and experience in developing, promoting products.