

# Lehigh Valley Insights

JOURNAL OF THE LEHIGH VALLEY CHAPTER OF THE ASHRAE, INC.

VOLUME 45 ISSUE 6

March 2010

## 2009-2010 LEADERS

## MEETING NOTICE

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[WWW.LVASHRAE.ORG](http://WWW.LVASHRAE.ORG)

**Wednesday, March 24, 2010**

## **BACnet and Integration Protocols**

**Membership Promotion Night**

at

**Mango's Coastal Cuisine**  
**3750 Hamilton Blvd., Allentown, PA 18103**  
**(Route 222 North)**

- 4:30 – 5:30 p.m. **Board of Governors Meeting**  
(Chapter members are welcome to attend)
- 5:30 – 6:30 p.m. **Social Hour** (Cash Bar)
- 6:30 – 7:15 p.m. **Dinner**
- 7:15 – 8:15 p.m. **Dinner Program**  
Topic: BACnet and Integration Protocols  
Speaker: Larry Uebele  
Program Chair: Tom Serwatka, Jr.

Reservations: Call Tom Serwatka, Jr. at 215-654-8040 or  
Email: [thomas.serwatka@siemens.com](mailto:thomas.serwatka@siemens.com)  
Students \$15.00  
Members & Guests \$30.00

Please make your reservations by Noon on Monday, March 22<sup>nd</sup>.

## President's Message

Ladies and Gentlemen:

For those of you who attended last month, Thank You! We enjoyed a presentation by Tom Werkema (ASHRAE DL) on the rapidly changing issues related to refrigerants and carbon. Legislation is being proposed in the US and has been crafted and enacted abroad that could significantly change the economic analysis for a project's critical path. Thank you Tom, for your insights (and for your flexibility with your schedule).

Now to move on to this month's topic. Whether you are an engineer, contractor, vendor, or building owner/operator, chances are you have had a few run-ins with building automation issues. Due to its complex nature, building controls require a significant amount of attention during the design, construction, commissioning, and operating phases of a building's life. This month, Larry Uebele, PE, LEED AP from Siemens Building Technologies will be presenting on the topic of Building Automation System Protocols and Integration. There will also be a discussion following the presentation for you to share your war stories, focusing primarily on best practices and good solutions. In other words, be candid but play nice!

On another note, with the warmer weather, our thoughts turn to acres of green. The Annual Lehigh Valley Golf Outing will be here before you know it. Please see the flyer attached to this newsletter for more information and mark the date on your calendars!

We look forward to seeing you at the meeting on March 24th. Enjoy the approach of Spring!!!

Stuart J. Heisey, PE  
President  
Lehigh Valley Chapter – ASHRAE

## March 24<sup>th</sup> Meeting

**Dinner Topic:**  
**BacNet and Integration Protocols**

**About the Speaker:**  
Larry Uebele graduated from Temple University in 1978 with a BA in Biology and subsequently received a degree in Electrical Engineering.

In July 1980, Larry started working for Honeywell. During 18 years with Honeywell he held various positions, Application Engineer, Project Manager, Regional Systems Engineer and Account Executive.

In 1998, Larry left Honeywell and joined Siemens Building Technologies as an Account Manager handling Merck worldwide. Currently, Larry is the Siemens Mid-Atlantic District Sales Manager, focused on Business Development and working with the Consulting Engineer community.

Larry is also a Professional Engineer in Pennsylvania and a LEED Accredited Professional.

## Membership Promotion

Our March meeting is our 2<sup>nd</sup> "Membership Promotion Night" of this year. THIS MEANS ANYONE WHO BRINGS A POTENTIAL NEW MEMBER AS A GUEST; THE CHAPTER WILL PAY FOR THE GUEST'S DINNER.

This is capitalized so hopefully people will read this and take advantage of this offer to try to get some new members into our chapter. By being a local member you can stay current with the latest developments in our industry by attending our monthly meetings. The meetings are also good for networking and socializing. We need more attendance at our meetings and everyone's help would be greatly appreciated.

Don't forget ASHRAE now only give you a 6 month grace period before making you delinquent. Then you must pay your back dues or loose credit for your years of membership. So please try to pay your dues as soon as your year is up.

As always, I have Membership Applications and Upgrade Forms. See you at the meeting.

Matt Matsinko, P.E.  
Membership Promotion Chairman  
[mjmatsinko@htlyons.com](mailto:mjmatsinko@htlyons.com)

## Board of Governors Meeting January 20, 2010

### Officers Present:

Stuart Heisey - President  
Stephen Phillips - Secretary  
Donovan Denlinger – Vice President  
Gabe Badesso - Treasurer

### Board of Governors Present:

Bryan Sandt

### Committee Chairs Present:

Matt Matsinko – Membership Promotion  
William Trach - Historian  
Frank Paretti – Research Promotion  
Paul Kuhn – Student Activities

### **Old Business:**

Meeting Planning

March Meeting chaired by Tom Serwatka. Larry Uebele will speak on ATC protocols, etc.

April Meeting chaired by Stephen Phillips. Sands Casino Project Team Roundtable Discussion.

May - Sands Casino Tour on May 26<sup>th</sup>. Chaired by Stephen Phillips. Meal Planning by Paul Kuhn.

June – Golf Outing – Mike Schultz, Stuart Heisey and Frank Paretti to meet in March to kick off event planning.

### **Officers'/ Chair Reports:**

Secretary: Stephen Phillips  
January meeting minutes included in newsletter and reported to DRC.

### **Chair Reports:**

Membership Promotion: Matt Matsinko  
New Member – Tim Bayer.  
Submitted dues paid report given to Gabe Badesso

Research Promotion: Frank Paretti  
Reported on Lehigh Valley Engineering Council Banquet. Suggested making a larger push towards HVAC related engineering. Reported on SYBUNT and LYBUNT calling campaign. Recorded one donation. Fund report. Net addition of 7 people have given 100% increase over last year. Currently at 39% of funding goal. If golf outing meets expectations we will exceed yearly goal.

Student Activities Chair: Paul Kuhn  
Draft a letter to local colleges. Target March completion date for letter.

Chapter Technologies Transfer: Tom Serwatka, Jr.  
Webcast promotion. April 21<sup>st</sup> date at Copperhead Grille.

## ASHRAE Standard 90.1 Press Release

### **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.

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.

Below is a listing of proposed addenda:  
Public Reviews from March 5-April 4, 2010:

- Addendum *bb* – would modify Appendix C and Appendix A in response to comments received on the previous version of the addendum, which modifies all fenestration and opaque assembly requirements in the standard.
- Addendum *bf* – would place performance requirements for air leakage of the opaque envelope. Performance requirements have existed on fenestration and door products to date, but evidence suggests that the opaque

envelope is the source of the majority of air leakage in buildings caused by lack of attention in the design, construction and enforcement process due to the absence of performance criteria.

- Addendum *bz* – addresses the comments received during the first public review calling for clarification of the requirements to reduce misinterpretation on the proposed monitoring requirements.
- Addendum *ce* – would clarify the requirements and avoid conflicts with other existing requirements for lighting space control.
- Addendum *cs* – originated with a continuous maintenance proposal to address information received on addendum *bs* on receptacles after the public review period closed and which the committee found to have merit.
- Addendum *cu* – would control the “night lights” that are part of the emergency system when there are no occupants in the space. This has definite energy savings and is not prohibited by the electrical codes.
- Addendum *cv* – would add energy efficiency requirements for service water pressure booster systems.
- Addendum *cw* – would address corrections and clarification necessary to Section 11, Table 11.3.1 section 11 Service Hot Water Systems.
- Addendum *cx* – would allow a 40 percent window wall area path within the prescriptive Tables 5.5-1 through 5.5-8.

Addendum *cz* – would incorporate bi-level control for parking garages to reduce the wasted energy associated with unoccupied periods for many garages and allows an exception for lighting in the transition (entrance/exit) areas to accommodate IES recommendations.

- Addendum *da* – would establish that an Appendix G baseline shall be based on the minimum ventilation requirements required by local codes or a rating authority and not the proposed design ventilation rates.
- Addendum *dc* – The conditions and common practice that existed to create the need for this requirement on tandem wiring are no longer practiced primarily with the new Federal efficacy requirements and products available on the market.

#### Public Reviews from March 5-April 19, 2010:

- Addendum *bu* – would modify the computer room efficiency requirements based on comments received during the first public review.
- Addendum *cd* – would strengthen the language to actually require exterior control rather than just require the control capability; add bi-level control for general all-night applications such as parking lots to reduce

lighting when not needed; and add control for façade and landscaping lighting not needed after midnight.

- Addendum *cn* – would add two versions of a combined advanced control to the control incentives table. These control system combinations involve personal workstation control and workstation-specific occupancy sensors for open office applications. The control incentive will apply only to the particular controls when they are applied in open office areas.
- Addendum *co* – would make three major amendments to Table 6.8.1A: update EER and IEER values for all condensing units and water and evaporatively cooled air conditioners with cooling capacities greater than 65,000 Btu/h; establish a separate product class for evaporatively cooled air conditioners with different energy efficiency standards; and replace the IPLV descriptor for condensing units with the new IEER metric and amends the EERs with more stringent values.
- Addendum *cp* – would establish, for the first time in Standard 90.1, efficiency requirements for VRF air conditioners and heat pumps, including heat pumps that use a water source for heat rejection.
- Addendum *cq* – would modify the duct sealing requirements in 90.1.
- Addendum *cr* – would set a definition for an unmet load hour currently lacking a throttling range or limit to the setpoint. It was decided that the baseline and proposed shall have the same thermostat throttling range. This required additional language in the unmet load hour definition as to how throttling range effects determination of an unmet hour along with additional language in Table 11.3.1 and Table G3.1, Design Model sections.
- Addendum *ct* – would reduce the threshold for daylighting from 1000 square feet to 250 square feet.
- Addendum *cy* – would make several revisions to the economizer requirements in section 6.5.1 and in section 6.3.2

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).

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

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# ASHRAE GOLF OUTING

**Friday, June 4, 2010**  
TO BENEFIT ASHRAE RESEARCH

**PLACE:** GREEN POND COUNTRY CLUB, BETHLEHEM, PA.  
**TIME:** SHOTGUN START AT 11:00 A.M. DINNER TO FOLLOW  
**FORMAT:** 4-MAN SCRAMBLE  
**COST (per person):** \$90.00 GOLF & DINNER  
\$45.00 DINNER ONLY

GOLF INCLUDES GREENS FEE, CART, REFRESHMENTS (BEER & SODA), A HOT DOG AND A DRINK AFTER 9 HOLES AND PRIZES.

**Hole Sponsorship will be accepted. Look for our April Newsletter hole sponsor details.**

COME ENJOY A FUN DAY WITH US!  
**RESERVATIONS MUST BE MADE BY MAY 14, 2010**

**CONTACT:** Mike Schultz at 484-223-1730 or email [mrschultz@trane.com](mailto:mrschultz@trane.com) to sign up.

- NOTES:**
- Contact above if you can donate a golf prize.
  - Payment must be received by **May 14**, at:  
Trane  
5925 Tilghman St. W.  
Suite 70  
Allentown, PA 18104
  - **Make checks payable to:** ASHRAE – Lehigh Valley Chapter
  - Space is limited and on a first-come basis
  - **Payment must be received prior to tournament**



**LEHIGH VALLEY CHAPTER OF ASHRAE  
2009-2010 MEETING SCHEDULE**

<b>MONTH</b>	<b>TECHNICAL/DINNER PROGRAM</b>	<b>Event</b>	<b>PROGRAM CHAIR</b>
Sept 23 <sup>rd</sup>	Noise & Vibration Control – Kris Kollevoll		Ray Forsthoefel
Oct. 21 <sup>st</sup>	Electrical Deregulation	Membership Promotion #1	Paul Kuhn
Nov. 18 <sup>th</sup>	Future Cities	Student Activity #1 (Future Cities)	Tracy Hansen & Paul Kuhn Stuart Heisey
Dec.	No Meeting		
Jan. 20 <sup>th</sup>	ASHRAE 90.1 – 2010 - Richard Lord		Donovan Denlinger
Feb 24 <sup>th</sup>	Global Warming / Refrigerants / Ozone – Tom Werkema	Student Activity #2	Gabe Badesso
Mar 24 <sup>th</sup>	Interoperability of ATC protocols	Membership Promotion #2	Tom Serwatka, Jr.
Apr. 28 <sup>th</sup>	Sands Casino Project Team Roundtable Discussion	Research Promotion #2	TBA
May 26 <sup>th</sup>	Tour – Sands Casino		Stephen Phillips
June 4 <sup>th</sup>	Golf Outing / Green Pond		Michael Schultz