



The Razorback Report

www.arkansasashrae.org

Volume XXIII, Issue 4, December 2011

Arkansas Chapter Newsletter for the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

DECEMBER MEETING

Central Arkansas

Date: Wednesday, December 7

Location: Camp Aldersgate

Cost: \$20

Schedule:

10:30a.m. Board Meeting

11:30a.m. Lunch / Technical Session

12:00-1:00p.m. Program

Northwest Arkansas

Date: Thursday, December 8

Location: AQ Chicken—Springdale

Cost: Free (lunch extra)

Schedule:

11:30a.m. Lunch

12:00-1:00p.m. Program

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THE PRESIDENT'S MESSAGE

By Bill Simpson

Hopefully the December newsletter finds everyone rested from an enjoyable Thanksgiving holiday. In the spirit of the recently passed holiday, I wanted to take a moment to thank all of the Arkansas ASHRAE officers and committee members for working hard to deliver value to the chapter members and make this year another successful year for our chapter. I hope everyone has found the benefits of the leadership's labors. Thanks also go to all of you who continue to support those efforts.

At the risk of sounding like a broken record, I am especially excited about our program this month. We are very privileged to host society President Ron Jarnagin in December. President Jarnagin will be presenting his presidential message "Lead to Sustain". Ron is taking time out of his busy travel schedule this year to come to our chapter. The most impressive part is that as a former running back for the LSU Tigers, Ron committed to coming to visit us even before he earned back his bragging rights in the rivalry game last week. Come show Ron the resilient Razorback spirit.

This month is also student month at our Central Arkansas branch meeting. As such we will have students from UALR present results of a study they did as ASHE interns for our tech session. We will also be honoring Boyd King of ATU for earning the National High School ASHRAE Scholarship. Keep in mind that our chapter also awards generous scholarships each year to selected student members, so if you know engineering minded students who might benefit from such a scholarship, have them contact

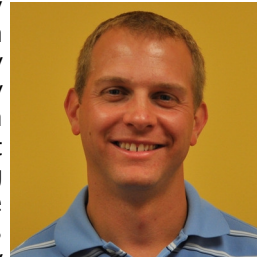
Forrest Moseley, our Student Activities Committee Chair, soon to apply.

A handful of members benefited from our November continuing education session on Robert's Rules of Order. Those who attended learned the fundamentals of running effective meetings, the role of the presiding officers in a meeting and basic parliamentary procedures and terms. I'm confident one of the products of the continuing education session will include a better run ASHRAE chapter.

We have also had a very active Young Engineers in ASHRAE (YEA) committee this year having had our third social event in as many months. The term active is especially fitting for the November paintball outing though I think bumps and bruises were kept to a minimum. Thanks to Caleb Haynes and Lindsey Brackett for heading up the efforts of this committee.

Lastly, it's not too early to sign up for the ASHRAE Winter Meeting in Chicago coming up January 21-25. At the winter conference, members have the chance to discuss and examine the latest topics in the building industry such as high performing buildings and integrated design as well as participate in technical tours, attend ASHRAE Learning Institute courses, earn professional credits and obtain ASHRAE certifications. The AHR Expo will also take place in conjunction with the conference. If you elect to attend, don't forget about the Region VIII dinner on Monday night. Other highlights include the President's Luncheon featuring our guest this month, President Jarnagin,

(Continued on page 3)



MONTH	MEETING TOPIC	SPEAKER	SECTION	DATE	LOCATION	MEETING DESIGNATION
SEPT	Bio-renewable Fuels	Tim Gorman	Central	09.07.11	Camp Aldersgate	Sustainability
			NWA	09.08.11	AQ Chicken	
OCT	Public Service Commission	John Bethel	Central	10.12.11	Camp Aldersgate	TBA
	ASHE Energy Survey for Hospitals	Clark Reed	NWA	10.14.11	Washington Regional Medical Center	Joint Meeting with ASHE
NOV	UV-C for Controlling Mold in AHUs	Dean Saputa	Central	11.02.11	Camp Aldersgate	Indoor Air Quality / Membership Promotion
			NWA	11.03.11	AQ Chicken	
DEC	Sustaining ASHRAE Through Leadership	Ron Jarnagin	Central	12.07.11	Camp Aldersgate	Student Meeting
			NWA	12.08.11	AQ Chicken	
JAN	NEBB Educational & Training Outreach	Tom Hanlon	Central	01.04.12	Camp Aldersgate	Continuing Education
			NWA	01.05.12	AQ Chicken	
FEB	Basic Steam Engineering Principles	Jon Lye	Central	02.01.12	Camp Aldersgate	TBA
			NWA	02.02.12	AQ Chicken	
MAR	Energy Dashboards	Phil Smith	Central	03.07.12	Camp Aldersgate	TBA
			NWA	03.08.12	AQ Chicken	
APR	ASHRAE 62.1/90.1 Update	Hamid Habibi	Central	04.04.12	Camp Aldersgate	TBA
			NWA	04.05.12	AQ Chicken	
MAY	Past President's Night	N/A	Central	TBA	TBA	Past Presidents Recognition
			NWA	N/A	N/A	

ARKANSAS CHAPTER MEETING MINUTES

Board Meeting of November 2, 2011

Mark Mizell—Secretary

Members Present: Steve Keen (Research Promotion, Delegate), Russell Black (Board of Governors), Bill Goodman (Board of Governors), Jim Pitts (Board of Governors), Bill Simpson (President, Alternate), Mike Fullerton (President-elect, CTTC Chair), Mark Mizell (Secretary), Forrest Mosely (Student Activities Chair), Caleb Haynes (YEA Chair), Lindsey Brackett (YEA Co-Chair), Terry Jacks (Membership Promotion), Lee Greeson (Newsletter Editor), Robin Sipes (Electronic Communications Chair), Mark Eley (Reception), Jake Skinner (Historian), Tom Hanlon (TEGA Chair)

Call to Order: 10:30 a.m.

President's Report—Bill Simpson:

- PAOE points are looking good so far. Keep up the good work.
- One MBO is still outstanding.

President-elect / CTTC Report—Mike

Fullerton:

- Seven people have signed up for the Parliamentary procedure training.
- Tom Hanlon has agreed to serve as TEGA chair.
- Need ideas for a submission for a refrigeration award.
- Society President Ron Jarnigan will be the speaker for December.

Treasurer's Report—Mike Fullerton and Bill Simpson (for Marlon Joiner):

Treasurer's Report/Budget tabled to next month for approval.

- The accounting line item in the budget has been increased by \$100.
- The accountant has all the paperwork for preparing taxes.
- Marlon and Chris Ahne have

(Continued on page 4)

PRESIDENT'S MESSAGE

(Continued from page 1)

as well as the Welcome Party, YEA hospitality suite and Members' Night Out.

Look forward to seeing everybody at the meeting. Best wishes to everyone for the holiday season. ☼

TECHNOLOGY AWARD APPLICATIONS

Michael Fullerton—CTTC Chair

Do you have a project that might qualify for a technology award? The technology awards are broken into 6 main categories. The categories are as follows: Commercial Buildings, Institutional Buildings, Health Care Facilities, Industrial Facilities, Public Assembly, and Residential. Submitting an award on behalf of one of your clients is a great way to gain publicity for you and the owner. If you have a project that you would like to submit, please contact either Tom Hanlon or Michael Fullerton at 501-666-6776. A copy of the application form is attached to this newsletter. Feel free to use me as a resource for filing the application. Let's make this year the best year for ASHRAE technology awards.

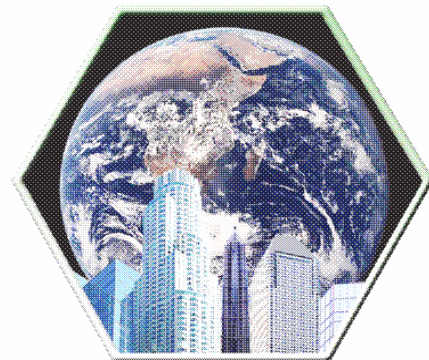
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MEMBERSHIP PROMOTION

Terry Jacks—Chair

I'd like to welcome our newest members: **Joshua Brackett, Amanda House and Christopher Ray**, of Little Rock, **Travis Collyar** of Alma, and **Marshall Rucker** of Springdale.

Also welcome to our newest student members: **Andrew Arnold, Jason Barth-Heckler, Thomas Brown, Rakeem Couch, Jasmine Dozier, Charles Epperson, Marshall Jackson, Knameron Jones, DeAnn Robinson and Odbayar Ulziibuyan** of Little Rock, **David Bednar, Samuel Clark, Adam Jones, Michael Mace, William Moran, Ryan Ohl, Dakota Scrivener, Kyle Temple and Kurt Thompson** of Fayetteville, **Chase Berg** of Lonoke, **Shawn Briggs** of Greenbrier, **Adam Cathey** of Heber Springs, **Jones Clemons and Michael Nauman** of North Little Rock, **John Fritschen and Talmage Rosel** of Austin, **David Fulham** of Russellville, **Jeff Hatton, John Kelley Jr. and Cesar Murillo** of Sherwood, **Joshua Johnson** of Bryant, **Hector Loya** of Conway, **Blake McCallie** of Arkansas City, **Thomas Navarro** of Springdale, **Shane Skinner** of Alexander, **Blake Sullivan** of Hensley, **Christopher Terry** of Jacksonville, **Andrew Tilley** of Benton, and **Quinton Wade** of Pine Bluff. I applaud you for your interest in the HVAC&R field and look forward to seeing you at our December meeting!

I would also like to recognize two members who transferred into the Arkansas chapter this past month: **Tim Gorman** and **David Robertson Jr.** of Little Rock.

Finally, I would like to acknowledge members whose service to ASHRAE has allowed them to advance their membership to full ASHRAE Member status: **Shawn Haves, Steve McConnell** and **Bill Simpson** of Little Rock, of Little Rock, and **Phillip Pate** of North Little Rock.

We have a strong chapter, and additional members will help to make us even stronger. ASHRAE offers invaluable resources to design engineers, contractors, and owners alike, and everyone that attends meetings is encouraged to seek membership to aid in strengthening our chapter. As always, if you have any questions pertaining to membership, please contact me and I'll be happy to assist you.

MEETING MINUTES

(Continued from page 3)

been coordinating the items necessary for the Auditing Committee to perform an audit.

Secretary Report—Mark Mizell:

- The previous meeting's minutes were posted in the last newsletter.
- October minutes approved (Greeson motion, Fullerton second).

Board of Governors Report:

Russell Black:

- Parliamentary procedure training is a go for November 15, 16 and 17. 6:00 -7:30 each night. Three separate sessions (not one repeated). \$50/person covering all three sessions.

Social Chair Report—Steve Keen (for Tony DeMarco):

- There will be a poker tournament after Thanksgiving.

Student Activities Report—Forrest Mosely:

- Forrest met with the ASU student chapter and toured the Ritter Communications Building which is going for LEED Gold certification. The tour took place before the ceilings were up, so the students got to see a lot of HVAC design come to fruition.
- Loren Cook tour will be in the spring.
- 25 student applications have been received from UALR.
- Two UALR students will be presenting for the Tech Session in December.

Membership Promotion Report—Terry Jacks:

- November is Membership Promotion Month. An eight-minute video will be shown for the technical session.
- Terry and Mark Eley are working on streamlining the

chapter roster.

- Terry is working on a list of members that could advance in membership status (associate to full member).

Electronic Communications Report—Robin Sipes:

- PDH certificate link is on the website.
- Need more events on the calendar.

YEA Report—Caleb Haynes:

- Paintball will be Sunday, November 6th at Paintball Arkansas in Mayflower.

Historian Report—Jake Skinner:

- A few history PAOE points have been entered.
- Working on gathering history-related documents from past historians. Will digitize.

Newsletter Report—Lee Greeson:

- Newsletter article deadline will be November 25th.

Research Promotion Report—Steve Keen:

- Still need Full Circle contributions. Deadline is November 15.

Adjourn: 11:15 a.m.

Chapter Meeting Minutes:

Open: 11:30 a.m.

Terry Jacks introduced three new members and showed Society's "Sustaining through Leadership" video.

Caleb Haynes announced the paintball outing.

Bill Simpson announced the Parliamentary procedure training sessions.

Sam Cummings recognized Dr. Wayne Helmer for receiving the E.K. Campbell Award from Society.

Mike Fullerton introduced the speaker, Dean Saputa from UV Resources, who made a presentation on ultraviolet radiation to control mold and other biological elements.

Adjourn: 12:50 p.m. ☼



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ASU ASHRAE STUDENT BRANCH NEWS: TECHNICAL TOUR FOR LEED-PURSUING BUILDING IN JONESBORO

Dr. Kwangkook Jeong—ASU ASHRAE Student Chapter Advisor

On October 31, the Arkansas State University ASHRAE Student Branch had a technical tour at the Ritter Communications building which is being constructed in Jonesboro and is pursuing LEED (Leadership in Energy and Environmental Design) certification. The objective of the tour was to expose students to actual HVAC systems and obtain hands-on experience for application of engineering principles regarding fluid and thermal energy systems. Students learned many aspects about HVAC systems including design, construction, piping systems, mechanical components, LEED, energy and environmental considerations, and efficiency, etc.

A total of 10 students at ASU ASHRAE Student Branch participated in the tour with the guidance of ASU ASHRAE Student Branch Advisor, Dr. Kwangkook Jeong, Arkansas ASHRAE Student Officer, Mr. Forrest Moseley and Mr. Jeff Herren with Brackett and Krennetich Architects. ASU ASHRAE Student Branch gratefully acknowledges Brackett and Krennetich Architects and Arkansas ASHRAE for providing them a great opportunity for the informative tour.

The Ritter Communications building has applied sustainable technology such as geothermal water source heat pump system to the HVAC system and will be LEED certified the U.S. Green Building Council in 2012. ASU ASHRAE Student Branch currently has 20 members on campus and seeks to encourage and support creative and competitive HVAC engineers.



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2012 WINTER CONFERENCE: ASHRAE TECH PROGRAM FOCUSES ON CURRENT PRACTICES

ATLANTA - Current practices related to hot industry topics, such as energy modeling, high performance buildings and integrated design, are featured in the Technical Program at ASHRAE's 2012 Winter Conference.

The 2012 Winter Conference takes place Jan. 21-25, Palmer House Hilton, Chicago. The ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Expo(r), held in conjunction with the Winter Conference, will run Jan. 23-25 at McCormick Place.

"The 102 sessions in the Technical Program provide attendees the information they need to stay competitive and educated in today's market," Dennis Wessel, chair of ASHRAE's Conferences and Expositions Committee, said. "The program features 10 program tracks that provide plenty of case study and current-practice sessions on a wide range of pertinent subjects that provide insight into how to do a job better or more efficient."

The technical program features more than 100 programs by nearly 300 speakers with tracks on Energy Efficiency - New Applications and Technology; Energy Modeling Applications; High Performance Buildings; HVAC&R Fundamentals and Applications; HVAC&R System and Equipment; Installation, Operation and Maintenance of HVAC Systems; Integrated Design; Professional Skills; Refrigeration; and Specialized Applications - Healthcare, Laboratories and Data Centers.

As an added benefit, there is a new "mini-conference" on Installation, Operation & Maintenance of HVAC Systems built within the Technical Program. The O&M mini-conference is scheduled on Sunday and Monday.

ASHRAE is also offering a free Conference session at the Expo. This session brings to AHR Expo attendees a program that advances their knowledge on a particular topic. This session is titled "Selection, Operation and Maintenance and Water Treatment for Multi-Metal Boilers" and takes place Monday, Jan. 23, 3 p.m.-4:30 p.m., S106A, McCormick Place. No badge or ticket is required to attend.

In total, the program includes nine technical paper sessions, 31 conference paper sessions and a poster session - 54 application-oriented, non-paper seminars and eight open discussion forums.

Highlights of the Technical Program include:

Energy Efficiency track: "DOAS Parallel Systems, Configuration and Control" and "Case Studies: New Equipment and Applications"

Energy Modeling Applications track: "Integrated Multi-domain Simulations for Innovative Building Design and Operation"

High Performance Buildings track: "Advanced Control and Diagnostic Techniques for Efficient Operation of High Performance Buildings," "UK Perspectives on Incentives for Technologies to Reduce Energy Use," "Thermal Displacement Ventilation Applications for High Performance Buildings"

HVAC&R Fundamentals and Applications track: "How to Specify Seismic Certification," "Loads on the Move: Mobile Apps"

HVAC&R Systems and Equipment track: "Chicago Smackdown: Air-Source vs. Ground Source or Best Practices for Air-Source vs. Ground-Source Heat Pump Systems," "Water-Cooled VRF Systems: An Introduction," "Back to Basics: Selection of Proper Chiller Technology"

Integrated Design track: "Streamlining BIM through Open Information Exchanges," "Advancing the 'I' in BIM"

Professional Skills track: "Protecting Your Design Against Changing Requirements," "Increase the Impact of Your Presentation"

Refrigeration track: "Industrial Refrigeration Worst Practices," "Magneto-Caloric Refrigeration: Are You Attracted to Cool Ideas?," "Advancements and Trends in Low Global Warming Impact Technologies"

Specialized Applications - Healthcare, Laboratories, and Data Centers track: "Optimizing Cleanrooms for High Performance, Energy Reduction and Sustainability," "Liquid Cooling Technologies to Enable High Density and Improve Energy Efficiency of Information Technology Data Center Facilities"

The full Technical Program offers the opportunity to earn a year's worth of PDHs, NY PDHs, AIA LUs and LEED(r) AP credits.

For more information on the ASHRAE Conference, visit www.ashrae.org/chicago. For more information on the AHR Expo, visit www.ahrexpo.com.

The Chicago Virtual Conference is included with a paid Conference registration-comp and single day registration excluded-and includes on-demand access to all speakers' audio presentations synced to their presentations. Attendees and speakers can post comments on the presentations for a two-week period following the completion of the Conference. Those not attending the Chicago Winter Conference in person may register for the Virtual Conference only. Register at www.ashrae.org/chicagovirtual.

FUTURE ASHRAE MEETINGS:

2012 ASHRAE Winter Conference
January 21—25
Chicago, IL

2012 ASHRAE Annual Conference
June 23—27
San Antonio, TX

The Razorback Report is published monthly by the Arkansas Chapter of ASHRAE. Statements made in this publication are not expressions of the Society or of the chapter and may not be reproduced without special permission from the chapter.

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THE RAZORBACK REPORT

ARKANSAS CHAPTER OF ASHRAE
P.O. Box 180
LITTLE ROCK, AR 72203

April 19, 2012/1:00 PM–4:00 PM EDT

Dedicated Outdoor Air Systems:
A Path to Balancing Energy and IEQ

www.ashrae.org/doaswebcast





ASHRAE
CHAPTER/REGIONAL TECHNOLOGY AWARD APPLICATION
SHORT FORM

(Revised June 2011)

INTRODUCTION:

*This Short Form has been developed to stimulate more participation in chapter and regional competition. **This form is not intended to replace the full Society Technology Award Application form.** Regional winners using the short form will be required to complete the full Technology Award Application form before their applications can be forwarded for Society Competition. (This form does not require extensive narrative, plans or photographs.)*

INSTRUCTIONS:

- A. The individual submitting the Technology Award Application must be a current member of ASHRAE who had a significant role in the design or development of the project.
- B. Complete the "Short Form" and use it as the cover page.
- C. Provide a system schematic/diagram not larger than 11" x 17" in size. In addition, attach a brief narrative (maximum of 2 pages). The narrative should include the gross and net building areas applicable to the project, a description of the major building areas (i.e., operating rooms, laboratories, computer rooms, industrial processes, offices, warehouses) and a brief discussion regarding the following five criteria (if a criterion is not applicable, state accordingly):
 - Energy Efficiency
 - Indoor Air Quality
 - Innovation
 - Operation & Maintenance
 - Cost Effectiveness
 - Environmental Impact
- D. Submit your schematic, brief narrative, and completed form to your Chapter Technology Committee Chapter (CTTC) Chair for judging at the chapter level in accordance with their instructions.
- E.

The ASHRAE Technology Award program is intended for built projects. First place winning projects should be eligible for submission to the Society level competition on September 1st of the following Society calendar year. Therefore, a project submitted to a Chapter or Regional competition shall be occupied prior to September 1st of the current Society year in order to satisfy the preceding Society level competition requirement of one full year of occupancy.

First place winners in each category from chapter competition will be submitted by the CTTC Chapter Chair to the CTTC Regional Vice Chair for judging in the Regional Technology Awards competition. At the discretion of the CTTC Regional Vice Chair, this may require completion of the full Society Technology Award Application form if the chapter submission was done on the Short Form Application.

The CTTC Regional Vice Chair will invite first place winners in each category from regional competition to submit them for judging in the Society level Technology Awards competition. The regional winners will be given the opportunity to incorporate new information or otherwise improve their submittal before submitting it to the society level competition (e.g., by addressing comments from regional judges). At the discretion of the judging panels at the chapter and regional competitions, more than one first place winner may be awarded in each category.

For the regional competition, submit the number of copies requested by the Regional CTTC Vice Chair. The CTTC Regional Vice Chair may require entries into the regional competition to be done on the full Society Technology Award Application form. In any case, all submissions to the Society level competition must be done on the full Society Technology Award Application form.

- F. It is highly recommended that each entrant confirm by letter (and retain a copy for record) to the owner that the owner has granted permission to submit this project to competition.

NOTE: ASHRAE Technology Awards are the HVAC&R industry's most prestigious honor for efficient energy use in buildings and environmental system performance. While the awards do not certify responsible charge or professional license status, they do recognize outstanding design innovation and successful implementation.

CHAPTER/REGIONAL TECHNOLOGY AWARD - SHORT FORM

1. Category (Check one and indicate New or Existing, if applicable)

☐ Commercial Buildings ☐ New or ☐ Existing

Institutional Buildings:

☐ Educational Facilities ☐ New or ☐ Existing

☐ Other Institutional ☐ New or ☐ Existing

☐ Health Care Facilities ☐ New or ☐ Existing

☐ Industrial Facilities or Processes ☐ New or ☐ Existing

☐ Public Assembly ☐ New or ☐ Existing

☐ Residential (Single and Multi-Family)

2. Name of building or project:

City/State:

3. Project Description:

Project Study/Design Period:

Percent Occupancy at time of submission:

4. Entrant (ASHRAE member with significant role in project):

a. Name: _____
Last First Middle

Membership Number: _____

Chapter: _____

Region: _____

b. Address (including country): _____

City State Zip Country

c. Telephone: (O) _____ d. Email: _____

e. Entrant's Role in Project: _____

f. Member's Role in Project: _____

g. Member's Signature: _____

5. Engineer of Record:

By affixing my signature above, I certify that the information contained in this application is accurate to the best of my knowledge. In addition, I certify that I have discussed this entry with the owner and have received permission from the owner to submit this project to the ASHRAE Technology Awards Competition.

April 19, 2012 1:00 PM-4:00 PM EDT

Dedicated Outdoor Air Systems:

A Path to Balancing Energy and IEQ

Hear leading experts discuss the role of Dedicated Outdoor Air Systems in the overall HVAC system and describe various DOAS equipment configurations, characteristics, and applications. This webcast will identify common design and operational pitfalls, and cover challenges unique to DOAS.



Presenters



**Ron Jarnigan, 2011-12
ASHRAE President**
Staff scientist | Pacific North-
west National Laboratory |
Richland, WA



Tim McGinn, P.E., LEED AP
Principal | Dialog | Calgary, AB,
Canada



Stan Mumma, Ph.D., P.E.
Professor Emeritus | Pennsylvania
State University | University Park, PA



John Murphy, LEED AP
Applications Engineer | Trane |
La Crosse, WI

How to Participate

- You may register to view the Webcast on your PC
- You may host a webcast viewing site for your colleagues
- View the webcast at a site

PDH Credits

Three (3) Professional Development Hours (PDHs) or three (3) AIA Learning Units may be awarded to viewers who complete the "Participant Reaction Form" by May 3, 2012.

Sponsored by:



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For more information about the program, presenters, continuing education credits, sponsorships, and DOAS resources please visit us at www.ashrae.org/doaswebcast

How to Earn Professional Development Hours (PDH's)

ASHRAE Webcast participants may earn credit towards continuing education, license renewal or certification renewal requirements. Please review the information below to learn how credits may be available for participants via the live webcast, archived webcast, or the DVD.

Live Webcast

Three (3) Professional Development Hours (PDHs) or (3) AIA Learning Units (LUs) may be awarded to viewers of the live webcast who complete the Participant Reaction Form online by **May 3, 2012**. The Participant Reaction Form will be posted following the live webcast at <http://www.ashrae.org/doaswebcast> and must be completed by **May 3, 2012** to allow ASHRAE to comply with reporting requirements. Your Attendance Certificate can be printed on your printer immediately after you submit the Participant Reaction Form.

Archived Webcast

If you are unable to participate in the live webcast, the program will be archived online until **May 3, 2012**. Registration will be necessary to view the archived program. You may complete the Participant Reaction Form online at <http://www.ashrae.org/doaswebcast> by **May 3, 2012** and print your Attendance Certificate. Many states and organizations accept viewing the archive and completing the Participation Reaction Form as credit toward continuing education, license renewal, or certification renewal requirements. The individual is responsible for verifying approval from a state or organization. **ASHRAE will not assume responsibility in reporting participation for viewers of the archived program.**

DVD

You may earn PDHs/LUs by purchasing and viewing the webcast DVD. The Participant Reaction Form will be included on the DVD with instructions for completion and submittal to ASHRAE. Upon receipt of the completed Participant Reaction Form, you will be emailed an Attendance Certificate. Many states and organizations accept viewing the DVD and completing the Participant Reaction Form as credit toward continuing education, license renewal, or certification renewal requirements. The individual is responsible for verifying approval from a state or organization. **ASHRAE will not assume responsibility in reporting participation for viewers of the DVD.** Upon request, ASHRAE will provide appropriate support. DVDs will be available in June via the ASHRAE [Bookstore](#).

If you have questions regarding continuing education credits or reporting for the webcast, call (678) 539-1200 or email ashrae-webcast@ashrae.org.