

Meeting Minutes  
ASHRAE 2017 Annual Meeting – Long Beach, CA  
**TC 7.1 Integrated Building Design**

**Scope:**

TC 7.1 is concerned with facilitating interaction among all building disciplines, from earliest concept development throughout the building life cycle, in order to achieve integration of design efforts and operation of the total building.

Attendees

Name	Affiliation
Michel Tardif	NRCAN
Elyse Malherek	The Weidt Group
Jason Atkisson	Affiliated Engineers
Mitchell Swann	MDC Systems
Chris Laughman	Mitsubishi Electric Research
Jamie Fine	Ryerson University
Joseph Chin	Western Allied Mechanical
Rachel Romero	NREL
Kevin Amende	MSU
Eric Haley	Baskervill
Joe Furman	Automated Logic
Ashish Rakhejo	Aeon Consultants

**Main Committee Meeting:** Monday, June 26, 2017 8:15-10:30 am Seaside Ballroom B ( LBCC-SS)

A. Call to Order – Tardif – 8:15 AM Call to order 8:22

- Discussion on the somewhat sketchy location of the meeting room
- Code of Ethics reminder - As members of ASHRAE or participants in ASHRAE committees, we pledge to act with honesty, fairness, courtesy, competence, integrity and respect for others in our conduct.

B. Approval of Minutes from Winter Meeting 2017 St-Louis Meeting – Tardif

- Quorum not achieved
- **Action: Tardif to send electronic ballot Done**

C. Roster Review- Tardif Elyse, Russell, and Jason will be voting member effective July 1<sup>st</sup>.

**Subcommittee Meetings:**

Noted that subcommittee meetings were held as conference calls prior to Long Beach Conference

D. Subcommittee Reports

1. Handbook – David Allen Michel spoke on David’s behalf.
  - a. There is core committee that meets monthly.
  - b. Once we finalize the updated draft, then we’ll post the draft to committees.
  - c. Anticipated schedule- Draft available next June 2018.

- d. Authoring.com - has track changes with the ability to accept or delete. Anyone on the TC can access, though they should only do so with the permission of handbook subcommittee members. The site is a bit quirky. Looks like only IE 10 and below seem to work. May have to talk to IT.
- 2. Research – Russell Taylor:
  - a. Rob Hitchcock asking for help BIM data proposal.
  - b. **ACTION: Russell to email Work Statement and corresponding comments to Michel for distribution to committee.**
  - c. **ACTION: Michel to send electronic ballot for sponsorship. Done**
- 3. Programs – Rachel Romero:
  - a. Conference call beforehand. Program in Long Beach.
  - b. Moving to quarterly meetings with potential for one before the August 1<sup>st</sup> deadline for Chicago seminars.
  - c. Long Beach meeting - Cosponsored a seminar on Wednesday 8-9:30 Seminar 48 – Achieving Net Zero: Design Strategies and Modeling Techniques. Check it out on the virtual conference if you missed it.
  - d. Proposal for session in Chicago in winter meeting.
    - i. Tracks don't really match our TC well, maybe modeling through the life cycle
    - ii. Panel or debate on Integrated Building Design or the Role of Integrated Building Design. In process of putting together abstract and objectives. Mitchell as a speaker. Possible architect speakers include Dusty Eaton or Steven Pope. Mitchell suggests owner or contractor as well. Contact 7.2 with Joe for possible cosponsorship. We should look for firms in the Chicago area. John Jones LaSalle or Rush Medical Center in Chicago.  
**ACTION: Rachel to reach out as needed to complete the seminar submission for Chicago. Done**
    - iii. Meeting discussions surrounded the role of energy modeling in integrated design and the potential improvements/design advances it can provide but also on the liability side of things. Where are the limitations of what an energy model can/should be? Leaders of discussion were Mitchell Swann and Jason Atkisson.
    - iv. Request for cosponsorship for a submission in Chicago. Tim Dwyer having seminar based on CIBSE (<http://www.cibse.org/>). CIBSE President Peter Wong theme is The Art of Healthy and Productive Buildings and that would be the seminar name. Speakers already established. The three speaker topics are High Performance Building Require High Performance Commissioning, The New Emergency Department at Nanaimo Regional General Hospital, and Delivering Net Zero Energy and Occupant Satisfaction.  
**ACTION: Michel to send the Speaker and Abstracts for committee review along with an electronic ballot. DONE**

- v. Request for cosponsorship for a submission in Chicago. Scott Hackel Seventh Wave has talked to track chair. Topic Performance based procurement. 3-4 speakers with at least one major building owner.  
**ACTION: Rachel Romero to obtain abstract and speaker list. Michel to distribute with electronic ballot. DONE**

#### 4. Special Publications – Gullledge

#### 5. Webmaster – Malherek

- a. Everyone should be on basecamp now.
- b. We have Basecamp 3.0 including the Campfire where you have informal conversations.
- c. Website up-to-date

#### E. TC 7.1 Liaisons to Other Committees:

- a. BIM MTG – Malherek
  - NIBS BIM Guide for Owners (NBGO) now available for free download. Published in November 2016 ([www.nibs.org/?nbgo](http://www.nibs.org/?nbgo))
- b. SPC 209 – Dobbs
  - Energy Simulation Aided Design
  - Process standard that sets minimum requirements for the use of building energy simulation in the design of new buildings.
  - Out for second public review
- c. Section 9: TC7.1 liaisons to the indicated TC of Section 9:
  - TC9.1 – Large Building Air Conditioning Systems -NONE
  - TC9.2 – Industrial Air Conditioning -NONE
  - TC9.4 – Justice Facilities - LeViseur
  - TC9.6 – Healthcare Facilities - Austin
  - TC9.7 – Educational Facilities - Atkinson (LeViseur as back-up)
  - TC9.8 – Large Building Air Conditioning Applications - Austin
  - TC9.9 – Data Centers - NONE
  - TC9.10 – Laboratory Systems - Atkinson
    - i. Busy on research.
    - ii. Lab Design guide out, working on next revisions
  - TC9.11 – Clean Spaces - Mitchell.
    - i. Working on clean room design guide. Probably voted out next meeting.
    - ii. Writing Energy Monograph.
    - iii. Finishing up Research Project on analysis of particle generation rates for clean room pharmaceuticals processes. Report out in two months. A table in fundamentals is likely.
    - iv. New Work Statement and research RTAR for same thing but in micro electronics.
  - TC 2.8 – Building Environmental Impacts and Sustainability
    - i. A guy came to 2.8 and said it would be good to have net-zero building guide. This is a hot topic and ASHRAE has a major stake in this market, so best to be on the forefront. The intent is “when I say net zero, this is

what it means.” This committee should actively engage in this topic with TC 2.8.

- ii. Paul Torcellini developing a net-zero AEDG for education
  - TC9.12 – Tall Buildings - NONE
- d. MTG-OBB-Tardif – Concurrent meeting, but they have a Research Topic Acceptance Request (RTAR) titled Explore and Quantify Behavior-Driven Building Energy.
  - Executive summary Building energy consumption is a systematic procedure comprehensively influenced not only by engineering technologies, but also cultural concept, occupant behavior, social equity, etc. Occupant behavior becomes one of the leading influencers of energy consumption in buildings. This project aims to explore, research and provide sustainable building design and operation decision support through understanding hidden driving mechanism of occupancy behavior within built environment, and quantifying their impacts on energy.
- e. SPC 205 – Standard Representation of Performance Simulation Data for HVAC&R and Other Facility Equipment
  - Standard transfer of energy modeling relevant data for HVAC equipment. First specification annexes to include chillers, fans, and unitary cooling equipment.
  - Voting out an Advisory Public Review soon if you want to review

2. ALI IBD Course – Gullledge – Not present

#### F. New Business

- 1. Fun conversation
  - a. Promise of performance - Mitchell - Do green buildings act as expected? What happens if they don't? Differences between energy modelers and ESCO providers. You pick features and systems based on their recommendations. Design contracts protect you from consequential damage. Since HPD building, energy use is potentially a reasonably foreseeable outcome. Both Swann and Atkisson had great example when energy modeling doesn't translate to the expected high performance building.
  - b. Spawn of EnergyPlus of LBNL, compatible with E+. More integrated. More dynamic models with the grid.  
<https://energy.gov/eere/buildings/downloads/spawn-energyplus-soep>
  - c. IEA 60 Integrated design for district - The objectives of Annex 60 are to develop and demonstrate next-generation computational tools that allow building and community energy grids to be designed and operated as integrated, robust, performance based systems. <http://iea-annex60.org/>

Adjourn at 9:30

G. Next Meeting: Monday, January 22, 2018, Chicago, IL