Building EQ Committee
Chicago Winter Meeting
January 21, 2018

Participants: Hugh Crowther (chair), Bill Klock (vice-chair), Esteban Baccini, Nate Boyd, Bill Dean, Charles Eley, Hywel Davies, Jeff Clarke, John Dunlap, Bruce Hunn, Ross Montgomery, Edward Tsui (Coordinating officer)
Not available: Shanta Tucker

Staff: Stephane Reiniche, Vanita Gupta, Jim Scarborough, Jeremy Pollack, Lilas Pratt

Guests: Stephen Roth, Michael Hoffman, Dave Palty, Ryan Colker, Jojo Castro, Tom Phoenix, Supriya Goel, Daniel Redmond, Darryl Boyce, Riad Assof, Alison Farmer, Dan Doyle

Principal Motions

Motion 1: Nate Boyd moved and Bill Dean seconded that the committee approve the meeting minutes from the October 16-17, 2017 and the December 1, 2017 meetings of the committee
Vote: Motion passed by voice vote (5-0-0, CNV)

Motion #2: Bill Klock moved and Bill Dean seconded that the committee recommend that SRC approve the proposed changes to the ROB as shown in Appendix A.
Vote: Motion passed by voice vote (6-0-0, CNV)

Motion #3: Bill Dean moved and Hywel Davies seconded that the committee approve the completion of the Building EQ Portal development project
Vote: Motion passed by voice vote (6-0-0, CNV)

New and Open Action Items

January 21, 2018 Chicago Winter Meeting

• **AI 1**: Pratt and Eley to submit an interpretation request on Standard 214 regarding Building EQ procedures for age of data and use of metered data.
• **AI 2**: Chris Balbach to report to Methodology Subcommittee on what plug load information is being used by the DOE Asset Score.
• **AI 3**: Business Development Subcommittee to create a sample advance energy audit report (i.e. narrative report) by March 15, 2018.
• **AI 4**: Crowther and Klock to discuss with Standards Committee and Technology Council the committees intentions regarding the audit reports and making the Portal a tool to assist with compliance of Standard 211
• **AI 5**: Building EQ Committee to work with GGAC to improve the way PAOE points are awarded.
• **AI 6**: Business Development SubC to work with ASHRAE Marketing staff to create a campaign targeted at the grassroots member and to create tools for the grassroots members to use with owners
• **AI 7**: Pratt to talk with Brendan Owens for an update on incorporating Building EQ in LEED
• **AI 8**: Pratt to get details on the motions used by RBC for promotional travel.
• **AI 9**: Crowther and Klock to process paperwork required to add Chris Balbach to the committee to fulfill the remainder of the Shanta Tuckers’ term as a voting member

January 4, 2018 Business Development Subcommittee meeting

1 All votes are recorded as yes-no-abstain.
• **AI 3: Pratt** to ask Stephen Roth about common interface programs that might be necessary to interface with Dashboard programs.

**December 1, 2017 Web Meeting**

✓ **AI 1: Eley and Pratt** to develop a plan for the beta test of the As Designed rating (who, when, how).

**October 16-17, 2017 Atlanta Meeting**

• **AI 4: Eley** to review lab data from I2SL.

**August 30, 2017 Web Meeting**

• **AI 2: Business Development Subcommittee** to evaluate a volume discount on the report fees for large customers and report back to full committee.

**August 24, 2017 Business Development Subcommittee meeting**

• **AI 1: Montgomery** to look into the option of personalizing labels with individual company logos and assessor information.

**June 25, 2017 Long Beach Annual Meeting**

• **AI 3: Pratt** to work with Eley to create new EEM measure payback ranges for Stephen Roth.
• **AI 6: Methodology** to look at how to address Data Centers and using PUEs
• **AI 12: Committee** to add French and Spanish to the Web Portal after initial launch.

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### Meeting Minutes

1. **Call to Order** – **Meeting convened at 8:30am CST.** Quorum was established.

2. **Opening Remarks (Crowther)**
   a. Introductions
   b. Review of Agenda

3. **Old Business**
   a. Approval of minutes
      • October 16-17, 2017 Atlanta meeting (**bEQ_16-17Oct2017_Minutes.pdf**)
      • December 1, 2017 web meeting (**bEQ_1Dec2017_Web_MtgMinutes.pdf**)
   b. Review of **Action Items**

**Motion 1:** Nate Boyd moved and Bill Dean seconded that the committee approve the meeting minutes from the October 16-17, 2017 and the December 1, 2017 meetings of the committee

**Vote:** Motion passed by voice vote (5-0-0, CNV)

4. **Methodology Subcommittee Report**
   a. **Web Portal Update/Statistics**
      • The soft launch of the Portal was in mid-October to roughly 5000 people who had previously downloaded workbooks.
      • The hard launch was on December 13 to all ASHRAE members.
      • The Portal now has over 400 registered users and over 140 projects initiated.
      • There have been three new project submissions, all of which have been approved.
      • A school district in Florida has indicated plans to submit projects for 50 schools. Twelve projects in the district have been initiated so far.
• Statistics suggest that ASHRAE’s investment in this portal is going to pay off by making the tool very accessible.
• The As Designed Portal functionality will be beta tested by several volunteers

b. Parking Lot Items
• Charles Eley briefly reviewed items currently on the parking lot list for potential upgrades/improvements to the Portal.
• Several items have been quoted and the committee may wish to move on these in this Society year. These include:
  ▪ Copy Project Functionality to allow a submitted project to be copied for updating or comparison (i.e., “save as” functionality)
  ▪ Add to list of credentialed users to include additional credentials to the Portal. The full committee needs to discuss if additional credentials should be added and if so, what those might be.
  ▪ Language Translations
    □ A French translation has been completed by Hydro Quebec and would be required for the Portal to be utilized in Quebec or for any federally funded programs in Canada.
    □ A Spanish translation would be a helpful addition for the Central and South American markets.
    □ The committee discussed what methodology would be most appropriate for adding additional languages to the Portal. Two different options are being explored and a decision will be made in February in order to allow this to move forward this Society year.
  ▪ Climate Zone 0 to create the additional fields for new ASHRAE CZs 0A, 0B, 1A, and 1B. All of these fields would initially use the existing calculations for CZ1, but would be set up and ready to incorporate new calculations when available.
• Other features that require additional scope clarification include:
  ▪ Adding additional accordions for multiple meters (metered energy data)
  ▪ Creating/sending reminder messages for partially completed projects
  ▪ Adjusting the date format
  ▪ Auto calculation of HDD/CDD
  ▪ Updates to the Level 1 Energy Audit Spreadsheets Report
  ▪ Changes to the Energy End Use Information (Pie Chart Form)

c. Laboratory Buildings (Alison Farmer – I2SL) (Michael Hoffman – APPA)
• Bruce Hunn provided background on the efforts to date to identify laboratory data needed to create a new procedure for determining median EUIs for lab buildings
• Dan Doyle (I2SL) provide background on the creation and purpose of I2SL which has been around for about 20 years.
• Alison Farmer (I2SL) provide additional information about the I2Sl database:
  ▪ The benchmarking tool is a crowd sourced tool/database
  ▪ The database contains about 675 buildings
  ▪ A large data set is need in order to be able to chop that dataset into smaller blocks that represent different types of lab buildings
  ▪ About 40 buildings a year are added to the peer group data set
  ▪ The tool and data reside on an LBNL server.
  ▪ The data is owned by the original submitters of the data rather than by I2SL or LBNL.
  ▪ I2SL is looking to update the web interface for the tool/database.
  ▪ Key parameters include the type of lab, percentage of building that is lab space, ventilation requirements, climate zone, operating hours per week.
  ▪ Additional data is collected that is not publicly available in order to protect privacy
Charles Eley noted that Building EQ is trying to determine a new methodology for determining a baseline median EUI for lab buildings. The raw data from the database is needed to develop a regression analysis to create that methodology.

Alison Farmer and Bruce Hunn will be the main contacts for what is needed/requested from the database for the Portal.

Bill Klock and Hugh Crowther will work with Dan Doyle on how the I2SL and ASHRAE organizations can work together for mutual benefit.

d. Plug Loads for AD Rating
Charles Eley briefly reviewed the updates to the Building EQ plug load information on the COMNET website for the As Designed rating.

5. Business Development Subcommittee Report
   a. Advanced Level 1 Audit Report
      Ross Montgomery reported that a template has been created for this proposed report based on the requirements in Standard 211P. The subcommittee will follow this up with a sample report that can be used to quote the development cost for adding this to the portal.
      The subcommittee had also discussed the need to formalize relations with SSPC 211 as the committee moves towards setting up the Portal to be an electronic tool to assist in complying with Standard 211. Discussions with Standards Committee may also be appropriate.

   b. EEM Description Updates
      The Subcommittee is looking at the EEMs currently in the Portal in order to update them to reflect current auditing/design practice.
      The EEMs currently in the Portal are from Standard 100 Informative Annexes D and E.
      Pratt confirmed for the committee that the list of EEMs was not updated for the 2018 version of the Standard.
      SSPC 100 would be interested in receiving a copy of the updates once completed by the subcommittee.

   c. Coordination with GGAC
      The subcommittee would like to coordinate with GGAC for a pilot program focused on targeted municipalities. The plan is to create a small working group with member from both committees identify 3 to 5 areas to target over the next year. Nate Boyd and John Dunlap will represent Building EQ on this working group.
      The committee will next reach out to the leadership at GGAC to set up this working group.
      This pilot effort will provide an opportunity to learn what this market is looking for and how Building EQ can meet those needs. It will also provide insight into what the licensee program should address.
      One suggestion was to also consult with the Institute for Market Tranformation (IMT) to identify the best areas to target.

   d. Licensee Program Business Plan
      The subcommittee is also looking at how to target other large organizational customers and/or vertical markets such as utilities (Hydro Quebec), schools, hospitality, building owners (BOMA).

   e. As Designed full launch plan
      The hard launch for the As Designed rating is schedule for March 2018.
      It is not immediately obvious that there is a sellable value proposition for the As Designed rating. The committee is still working to develop to the additional value that this rating offers to the marketplace (beyond the rating score).
f. University Course Update
   • Michael Hoffman (APPA) reported that APPA is coordinating a pilot program for universities who will be implementing Building EQ in the near future.
   • The University of Arizona is one of those schools. They will either offer the course through the College of Architects or in the Architectural Engineering department.

6. New Business
   a. Report on liaison activity (Crowther/Klock)
      • Hugh Crowther and Bill Klock reported on their visits to GGAC, CTTC, Student Activities, and YEA meetings here in Chicago. The visits were intended to inform these different groups that the Building EQ Portal is available and to promote the benefits of the program.

   b. Brainstorming on how to get the message out to Grassroots / leverage the infrastructure / let them know about the product and how it applies to them and will make their life better.
      • First need to increase awareness.
      • A Journal cover story
      • Mini-session prior to the main program at chapter Meetings
      • Show the training video at the mini-sessions
      • Increase awareness of the training video – share on Social Media channels.
      • Feature the video or a presentation at CRC technical sessions
      • Explain the difference between In Operation and As Designed
      • Make sure that DL’s are fully up to speed on changes
      • Do a webinar for the DL’s – to train the trainers
      • Create a slide deck to use in GGAC training and a shorter deck for other presentations.
      • Include information in Standard 211 press releases that the Portal assists with Level 1 energy audits
      • Improve/updated PAOE points
      • Use DL presentations as an opportunity to recruit local Building EQ work and to tell local universities about the course.
      • Building EQ is very prominent on the home page of the ASHRAE web site and there is a Workshop about the Portal at this meeting.
      • Suggest a push notification on the workshop.
      • Find a way to reach Building Owners
      • Develop case studies.
      • Increase the number of people who can sell the program beyond just the DL’s, committee members, etc.
      • Engage young engineers (YEA) who quickly pick up on new things and are very good at sharing information
      • Utilize AASA
      • Circle back to USGBC regarding Building EQ as alternate path for energy points in LEED

Conclusions:
   • Put together a campaign to inform our grassroots organization about the capabilities of these tools and what they can do.
   • Include in that campaign: DL’s, journal article, chapter tech session, case studies, training power points/sessions (long/short), CRC content, social media.
   • Create a flow chart with specific deliverables: What trying to accomplish and who trying to reach?
   • Low handing fruit is to engage the grassroots organization and the APPA connection.
   • One key is going to be continuous touch (keep the message out there)
   • In parallel to other efforts, the committee also needs to think about what the members need to present this tool to the owners.
c. Budget Considerations
   • There is money left in this year’s budget that can be used to address some of the proposed Portal enhancements in the parking lot.
   • A top priority would be the translations, but the committee needs to understand the business case for other languages and determine the best way to undertake the task.

d. 1771-RP Research Project Update (Michael Deru) – Discussion deferred

e. Committee MOP development – Discussion deferred

f. Review of Price Sheet
   • Credentialing verification = $15 members, $25 non-members (BEAP/BEMP free)
   • Building EQ Performance Score Calculation = $0 all users
   • User Input Report - $0 all users
   • Label Report (barometer) = $0 credential users/approved submissions only
   • Plaque using Label Report artwork = TBD
   • Level 1 Audit Spreadsheets Report = $250 per approved submission/credentialed users
   • Disclosure Report = $200 per approved submission/credentialed users
   • Advanced Level 1 Audit report (narrative) = TBD (in development)

g. Funds for Promotional Travel
   • There is a need for monies to reimburse committee members transportation/travel to help publicize the tool.
   • There is some precedence for this within the Society as something similar was approved by Tech Council for the residential building committee (RBC).

h. Replacement for Shanta Tucker’s remaining term
   • Chris Balbach has been suggested to fulfill Shanta’s term. The committee agrees with this suggestion.

i. Proposed change to ROB (Attachment A)
   • Bill Klock presented proposed changes to the ROB to eliminate the council representation requirements which no longer seem to support the work of the committee.

Motion #2: Bill Klock moved and Bill Dean seconded that the committee recommend that SRC approve the proposed changes to the ROB as shown in Appendix A.
Vote: Motion passed by voice vote (6-0-0, CNV)

j. Registered Architects and other credentialed users – Discussion deferred

k. Approval/Acceptance of final Building EQ Portal

Motion #3: Bill Dean moved and Hywel Davies seconded that the committee approve the completion of the Building EQ Portal development project.
Vote: Motion passed by voice vote (6-0-0, CNV)

7. Adjourn – Meeting adjourned at 11:30am Central Standard Time
Attachment A – Proposed changes to Building EQ ROB

2.432 BUILDING ENERGY QUOTIENT COMMITTEE

2.432.001 SCOPE AND PURPOSE

This committee is responsible for the business planning, training and marketing of the programs of this enterprise. This committee has the overall responsibility to determine technical developments that are required to support these activities. This committee has the responsibility for directing the development of marketing programs to determined target audiences.

2.432.002 MEMBERSHIP

2.432.002.1 Composition
The members of this committee shall be as follows:
A. Eight (8) voting members, including a chair and a vice chair
B. Voting membership shall include one member representing each council and three (3) members at large.
C. Non-voting members include the coordinating officer and consultants as required.

2.432.002.2 Qualifications
A. Either the chair or vice chair shall be current or past members of the Board of Directors.
B. Council representatives shall be current or past members of the representative councils. Part of their role is to liaise with and report back to the respective councils.
C. Members-at-large should be considered for their broad business and marketing experience as well as required technical expertise to guide the development and support of the enterprise. Familiarity with the BEAP and BEMP certifications is also encouraged.
D. Consultants should be included for specific technical expertise as needed as well as their representation of building owners and/or government agencies.

2.432.002.3 Term of Service
The term of service for voting members is intended to be three (3) years, subject to ROB 3.300 Election and Appointment Procedures.

2.432.003 OPERATION

2.432.003.2 This committee is responsible for the operation of the BEQ enterprise as determined by the Board and for coordinating the activities of all three councils regarding the ASHRAE Building Labeling program.

2.432.003.3 This committee is responsible for the business planning, training and marketing of the programs of this enterprise. This committee has the overall responsibility to determine technical developments that are required to support these activities. This committee has the responsibility for directing the development of marketing programs to determined target audiences.