



TC 9.07 Vice Chair Melvin Glass called the meeting to order at 1:00 PM

AGENDA -

Vice Chair Melvin Glass opened the meeting in absence of Chair Dr. Maor with health travel restriction.

Roll call – A membership roster was reviewed and a sign-in sheet was passed around to the attendees. From the membership roster, it was determined a quorum was present of (6) voting members plus the chair were present, constituting a quorum of the (9) active voting members.

Introduction of Members and Guest – all attendees introduced themselves in name, and indicated their professional affiliation and status relative to committee affiliation. (14) members and guests were recognized. Post meeting start, (8) additional members and guest arrive with names recorded on the sign in sheet, constituting a total of (18) members and guest.

Agenda Review – Agenda items was emailed to members prior to meeting and made available to attendees

OLD BUSINESS

Las Vegas TC Meeting Review – General discussion of the success of Las Vegas meeting circulated among the group.

Prior minutes were provided prior to the membership prior to the meeting and reading of the minutes waived. Reading of the minutes was waived, with a motion by Hugh McMillan, second by Jason Atkisson to approve the minutes as written. Minutes were approved unanimously 6-0-0.

LIAISON REPORTS

TAC Section 9 Report – No report

Environmental Health – No report

Handbook – No report

Research - Carl Huber, Section 9.0 Research Liaison addressed the committee. Huber noted no research proposals have been received from TC 9.7. Vice Chair Glass noted an RTAR on low humidity study in educational facilities was submitted with 9.7 as a co-sponsor to TC 2.1. No other research topic have not been submitted at this time. Huber encouraged the committee to submit any research topics as there is a competitive pool at this time.

Dr. Dejan Mumovic of University College London discussed with the group some of his research studies that he has headed up or has been involved with regarding high performance school buildings. His research specifically addresses the indoor air quality issues of primary schools in Great Britain and



other European counties. Dr. Mumovic deferred additional discussion as he was included on the agenda prior.

Lou Kelter questioned whether the fresh air requirements prescribed in Standard 62 is too low for providing quality IAQ. Handwork agreed the low prescribed outdoor air quantity under Standard 62 could underserve buildings such as in high dew point regions of the country. Kelter noted most of the buildings he has been involved with is underserved typically, sometimes shorted for energy conservation. Atkisson noted the current Standard 62 requirement limits the outside airflow currently to around 12 cfm per person. The question is how can outdoor air be prescribed with a metric that is based upon the health and academic performance of the students/occupants. Mumovic noted the European studies show the direct correlation to performance of students relative to conditioned outside air.

Glass asked if a committee member would champion the writing of the RTAR proposal relative to the discussion of IAQ (minimum OSA) and performance of students. Kelter agreed to writing the draft RTAR proposal. Glass suggested the RTAR, and Atkisson supported by the ADEG for K-12 schools, the RTAR should look at climate zones. McMillan cautioned the minimum OSA requirement could compete with the 90.1 energy reduction goals.

Huber described the process and structure of RTAR request, and if the idea is not submitted, it remains as an idea only. When reviewed and approved, the RTAR will be advertised for research bid proposals.

Discussion agreed to have the draft RTAR ready for review of the committee at the Chicago meeting, with a review of the research committee following the Chicago meeting, hopefully prior to the Summer 2012 meeting (San Antonio). Kelter suggested the RTAR be shared electronically to ensure the RTAR is ready to move forward at the Chicago meeting. Atkisson suggested co-sponsorship to ensure success moving forward. General committee agreement was the Chicago meeting was a good target to review the RTAR proposal document.

Other TC's (reports)

2.1 - No Report

9.6 - No Report

SSPC 90.1 - Handwork made a report in the absence of Maor. Handwork reported no additional information from the Las Vegas meeting, which the 2010 version of 90.1 was released. Handwork reported the 2010 version achieved approximately 30% more efficiency compared to the 2004 version. The working plan goal for the 2013 version is to achieve 50% more efficiency over 2004 version. There was general discussion and questions if EUI's to be a metric for energy efficiency. Handwork reported ASHRAE Standard 100 is under re-write for existing buildings to be measured for efficiency relative to a specific EUI depending upon the building type.



SUBCOMMITTEE REPORTS

Subcommittee Reports and Business Activities

Membership Subcommittee Report

Roster Review and Update – Dawen Lu discussed the current membership status and the number of voting members rolling off the committee. Glass indicated he had report of members being added as voting members that will maintain the (12) voting members for the committee (requirement for active committee status).

Programs – Melvin Glass discussed the program tracks for the Chicago meeting, no programs were included for the Montreal meeting, although topics were submitted. Possible program topics for Chicago:

- Energy Modeling - Centralized Geothermal Modeling for LEED Gold Campus Housing, and Energy Modeling of Chilled Beams (Maor), Energy Modeling for ADEG for K-12 Schools
- Installation Maintenance and Operations - Continuous Commissioning (Texas A&M, University of Minnesota)
- Energy Efficiency - 1) Centralized Geothermal (Atkisson, and Setty); 2) Natural Ventilation of Educational Facilities (Frank Mills)

Possible Forum Topic - ADEG for Educational Facilities (K-12) and Net Zero Energy Facilities

Glass presented the tracks for the San Antonio meeting. Glass recommended Track 4 - Energy Modeling with a possible topic tying into BIM, Integrated Design with Energy Modeling. Glass also suggested a forum to support the prior discussed RTAR.

Lu also referred to prior committee suggestions of presenting case studies in education facilities.

After discussion, Glass recommended the seminars for case studies/presentations on the geothermal and commissioning / retro-commissioning be submitted for the Chicago meeting. The seminars will be under Installation Maintenance and Operations, the other under Energy Modeling. Glass also suggested the EPLUS energy modeling results for the 50% ADEG for K-12 facilities (John Murphy). Submittal deadline for Chicago meeting is August 12.

SUBCOMMITTEE REPORTS

Handbook Subcommittee Report – No report

Website and electronic communications – Glass reported the TC website has been semi-updated regarding the roster and other information. Mark Bender is the committee person for maintenance of the TC website.



ADEG - John Murphy provided an update for the K-12 Advanced Energy Design Guide. Since the Las Vegas meeting, the public viewing periods had been closed with several comments. The project is currently in the scope of a steering committee for review of the publication to be approved at the Montreal meeting, with publication targeted for October of 2012. Glass asked if a forum for the ADEG would be appropriate for the Chicago meeting. Sarah Matson advised a forum is usually targeted for ASHRAE members, but a presentation/seminar of how the 50% was achieved would be possibly more productive for the general public. The general discussion from the TC is a co-sponsor would be needed for a seminar track.

Dejan Mumovic, Collaboration between CIBSE School Design Group - Dr. Dejan Mumovic provided an introduction of the research currently being performed with CIBSE and the opportunity to partner with ASHRAE on education facilities. Some of the research topics are IAQ and energy use. Dr. Mumovic has indicated an interest to collaborate with TC 9.7 as a liaison for ASHRAE with CIBSE. Dr. Mumovic's prior discussion on the RTAR is very analogous to the current research being performed in Great Britain and Europe.

Matson and Glass recommended Dr. Mumovic consider participating on future ASHRAE conferences by submitting a conference paper, which is a minimum intensive effort. This would provide an avenue for himself and students to engage with ASHRAE.

Open discussion – Sarah Matson discussed with the group the Conference Committee are reviewing the presentation evaluations and provide feedback to the speakers for improving the presentation content and delivery. Seminar proposals are due August 12. Complete application is important for the seminar proposal to be considered. Sarah provided her contact information if any committee member needed assistance or had questions about the submittal process.

Next meeting - The next meeting will occur at Chicago in January 2012. The same day and time slot will be reserved. However, the committee was advised to check the final meeting day and time prior to arrival to the winter 2012 meeting.

Meeting was adjourned at 3:01 PM, motion made by McMillan, second by Handwork, unanimous approval.

END OF MINUTES.