



Giga-Joule

December 2012

<http://www.ashrae4greenville.com/newsletter.php>

Meeting Announcement

The December meeting will be held on Thursday, December 13, at the Roper Mountain Science Center. The details are listed on the Programs Page. For more information, please contact our Programs Chair, Daniel Lowe at lowed@cxconsultants.com.

A Message from the President

Our December meeting topic will be Solar Thermal with an additional seminar on the Primary Secondary vs Variable Primary debate. Chris Edmondson will be the speaker, and I am sure that anyone who has heard him speak can testify to what a great presenter he is.

Thanks to all of you who came to the presentation on the Building Energy Quotient (bEQ). Mr. Phoenix did a great job presenting, and I must reiterate Randy Jones's opening remarks. We are always looking for new faces to participate on a committee or serve on the Board of Governors. If you would like to hear more information on what this would entail please let me know.



All presentation slots for this ASHRAE year have been filled. Please take a look at the revised schedule at the bottom of this document and attend as many events as possible. We would still like to hear ideas for future meetings, so please let me know if you have a topic that would make for a good meeting.

Ryan Tonnsen
Greenville ASHRAE President
president@ashrae4greenville.com

Membership Corner

ASHRAE Greenville would like to take this opportunity to wish a Merry Christmas and a Happy to New Year to ALL!



As we look forward to the new year ahead, we have a plan for continued growth in our Greenville Membership and need your help in achieving this...on the horizon are some great programs, some social events, golf tournaments etc. being planned throughout the season to encourage you invite your friends and colleagues. Thanks all members who recently joined via a Membership Promotion Meeting, a transfer in, or just the desire to be a Member, we appreciate your support. Welcome back to our existing members, and especially those who serve on the board...we could not do this without everyone's participation. Our 2nd and final Membership Promotion meeting for this year will be in the SPRING of 2013.

Don't forget about those Young Engineers – ASHRAE offers a special membership for engineers currently under the age of 35 to encourage them to be involved...these are our future leaders.

Existing MEMBERS – Ask me about upgrading your membership by going online to www.ASHRAE.org to update and complete your BIO...this process will automatically upgrade your membership based on the information that you supply...it's quick, and it's easy ~ After all it's all about YOU!

Just a reminder:

Chapter Members in good standing (paid dues) **\$10.00** per meeting – lunch included.

Non-Chapter Members **\$15.00** per meeting – lunch included.

I am always available to discuss your questions and concerns, or if you have a good idea or suggestion on how we can increase membership – We are interested!

Drop me an email Membership@ASHRAE4GREENVILLE.COM or call me at 444-0219

Best Regards,
Dorothy Bertolini
Membership Chair – ASHRAE Greenville SC
membership@ashrae4greenville.com

Chapter Programs

This month, there will be two technical presentations, “Solar Thermal” and “Primary Secondary vs. Variable Primary debate.” Please RSVP so that we can make arrangements to have the appropriate amount of food available.

December Meeting

Program: “Solar Thermal” and “Primary Secondary vs. Variable Primary debate.”

“Solar Thermal”

The objectives of the “Solar Thermal” presentation are as follows:

1. Determine availability of solar energy based on solar sky position (altitude, inclination, & azimuth).
2. Understand basic solar energy definitions and solar collector types.
3. Identify basic piping layouts of different hydronic solar systems.
4. Understand typical hydronic solar system is sizing.
5. Describe standards and codes for solar systems.
6. How to check for local tax incentives and rebates including Renewable Energy Certificates (REC's).

“Primary Secondary vs. Variable Primary debate.”

A basic review of both systems will be discussed. A comparison of the two with pros and cons will be presented. A comparison of the two in chiller applications will be presented.

Presenter: Chris Edmondson, President, James M. Pleasants Company, Inc.



Chris Edmondson received his B.S. degree in Mechanical Engineering from North Carolina State University in 1967. During the summers, he worked at Barber Coleman and Jay Johnson Controls. After graduation, he spent four and a half years as a salesman with the Trane Company. In 1971, he came to work for the James M. Pleasants Company, Inc. (Manufacturer’s Representative for the ITT Fluid Handling Division). He worked as an outside salesman until 1978, when he was promoted to Vice President and Sales Manager until 1987. Since 1987 to the present time, he has served as President of the James M. Pleasants Company, Inc.

Mr. Edmondson has served many years in the ASHRAE organization, holding positions such as Secretary/Treasurer, Vice President, and President of the North Piedmont Chapter. For the fiscal year, 1985-86, he received the Rudy Ferguson Memorial Award (Presidential Award of Excellence). In 1985, he became a technical speaker to various ASHRAE chapters and continued through 1989. He spoke at the ASHRAE Region VII CRC in 1992 and also at the Birmingham Region VII CRC. He also held the position of Educational Activities Vice Chair for Region IV from 1992-1994. In 1994, he was the Chapter Programs Chair for Region IV. In 1998-2000, he was Region IV ARC. He is currently Region IV DRC.

During 1980-1990, he has presented papers to various engineers on the following subjects:

- Basic Primary/Secondary Variable Volume Pumping
- Chiller Piping

- Air Control
- Plumbing Piping Systems

His principal areas of interest are energy savings, primary/secondary variable volume systems, heat transfer, hydronic systems, plumbing piping systems and control chilled water plant design.

- Location:** Roper Mountain Science Center (www.ropermountain.org)
- Date:** Thursday, December 13, 2012
- Time:** 11:30 a.m. Doors Open
11:35 a.m. Lunch Served
11:45 a.m. to 12:00 p.m. Chapter Business
12:00 p.m. to 1:00 p.m. “Solar Thermal” Program
1:00 p.m. to 3:00 p.m. “Primary Secondary ...” Program
- Cost:** Lunch Program: \$10/chapter member \$15/non-chapter member (catered lunch)
- Education Credit:** The “Solar Thermal” Program qualifies for 1.0 PDH (including NC PE) and 1 USGBC credit
The “Primary Secondary...” Program qualifies for 2.0 PDH (including NC PE)

**Please RSVP to secretary@ASHRAE4greenville.com
No later than Noon Tuesday, December 11, 2012**

Chapter Technology Transfer

ASHRAE 189.1 on the ledge of the fiscal cliff

Article adapted from ASHRAE Government Affairs



The House and Senate have been busy working through a long list of bills, and trying to reach agreement on a solution to the expiring tax issues and automatic federal spending cuts – often called the “fiscal cliff”. This week the top issue in the Senate has been debate on the National Defense Authorization Act (NDAA) for Fiscal Year 2013 – a bill that allows for spending on U.S. Department of Defense (DOD) programs, including military construction; and it is in the military construction section of the bill that has ASHRAE interested.

Specifically, the House-passed version of the NDAA would prohibit DOD from using FY 2012 or 2013 funds to implement ANSI/ASHRAE/USGBC/IES 189.1 Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings. This bill would also continue the prohibition on the use of DOD funds for Leadership in Energy and Environmental Design (LEED) Gold or Platinum certifications. The House Armed Services Committee report on the bill provides some insight into this section:

“The [Armed Services] committee remains concerned that the Department of Defense is investing significant funding for more aggressive certifications without demonstrating the appropriate return on investment.”

A recent report by the National Research Council on the cost effectiveness of Standard 189.1 found that over 40 years, a building that follows 189.1-2011 would have (for medium office and small hotel buildings):

- Net cost savings of 189.1-2011 ranges from \$955,630 to \$2.1 million per building on operational savings.
- Adjusted Rate of Return on Investment from 6.3 to 8.7%.
- Simple payback is from 2.9 to 6.5 years.

In partial response to this report, the Senate NDAA does not currently contain the House prohibition on the use of DOD funds to implement Standard 189.1. The Senate is expected to pass its version of the NDAA sometime next week; House and Senate leaders will then meet in a conference committee to work out differences between their two versions – possibly including this section – before producing a final compromise bill that goes back to the House and Senate for one last vote before being presented to the President for his signature or veto.

Additional information on this bill will be included in the next Government Affairs Update. For additional information, please contact Mark Ames, ASHRAE’s Manager of Federal Government Affairs, at mames@ashrae.org or 202-833-1830.

ASHRAE 90.1-2010 Addenda Review

The public review period for 90.1-2010 Addenda is currently open until December 30, 2012. Over a dozen addenda have been proposed.

For more information go to <http://www.ashrae.org/standards-research--technology/public-review-drafts>.

Looking for information on State Incentives for Renewables & Efficiency?



The banner features a red background with a yellow and orange abstract graphic on the left. On the right, it contains logos for the U.S. Department of Energy, Energy Efficiency & Renewable Energy, IREC (Interstate Renewable Energy Council), and the North Carolina Solar Center.

DSIRE™
Database of State Incentives for Renewables & Efficiency

U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency & Renewable Energy

IREC
INTERSTATE RENEWABLE ENERGY COUNCIL

NORTH CAROLINA
Solar Center

Be sure to check out www.dsireusa.org for the latest information

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Event Dates for 2012-2013

Thursday 09/13/2012	LEED Litigation	Presenter: Stephanie Burton
Thursday 10/11/2012	Today's Project Design Challenges A Contractor's Perspective	Presenter: Bill Caldwell
Thursday 11/8/2012	Building Energy Quotient (BEQ)	Presenter: Thomas Phoenix
Thursday 12/13/2012	Solar Thermal Additional Seminar: Primary Secondary vs. Variable Primary debate	Presenter: Chris Edmondson, Distinguished Lecturer
Thursday 01/10/2013	Mold Control	Presenter: Andy Schauder
Thursday 02/14/2013	Acoustics/Vibration Best Practices for HVAC Equipment	Presenter: Dwight Landry
Thursday 03/14/2013	Residential Energy Efficiency	Presenter: James Groman
Thursday 04/11/2013	Responsible Use of Refrigerants Additional Seminar: Thermal Storage-Peak Load Avoidance	Presenter: Julian De Bullet, Distinguished Lecturer
Friday 4/26/2012	ASHRAE Golf Tournament	
Thursday 05/9/2013	HVAC Equipment Research at Oak Ridge National Laboratories	Presenter: Heather Buckberry



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Region IV
Greenville Chapter