

# The Latent News Ozark's ASHRAE Newsletter

ASHRAE Webcast Reminder 1  
New ASHRAE book published 2  
Research Investor Cups..... 2  
Study on IAQ in retail stores.... 3

**(BETTER LATENT THAN NEVER)**

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## Ozarks ASHRAE

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**The Latent News is a  
monthly newsletter  
produced by the  
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If you have information  
you would like to include  
in the next ASHRAE  
Latent News, please  
have it to the editor no  
later than the first  
Tuesday of the month.

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## About our Speaker

*"The Ethics and Economics of Energy Conservation"*

The March ASHRAE general meeting will be held Tuesday, March 16<sup>th</sup> at 11:30pm at the Springfield Brewing Company, 301 S Market Ave. Meal cost is \$12, payable at the door and first-time attendees are free.

Our speaker for the meeting will be William Coad, president of Coad Engineering Enterprises, distinguished lecturer and past president of ASHRAE. Mr. Coad will be exploring the economics of energy conservation and the failure of economic alternatives in the search for more energy conservative buildings and machines.

Mr. Coad received his degree in mechanical engineering from Washington University and is a registered professional engineer in 37 states. He has lectured on mechanical engineering at Washington



**William Coad, Coad Engineering Enterprises**

University for 12 years teaching undergraduate courses and has taught as an affiliate professor for 17 years teaching graduate courses in mechanical engineering and serving as a student thesis adviser in building environmental systems design.

## Last Reminder - ASHRAE Commissioning Webcast



On Wednesday, April 21, 2010, ASHRAE's Chapter Technology Transfer Committee (CTTC), with support from ASHRAE's High Performance Buildings Magazine, will present a webcast entitled **"Right from the Start – Commissioning for High Performance Buildings."** The broadcast will take place from noon-3pm, central time.

Three (3) PDH credits are available to those who view the program and then complete the Participant Reaction Form online by April 30, 2010.

There is no fee for registration. Online registration began March 2, 2010 at <http://www.ashrae.org/Cxwebcast>.

Information will be presented by a panel of experts in the field, including Rick Casault, H. Jay Enck and Ronald Wilkinson and moderated by Don Rheem. For additional information, visit <http://www.ashrae.org/education/page/557>

## New Fuel Cell Technology Introduced



SUNNYVALE, Calif. — A Silicon Valley company is claiming a breakthrough in a decades-old quest to develop fuel cells that can supply affordable and relatively clean electricity. Google, Bank of America, Wal-Mart and other large corporations have been testing the devices.

The start-up, Bloom Energy, has raised about \$400 million from investors and spent nearly a decade developing a new variety of solid oxide fuel cell, considered the most efficient but most technologically challenging fuel-cell technology.

K. R. Sridhar, Bloom's co-founder and chief executive, said devices made by his company were generating electricity at a cost of 8 to 10 cents a kilowatt hour, using natural gas. That is lower than commercial electricity prices in some parts of the country.

The technology was introduced in a press conference held in late February. More information is available in an article published in the New York Times and available online at <http://www.nytimes.com/2010/02/24/business/energy-environment/24bloom.html?dbk>

## 21 Changes Proposed for Standard 90.1

ATLANTA – Public input to help shape the technical requirements in Standard 90.1 is being sought through 21 proposed addenda, which could become part of the 2010 standard.

ANSI/ASHRAE/IESNA Standard 90.1-2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, The proposed addenda cover a range of topic areas, including daylighting, air leakage, EER and IEER values and requirements for VRF air conditioners and heat pumps. provides minimum requirements for the energy-efficient design of buildings except low-rise residential buildings.

“Our goal is to produce a standard to increase energy efficiency in buildings,” Mick Schwedler, Standard 90.1 committee chair, stated. “Public input from the industry into development of the standard has proven invaluable since it was first published 35 years ago.”

If no comments are received on the addenda, they likely will be incorporated into the 2010 version of the standard slated to be published this fall. If comments are received, the substance and volume of those comments will determine whether they are incorporated into the 2010 standard.

## Energy Efficiency Programs break \$6 Billion in 2009

Boston, MA — U.S. utilities increased their spending on energy efficiency programs by 43% in 2009 compared to 2008, according to a new report from the nonprofit Consortium for Energy Efficiency (CEE). U.S. utility spending on energy efficiency programs reached \$5.3 billion, including \$4.4 billion for electric energy efficiency programs and \$930 million for natural gas programs. Spending on natural gas programs increased 79%, while electric programs increased by 37%. Utility energy efficiency programs are offered in 46 states.

Budgets for ratepayer funded energy efficiency programs in the United States and Canada topped a record six billion dollars for 2009, illustrating the ongoing and growing support for energy savings and environmental benefits at the state and provincial level. Ratepayer funding increased 35% over the \$4.5 billion committed in 2008. Not including onetime U.S. stimulus funding directed to energy efficiency, U.S. budgets totaled \$5.3 billion,

Among the proposed addenda are two that deal with daylighting. Addendum *cu*, which would control the “night lights” that are part of the emergency system when there are no occupants in the space. Today, generally by default, lights are kept on even if buildings are unoccupied. Therefore, there are savings to shut them off. Addendum *ct* would reduce the threshold for daylighting to 250 square feet from 1,000 square feet.

In another area, addendum *bu* would modify computer room efficiency requirements based on comments from an earlier public review.

“The 90.1 committee worked closely with manufacturers, designers and owners of computer rooms to address comments and produce the language in this addendum,” said Drake Erbe, Mechanical Subcommittee chair.

The proposed addenda to ASHRAE/IESNA Standard 90.1 are available for comment only during their public review period. To read the addenda or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

doubling from \$2.6 billion in 2006. Eight Canadian provinces together reached budgets of \$800 million, a small reduction from 2008, but showing growth from the 2007 total of \$600 million.

Gas programs demonstrated the most rapid expansion, soaring 274 percent since 2006 and increasing nearly 80 percent over 2008 in the United States. Canadian gas programs rose 25 percent on top of a 39 percent rise in 2008. CEE members administer 89 percent of U.S. gas budgets and 74 percent of Canadian budgets.

Electric budgets in the United States went from a 21 percent increase in 2008 over 2007 to a whopping 37 percent in 2009 over 2008. CEE members administer 88 percent of U.S. electric budgets reported; Canadian members administer 94 percent. The largest gains were from southeast and south central states, regions that grew more than 76 percent.



## Upcoming Events

Mark your calendars for these dates:

- ❑ General Meeting – March 16, 2010  
“The Ethics and Economics of Energy Conservation by William Coad
- ❑ ASHRAE Commissioning Webcast – April 21, 2010, noon-3pm
- ❑ General Meeting – April 20, 2010 – Sound Control and Duct Design by Gerry Iacouzze
- ❑ General Meeting – May 18, 2010 – Tour of new Southwest 2 Power Plant

## Trivia Tidbit

Back by popular demand, here’s a bit of trivia to keep your brain cells active:

You know you’re an “old engineer” if:

You can remember seeing your first mobile phone. It was the size of a large toolbox and weighed as much. Plus it had a very limited battery life and range.

You can remember marveling at the very first fax machine you ever saw and now the young guys tell you that the fax is old technology no one uses.

# First Changes Proposed to new Green Standard: Daylighting Addressed

*Members sought for Daylight Standard Committee*

ATLANTA—Members are being sought and changes proposed for the new standard for the design of high-performance green buildings published in January.

ANSI/ASHRAE/USGBC/IES Standard 189.1, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings*, is the first code-intended commercial green building standard in the United States. The standard provides a long-needed green building foundation for those who strive to design, build and operate green buildings. It covers key topic areas of site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building’s impact on the atmosphere, materials and resources.

Under ASHRAE’s continuous maintenance procedure, which allows requests for change to any part of the standard to be made at any time, changes have already been proposed.

“Given the high amount of interest in this standard, using continuous maintenance allows us to incorporate current technical information on a timely basis,” Kent Peterson, chair

of the committee said. “These changes are then put out for public review and comment, which results in an industry consensus standard.”

Open for public comment are addenda *a* and *b*. Addendum *a* makes the daylighting definitions and criteria consistent with changes recently proposed to Standard 90.1, which sets requirements for energy efficient buildings. Addendum *b* reduces the space limitation for daylighting requirements. Rather than requiring daylighting in space larger than 1,000 square feet, the proposal would require it in spaces larger than 250 square feet.

Members also are being sought for the committee developing the standard with slots opening July 1. The deadline to apply is March 31. For more information on membership, contact [standardssection@ashrae.org](mailto:standardssection@ashrae.org)

For more information on the proposed addenda, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews). For complete information on the standard, visit [www.ashrae.org/greenstandard](http://www.ashrae.org/greenstandard).

## ASHRAE Vision

ASHRAE will be the global leader, the foremost source of technical and educational information, and the primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.

## ASHRAE Core Values

### Advancement

We are committed to the advancement of the arts and sciences of HVAC & R for the benefit of society through research, technology development and transfer, and education and training.

### Leadership

We are committed to providing leadership within our industry and developing leadership qualities in our members.