

October 2008
Volume 1, Issue 2

“The Gee Chee”

This Month's Articles:

- The Monthly Topic and Speaker
- The Presidential Message
- The CTT Corner
- Member News
- Chapter Research
- Awards and Honors
- The Wall of Honor
- Sponsorships and Investors
- September 2008 Meeting Minutes
- Announcements and Advertisements
- Chapter Involvement

Individual Highlights for September:

Dennis Knight – The High Five, Challenge Goal, and several other awards

Phillip Garcas – The Gold Star and Presidential Award of Excellence

Mike Weeks – The Chapter Service Award

Written By: Chris Sturdivant, Charleston Chapter Secretary

This Month's Topic: Utility Rates and New Generation: Where Are We Headed? Introducing: Bill Eisele, CEM

Bill is an Account Manager with SCE&G. He has 25 years experience in the utility industry having worked in generation, customer service, operations, and marketing. He is responsible for managing the corporate relationship with the federal government, and various industrial and commercial customers. He has performed hundreds of energy audits and facilitated \$21 million in energy upgrades. He has also worked on various alternative energy projects utilizing fuel cells, microturbines, solar cells and vanadium redox products. He volunteers in the community with the Boy Scouts. Bill earned a Bachelor of Science degree from the College of Charleston, an MBA from The Citadel, and is a Certified Energy Manager.

A Message From The President

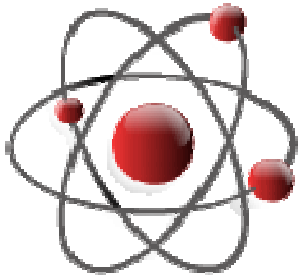
It looks like we will have a very interesting seminar this Tuesday: Utility Rates and Future Generation. This can be very useful information for LEED projects. In addition, it will be interesting to learn what future power plants are coming to South Carolina. I have a number of questions including: what incentives are there for ice storage? What roles do wind and solar play in South Carolina? This should be a great learning experience. Thanks to Pete for setting this up. Also, thanks to Dan Cartin for organizing the golf tournament. I understand he had special help from Randy Jones and a number of other people.

I don't know about you, but my wife was happy that I got home a little bit earlier last month from our meeting. It's always better to keep the "boss" happy. I hope everybody else likes and agrees with the revised meeting times. If not, you can talk to Emily about it. We have an exciting year ahead of us. I have had a number of calls from people interested in joining ASHRAE. We have an opportunity to grow and improve ASHRAE this year. This is something that is all our responsibility. Just talking to and welcoming a new member makes a big difference. I believe this will be the best year for Charleston ASHRAE ever, and I want to help make it happen. See you at the meeting on Tuesday.

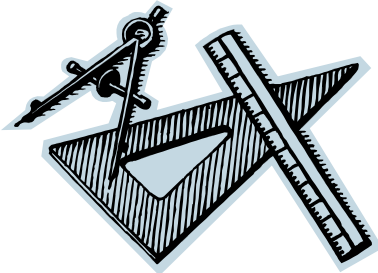
Best Regards,
Rob Turner, P.E.
Charleston Chapter President

THE CTT CORNER

By: Gene Brown



"Charleston is affected by 3 major geographic faults. Without restraint mechanical/electrical/plumbing systems can cause fire, flood, and structural damage."



I know many of you are designing projects which could be submitted for the local, regional and society technical awards. This will be good publicity for your company and will help our chapter.

Anyone who has a project for cold storage should consider submitting for the Milton Garland award. Contact me if you need info on the format for submission.

Gene_brown_jr@yahoo.com

At the September meeting Joel Davis gave an excellent presentation on seismic and wind restraint. There was a photo of a train overturned and a building still standing in the 1876 Charleston earthquake.

Charleston is affected by 3 major geographic faults. Without restraint, mechanical/electrical/plumbing systems can cause fire, flood and structural damage. The natural vibrational frequency of the springs must be considered. If the earthquake is at the same frequency, the equipment will become a giant pogo stick.

For earthquake protection, buildings are listed in 4

categories.

1. Agricultural and similar uses.
 2. All categories not in 1, 3 or 4.
 3. Substantial hazard to humans.
 4. Hospitals, fire stations and power plants.
- Importance factor is I_p .
 $I_p = 1.5$ if required for life safety.
 $I_p = 1.5$ if continued facility operation.
 $I_p = 1.5$ if contents include hazmat.
 $I_p = 1.0$ for all other applications.

Based on a contractor's interpretation, a bid for restraint may be \$7,500 or \$75,000.

For category A & B (good soil) roof mounted equipment is not required to have seismic restraint. For category C with $I_p = 1.0$ restraint is not required. For category C with $I_p = 1.5$, restraint is required.

Hurricane Floyd produced 87 fatalities. During Hugo there were 76 fatalities. Four parameters are considered in design of wind restraint.

1. Wind speed for 3 second gust.
2. Wind exposure of the item.
3. Importance factor.

4. Building height.

For building height up to 60 ft there is a factor of 1.9.

The wind builds up and goes over the building. An example of one project in Greenville SC. The projected area was 63.8 SF and the design wind force was 3070 lbs. Ninety mph is the lowest wind rating in the US. If there is I_p of 1.5 for the equipment, the equipment itself must be certified by the manufacturer to withstand a seismic event. Adapter curbs can be seismically rated but the curb below may fail. Show calculations for every selection of cable and all other restraint components. Housekeeping pads must be doweled. Otherwise, the pad could come up, come down and shatter.

Manufacturers put equipment on a shake table and certify that the equipment continues to run during a seismic event. Usually the equipment is rated to meet the numbers required for California (the worst case).

Member News

We have seen many of our local engineering firms growing their businesses and bringing along new folks on board. If you have recently moved to the Charleston area and wish to transfer your membership, please contact our Membership Chair, **Charles Hipp**, or make the change online at www.ashrae.org.

WELCOME TO CHARLESTON!!!!!!!!!!

Sponsorships and Investors

2008-2009 ASHRAE RESEARCH INVESTORS

PLATINUM LEVEL DONOR: (\$2,500 +)

GOLD LEVEL DONOR: (\$1,500 +)

SILVER LEVEL DONOR: (\$1000 +)

BRONZE LEVEL DONOR: (\$250 +)

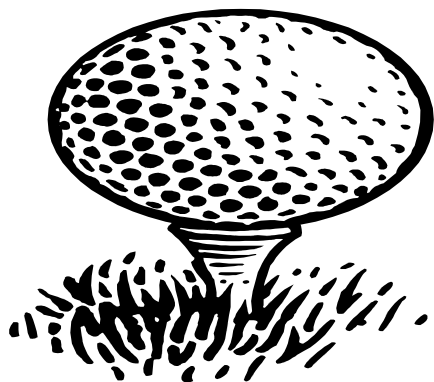


**PLEASE CONSIDER A CORPORATE SPONSORSHIP
TO HELP CONTRIBUTE TO ASHRAE'S FURTHER
GROWTH**

September 2008 Meeting Minutes

- ✚ Dan Cartin, introduced himself as Research Chairman for the Charleston ASHRAE Chapter, informed of the upcoming golf tournament at the Charleston International Golf Club and introduced a phone committee in order to help increase monthly attendance
- ✚ Chapter Technology-The Milton Garland Award and other technology awards submissions are very much encouraged
- ✚ Randy Jones-discussed briefly various topics that took place at the annual Chapters Regional Conference
- ✚ Joel Davis, EIT of Synergy Engineering, presented IBC-2006: Seismic Restraint of MEP
- ✚ All other chair reports: No New Chapter Business
- ✚ Nothing to report for Old Chapter Business

Announcements and Advertisements



TIME TO TEE IT UP!!!

**ASHRAE RESEARCH PROMOTIONAL GOLF
TOURNAMENT**

FRIDAY, OCTOBER 10, 2008

1:00 PM

CHARLESTON INTERNATIONAL GOLF CLUB

**\$75.00 INCLUDES GOLF, CART, BOX LUNCH,
BEVERAGES, AND PRIZES!!!!!!!**

RAFFLE FOR CASH PRIZES!!!

CONTACT DAN CARTIN FOR DETAILS

**REMEMBER TO STAY
TUNED FOR UPCOMING
ASHRAE EVENTS!!!!**

A Brief Discussion on Chapter Research

Donations and pledges are coming in and we will begin listing those names in the next news letter. The Charleston Chapter has always been a strong contributor to research and we can't stop now. You do not have to wait on us to call you, call me and get on the list by next month.

Dan Cartin

And The Honor Goes To.....

ASHRAE's Honors and Awards program is designed to recognize and encourage outstanding participation in the organization. There are a great many awards ranging from the "Hall of Fame" to chapter participation. Here is a sampling of just a few and how they are awarded.

- The Chapter Service Award- recognizes activities and contributions of members at the Chapter level. This is earned by accumulating "Points" for serving on committees, serving the chapter as an Officer, or other participation in the chapter.
- Willis H. Carrier Award – Recognizes an individual for the best published paper at a society level meeting of a member who is 32 years of age or less.
- Milton Garland Award for Project Excellence – Recognizes a NON-COMFORT COOLING refrigeration application that highlights innovation and or new technologies.
- Technology Award / Award of Engineering Excellence. – recognizes innovative designs that utilize ASHRAE Standards for Energy Management, IAQ, and mechanical design management.
- William J Collins Jr, Research Promotion Award – Recognizes the Chapter Research Promotion Chair who excels in raising funds for ASHRAE Research in the course of a year.

We have been blessed with several chapter members over the years who have earned some of these distinguished awards. The Charleston Chapter is a very strong one in ASHRAE, partly due to these folks and everyone's participation in the operations of the chapter. ASHRAE has many other Honors and Awards, who knows, what you do every day may help you qualify for one of these yourself!! Contact one of your Chapter Chairs to find out!

The Charleston Chapter Wall of Honor For

Individual Donations of \$100 or more

Much of ASHRAE Research funding comes in through individual donations, so please give. We are supporting the Charleston Chapter Wall of Honor again this year.



Please Support ASHRAE!!

CAN WE PUT YOUR NAME HERE?

READY TO GET INVOLVED?

CONTACT ONE OF OUR COMMITTEE CHAIRS, OR A CHAPTER OFFICER TO SEE HOW YOU CAN MAKE A DIFFERENCE

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CHARLESTON CHAPTER ANNUAL PROGRAMS FOR THE 2008-2009 YEAR

NOVEMBER

Tuesday, November 11, 2008
"PROGRAM TBD"

Student Activities Emphasis Night

DECEMBER

Tuesday, December 9, 2008
"PROGRAM TBD"

JANUARY

Tuesday, January 13, 2009
"PROGRAM TBD"

FEBRUARY

Tuesday, February 10, 2009

National Engineers Week Banquet at the Citadel Alumni Center

MARCH

Tuesday, March 10, 2009
"PROGRAM TBD"

Research Promotion Night

APRIL

Tuesday, April 14, 2009
"PROGRAM TBD"

Chapter History Night

MAY

Tuesday, May 12, 2008
"PROGRAM TBD"

Student Activities Emphasis Night

JUNE

DATE AND LOCATION OF CHAPTER SOCIAL TBD