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ASHRAE TC 6.7 – SOLAR ENERGY UTILIZATION Winter Meeting – January 15, 2002 Atlantic City, New Jersey

MEETING MINUTES

Meeting Called to Order: 1:10 PM

Attendees:

Henry Healey (VM)	- Chairman
Svein Morner (VM)	- Webmaster
Mark Hertel (VM)	- Handbook Subcommittee Chair
Brian Dougherty (VM)	- Acting Secretary
Tim Merrigan (CM)	- Vice Chair/Standards Subcommittee Chair
Dave Menicucci (CM)	- Sandia National Labs
Sandy Klein (CM)	- Univ. of Wisconsin
Charlie Cromer (CM)	- Florida Solar Energy Center
Bill Black (G)	- Sandia National Labs
Graeme Maidment (G)	- South Bank University, London
Harvey Stenger (G)	- Stenger Engineering
Andy Lowenstein (G)	- AILR
Dave Moulder (G)	- Univ. of Waterloo
Mike Collins (G)	- Univ. of Waterloo
Bill Rittelmann (G)	- IBACOS, Inc.
Bob Hresty (G)	- Solar Energy Corporation
Mark Owen (G)	- ASHRAE Handbook Editor
Mike Wassmer (G)	- Univ. of Colorado, Grad Student
Dennis Barley (G)	- NREL

Beginning at 1:30 PM, there was a quorum with 4 of 7 voting members present.

INTRODUCTIONS

The meeting was called to order by acting Chair, Tim Merrigan. The attendees made self-introductions and a sign-in sheet was circulated. Tim Merrigan presided for the first 20 minutes of the meeting. After his arrival at 1:30, Chairman Henry Healy presided. International voting member A. H. Malek was not present and did not count towards the quorum requirement.

Minutes from the April 2001 TC 6.7 meeting that was held in conjunction with the ASES/ASME Solar Forum 2001 conference were passed out at the meeting. Draft meeting notes from the June 2001 TC 6.7 meeting held during the ASHRAE Annual meeting in Cincinnati, Ohio were provided to Tim Merrigan. A quorum was achieved at the Solar Forum 2001 meeting, which was held in Washington DC, but not at the Cincinnati meeting. Acceptance of the April 2001 minutes was moved, seconded, and accepted (4-0-0 CV).

MEETING PLANING

Because of their similarly timed conferences, TC 6.7 voting members attend either the annual ASES/ASME/ASHRAE solar energy conference or the Annual ASHRAE meeting; a select few members attend

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both conferences. TC 6.7 sometimes chooses to hold a meeting at the solar energy conference if it is expected to be better attended by TC 6.7 members.

Tim Merrigan asked for possible attendees at the Reno solar energy and Honolulu ASHRAE Annual meetings. Three voting members are expected to attend the Honolulu meeting; two voting members are expected to attend the Reno meeting. Tim offered to check with the other remaining voting members to see if they may be attending either meeting.

MEMBERSHIP

Henry reviewed the latest roster from ASHRAE. Svein Morner offered to serve as the incoming TC 6.7 chair. Tim Merrigan agreed to convert to being a voting member and remain as the vice chair and standards subcommittee chair. Brian Dougherty will be the incoming secretary. Mark Hertel will continue as the handbook subcommittee chair. Henry will ask Paul Zeigler if he will consider continuing on as the research subcommittee chair. Henry Healy agreed to serve as the program subcommittee chair.

Bill Black and Harvey Stenger offered to join the committee as voting members. Charlie Cromer indicated that he would consider converting from a corresponding member to a voting member. Sandy Klein asked to be added to the technical committee as corresponding member.

Henry Healy asked whether the committee should consider an alternative meeting time in an effort to get better attendance. Henry indicated that he would explore with the ASHRAE staff member who handles meeting times to see what other alternative times are available. Henry asked for attendees to email him with information on alternative times when they would typically be available to meet.

TC 6.0 Section Head Art McIvor was recognized. Art indicated that all TCs are being asked to look at their handbook chapters. With the handbooks being published in a CD ROM version, ASHRAE has greater flexibility for adding tables or extra material that must be left out of the paper copy of the handbook. ASHRAE has contracted with a company to have web sites available for each TC by June 2002¹.

PROGRAMS AND EDUCATION

The proposed TC 6.7 program for Atlantic City, which was organized by Paul Zeigler, was not accepted. Henry Healy will contact Paul to see if the program should be resubmitted for consideration at another meeting.

Mark Hertel has received inquiries for the Honolulu meeting. Symposium paper possibilities include Steve Carpenter, HECO, Steven Strong, Danny Parker (Lakeland Low Energy House), and Michael McDermitt (who approached Henry).

Possible themes for future programs were suggested: (1) guidelines for evaluating passive solar applications relative to code compliance, (2) solar absorption case studies, and (3) reports from participants in the Solar Decathlon, which ends in October 2002. Graeme Maidment offered to provide a paper for the Chicago meeting. The Trane Company was suggested as a possible source of another solar cooling paper.

RESEARCH

The project monitoring subcommittee (PMSC) for research project 1109 voted to accept the final report with recommended editorial changes. Svein Morner moved that the technical committee accept the PMSC's recommendation. The motion passed. (4-0-0 CV).

¹ Note: Several months after the meeting, this target date was delayed.

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ASHRAE COMMUNICATION (Action Item)

Henry Healy informed the attendees that ASHRAE wants to improve its ability to answer technical questions submitted by ASHRAE members. With respect to TC 6.7's scope, Henry stated one question was: "Where can I find information on solar energy and solar heating equipment?" Henry provided a draft copy of the suggested response. The draft response provided information under the headings of "Quick Answer," "Long Answer," "ASHRAE Pubs," and "Topic References." The attendees recommended that the response include multiple web site links: FSEC, North Carolina Energy Center, University of Wisconsin (www.sel.me.wisc.edu), and DOE. Sandy Klein stated that Wisconsin is adding links for sites that are tailored to graduate school students. To the question of what links can be offered from the TC 6.7 web site, Svein Morner responded that he believes that ASHRAE will allow ".gov" and ".edu" links but their commercialism policy may prevent links to ".com" sites. The TC approved the draft response, as amended with the recommended web links (4-0-0, CV).

HANDBOOK

Subcommittee chair Mark Hertel stated that the ASHRAE Technical Advisory Committee (TAC) has asked that each TC complete a one-page survey. The survey seeks to gain information on what features are sought as part of their CD-ROM handbook chapters. The attendees collectively completed the survey as follows:

- 1) Links to other ASHRAE Handbook chapters – Yes
- 2) Multi-media components/sound – No
- 3) Interactive graphics – No
- 4) Spreadsheet/calculations – Yes
- 5) Database – Yes (for weather data; likely to be handled by TC 4.2's handbook chapter)

In instituting such features, the TCs will have to make some assumptions as to the users computer software (browser, MS Excel, etc.). Including links in an electronic handbook chapter should be done with caution due to links changing over time. Handbook chapters should seek to be self-contained.

Mark noted that he made a presentation at his local ASHRAE chapter and then requested feedback from attendees. Mark received the consistent comment that the handbook chapters are too confusing.

Applications Handbook chapter 32, "Solar Energy Use," must be completed and approved by July 1, 2002. An email ballot may be required if we lack a quorum in Honolulu. Mark Hertel went over his proposed reorganization of the chapter. Within a month, Mark would like consensus on the proposed reordering.

Chapters for the HVAC Systems and Equipment Handbook are due by the Kansas City meeting (June 2003). Erv Bailes performed a fairly major rewrite that last time around. Suggested reviewers were cited: Sandy Klein, Maurice "Bud" Wildin, Erv Bales (passive solar), Charlie Cromer and Jerry Venture (photovoltaics), and NREL's Bill Marion (quality and quantity of solar energy).

The TC plans to hold handbook subcommittee meetings at both the Honolulu and the Chicago meetings.

STANDARDS

The ASHRAE Standards committee seeks to identify which of its standards are referenced in the different building codes. With regard to standards for which TC 6.7 is cognizant, the following information was compiled at the meeting:

- 1) ASHRAE Standard 95 is used in IATMO. IATMO is going to reference SRCC SRG 0300.
- 2) ASHRAE Standards 93 and 95 are used by SRCC.

Standards subcommittee chair Tim Merrigan distributed a subcommittee report. Updates were provided on Standards 93, 95, 96, 109, and 125. All items were informative; no actions items were identified at the meeting.

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The meeting was adjourned at 3:25 pm.

Respectfully submitted by Brian Dougherty