



**ASHRAE**

American Society of Heating, Refrigerating and Air-Conditioning Engineers

Inc.

1791 Tullie Circle, NE • Atlanta, Georgia 30329-2305 ☎ 404-636-8400 • Fax 404-321-5478

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These minutes were approved as the official record during the 06-Jun-2013 teleconference.

## **ASHRAE MTG Alternative Lower GWP Refrigerants Winter Meeting, 26 January 2013 (Dallas, TX)**

### **Call to Order & Introductions**

Omar called the meeting to order at 6:05. He then read the title, purpose and scope of the MTG. The scope is copied below for reference.

This MTG is established to coordinate TC/TG/TRG technical activities to help transition the HVAC&R industry to sustainable lower Global Warming Potential (GWP) alternative refrigerants. The MTG will further request participation from US EPA and AHRI. The MTG responsibilities include suggestions for research, development and presentation of technical programs of all types on alternative lower GWP refrigerants, suggestions for Life Cycle Climate Performance (LCCP) systems evaluation for different applications, development of lower GWP solutions for different applications, and a special publication detailing aspects of LCCP applied to the HVAC&R fields.

### **Confirmation of quorum**

Voting members present:

Omar Abdelaziz (TC 1.3), Vikrant Aute (TC 8.4), Brian Fricke (TC 10.7), Yunho Hwang (IIR)  
Joseph Karnaz (TC 3.4), Justin Kauffman (TC 8.5), Debra Kennoy (SSPC34)  
Barbara Minor (TC 3.1), Mark Spatz (TC 8.11), Xudong Wang (AHRI)

Members absent:

David Godwin (TC 2.5), Phillip Johnson (TC 8.2), Samuel Sami (TC 1.1/8.10)  
Douglas Scott (TC 10.1), Sonny Sundaresan (TC 3.2)

Ten of fifteen voting members present, so the quorum was established.

### **Review Roster**

Vikrant is looking for interested members from TCs 1.5 (Computer Applications) and 4.1 (Load Calculation Data and Procedures).

### **Section Head, Liaisons and Visitor Comments**

No liaisons present.

### **Approval of the Minutes from November 2012**

Joe Karnaz moved to approve the minutes as amended by Omar. Vikrant Aute seconded the motion. The motion passed by a vote of nine for, none opposed, chair not-voting (9-0-1).

### **Chairman's report**

Omar noted that the MTG was not listed as a co-sponsor for any of the Low GWP related programs in Dallas. He requested that members involved in related programs should request co-sponsorship from the MTG in the future.

The MTG does not have its own website; rather it is maintained by ASHRAE staff. Information may be provided to Mike Vaughn ([mvaughn@ashrae.net](mailto:mvaughn@ashrae.net)) to be updated on the [MTG website](#).

Omar will talk with Mike Vaughn about a call for interested members from other technical committees, while trying to ensure that the committee does not become so large that it is unmanageable or difficult to obtain a quorum.

Omar received an email from the AIRAH requesting feedback from the MTG related to a recent publication regarding low GWP refrigerants. Joe Karnaz and Barbara Minor were most familiar with the document and suggested that the document is a summary of the status of low GWP fluids, not expressing opinions about the goodness of one fluid versus another. It was suggested that the timeline for feedback was too tight for full committee review and comment, so individual members should make their own comments outside of the MTG committee.

### **Program Report (V. Aute)**

Following up on the November meeting, the MTG has one seminar in Dallas with TC 3.1 co-sponsorship, titled "Industry-Wide Efforts to Evaluate Lower GWP Refrigerants." Barbara is chairing the seminar with Xudong and Omar presenting.

The second seminar proposed for Dallas was not approved. It was titled LCCP Methodologies..., and included four presenters including Bill Hill, Zhang Xiuping from HGMRI, Vikrant, and either Brian Fricke or Omar. Mark Spatz moved to resubmit the seminar for Denver. Barbara Minor seconded. The motion passed by a vote of nine for, none opposed, chair not voting (9-0-1).

A topic discussed in the past related to the AHRI AREP program. Xudong stated that AHRI is willing to present an overview of the program and its status. Xudong suggested that it would be more appropriate to allow the test companies the opportunity to present their reports or results. It was suggested that the committee seek out presenters from respective TCs to present a seminar titled "Performance Testing of Lower GWP Refrigerants." Committee members will solicit presenters during the remainder of the ASHRAE meeting and will refer those interested to Ken Schultz, who agreed to chair the session. Yunho Hwang moved to submit this seminar for Denver and Barbara Minor seconded. The motion passed by a vote of nine for, none opposed, chair not voting.

The deadline for submission of seminars and forums for Denver is 11 February 2013, so the committee will need to conduct a letter ballot in the first week of February to finalize the submissions.

Finally, Joe Karnaz moved to submit a conference paper session for New York titled "Performance Testing of Lower GWP Refrigerants," as a follow-up to the seminar presentation proposed for Denver. Mark Spatz seconded. The motion passed by a vote of nine for, none opposed, chair not voting.

The deadline for New York conference paper abstract submission is 15 March 2013, with final conference papers due 2 July 2013.

### **Research Report (B. Minor)**

[RP-1580](#), "Study of the Input Parameters for Risk Assessment of 2L Flammable Refrigerants in Residential Air Conditioning and Small Commercial Refrigeration Applications," is complete.

[RP-1583](#), "Assessment of Burning Velocity Test Methods" is complete.

RP-1584, “Assessment of Alternative Approaches to Predicting the Burning Velocity of a Refrigerant,” has an initial draft of the final report, but it still requires some editing.

[AHRI-8004](#), “Risk Assessment of Residential Heat Pump Systems Using 2L Flammable Refrigerants” is complete.

[AHRI Low-GWP Alternative Refrigerants Evaluation Program](#) (AREP), Xudong is presenting a summary of current status on Monday at 11AM.

As research chair of TC 3.1, Barbara requested input for any future refrigerant related research ideas.

Omar requested that equipment TCs begin generating RTARs to continue to push research on Low GWP refrigerants. Ken Schultz noted that he expects an RTAR from TC 8.5 regarding heat exchanger performance with alternative refrigerants.

#### **Membership Report (V. Aute)**

Vikrant had no updates regarding the roster, other than those mentioned in Roster update above.

#### **Web Site Report (K. Schultz)**

Ken echoed Omar’s comments regarding the MTG website. Meeting agendas and minutes will be provided to Mike Vaughn to update the MTG website.

#### **AHRI AREP Updates (X. Wang)**

More than two-thirds of tests are complete. Twenty-four reports have been submitted and twelve have been approved. Nine have been posted to the [AHRI AREP website](#), while others remain under revision.

#### **IIR LCCP Working Party Updates (Y. Hwang)**

The IIR LCCP working party was formed in 2012 and has had two meetings thus far; one at Delft and the other at the ASHRAE/NIST 2012 Refrigerant Conference. The working party is tasked with assessing the merits of different methods for evaluating the LCCP for refrigerants systems’ environmental impact of refrigerants and to produce implementation protocols for these methods for use by decision makers and refrigeration stakeholders. Yunho suggested that the working party is still looking for members. The next meeting is 18 June 2013 in Delft and the following meeting may be coincident with the ASHRAE winter meeting in New York in January, 2014.

#### **Old Business**

Future meetings at ASHRAE will be scheduled from 5-6 PM to be within official ASHRAE schedule.

#### **New Business**

None.

#### **Scheduling Next Meeting**

The MTG will conduct a letter ballot finalizing programs before the 11 February seminar submission deadline for Denver. The next teleconference is planned for the first week of March.

#### **Adjourn.**

Justin Kauffman moved to adjourn. Yunho Hwang seconded. The motion passed by unanimously. The meeting adjourned at 7:25 PM.