

## ASHRAE Bi-State Chapter

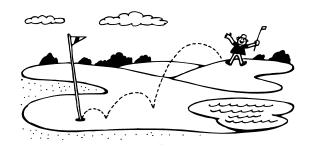
## Exchanger

Volume XXVII, Issue 9

Serving the Hudson Valley and Western Connecticut

May 2014

# 2014 Bi-State Chapter Annual Golf Outing



## Wednesday, May 14

Same Great Location: The Links at Union Vale 153 North Parliman Road Union Vale, New York 12540

www.thelinksatunionvale.com

For more information please contact sabbattista@olace.com

Return form (on page 3) with payment by May 9, 2014.

## 18 Hole Championship Golf Course

11:30 am: Check-In/Lunch1:00 pm: Shotgun Start6:00 pm: Dinner and Awards

## **Event Costs:**

- \$200 per player
- \$750 per foursome
- \$65 for dinner only

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## **Upcoming Events**

 August 14 through 16 -ASHRAE Region 1 2014 CRC Hosted by Bi-State Chapter

## **President's Message**

By Terry Connor, LEED AP

I hope you are all looking forward to our annual Golf Outing as much as I am! Keep your fingers crossed for sunny weather – on Wednesday, May 14<sup>th</sup> we will be back at The Links at Union Vale to enjoy an afternoon of golf – and more importantly, to raise money for the Bi-State Chapter's Scholarship fund. We expect to be able to announce the winners of this year's scholarships at the outing during the awards presentation part of the evening. We still have room available if you're interested in golfing – and there is plenty of room if you can only join us for dinner. We hope to see you there!

There will be no Dinner Meeting scheduled for the month of June this year. The Chapter Officers and Board of Governors members will be busy putting the finishing touches on our preparations for hosting this year's CRC in August. We still need plenty of volunteers to pull off a successful CRC event – so please reach out to our CRC Committee co-chairs – Mike Circosta (email: mjcarmonk@optonline.net / Ph: 914-273-9173) or Cliff Konitz (email: c.konitz@verizon.net / Ph: 845-297-5864) if you can volunteer.

Terry Connor, LEED AP Bi-State Chapter President

### **ASHRAE 2014 Annual Conference Announced for Seattle**

ASHRAE's 2014 Annual Conference takes place June 28-July 2 in Seattle, Washington. The Technical Program kicks off June 29, with interactive programs and a networking coffee break, and concludes July 2. The program addresses broad topics in the application of technology to practice, specific applications in ground source heat pumps, operations and maintenance and indoor environmental quality, as well as new reports on research taking place worldwide.

Featured is a track on Ground Source Heat Pumps State of the Art: Design, Performance and Research, which addresses all aspects of design that lead to optimally performing systems in addition to avoiding common pitfalls that lead to poorly performing systems. The Conference also features the second annual ASHRAE Research Summit, which presents innovations in HVAC&R research with particular emphasis on high performance building design and its role in a clean energy economy, and brings together researchers to present and discuss the latest research. Researchers present papers, seminars and forums or participate in panel discussions. Also, highlights on ongoing ASHRAE funded research are presented.

Attendees also can take part in courses offered by the ASHRAE Learning Institute, including two full-day professional development seminars and seven half-day short courses. New is a course on building demand response and the coming smart grid. ASHRAE also offers its Building Energy Assessment Professional (BEAP) and Building Energy Modeling Professional (BEMP) exams on July 1.

The keynote speaker is Robert Bryce, one of America's most prominent energy journalists and a senior fellow at the Manhattan Institute. He serves as the keynote speaker at the opening Plenary Session, held Saturday, June 28. Registration is not required to attend the session, which also features the Honors and Awards program. Denis Hayes, president and CEO, Bullitt Center, serves as keynote speaker at the Technical Plenary, Sunday, June 29. Conference registration is required to attend. In his remarks, Hayes discusses the problems and opportunities associated with "net positive" commercial construction, using the Bullitt Center as an illustration of what is currently possible.

Technical tours at the Conference include Federal Center South Building 1202; The Fred Hutchinson Cancer Research Center 1100 Eastlake Facility; The Bullitt Center; the Bill and Melinda Gates Foundation Headquarters; the University of Washington Molecular Engineering & Sciences Building; and the University of Washington Power Plant. General tours include Tillicum Village; Show Me Seattle; Aircrafts, Airpark and Aviation Artifacts; Leisurely Lakes Cruise; Going Boeing; Cascades, Cabernets and Chocolates; and Museum of History and Industry (MOHAI).

The Conference takes place at the Sheraton Seattle and the Washington State Convention Center. To register or more information, visit www.ashrae.org/seattle.

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## Wednesday, May 14, 2014 The Links at Union Vale

#### Schedule:

- 11:30 am check-in/ 12:00 noon lunch
- 1:00 pm shotgun start
- 6:00 pm dinner/awards

#### Costs:

- \$200 per player
- \$750 per foursome
- \$65 for dinner only

## Return this form with payment by May 9, 2014 Note: If payment is not received prior to the golf outing, your reservation may not be accepted.

Name:	Phone:		:
Company Name:			
Company Address:			
Email:			-
□ Individual for lunch/golf/dinner \$200	٥	Tee Sponsor	\$200
□ Individual for dinner only \$65	٥	Beverage Cart Sponsor	\$1000
□ Foursome for lunch/golf/dinner \$750		Lunch Sponsor	\$1500
Please check off participation level above above.			S. W. C. C. C. W. C. C. C. C.
1.			
2	74		





## Directions to The Links at Union Vale 153 North Parliman Road, Union Vale, NY 12540 (845)223-1002 www.thelinksatunionvale.com



## From New York City and South:

- Take the Taconic State Parkway north to Route 82 North.
- Travel 4-1/2 miles and make a right onto County Route 89
- Take the first right onto North Parliman Road (1 mile).
- Golf Course is 1/2 mile on right.

#### From East or West:

- Take Interstate 84 (east or west) to the Taconic State Parkway north (6-3/4 miles) to Route 82 North.
- Travel 4-1/2 miles and make a right onto County Route 89.
- Take the first right onto North Parliman Road (1 mile).
- Golf course is 1/2 mile on right.

### From the North:

- Take the Taconic State Parkway south to Route 55 east towards Pawling.
- Take a left at the first light (Route 82 north).
- Make a right onto County Route 89
- Take the first right onto North Parliman Road (1 mile).
- Golf Course is 1/2 mile on right.

## Research Promotion Contribution Form

#### PLEASE COMPLETE THE INFORMATION BELOW AND RETURN WITH YOUR CONTRIBUTION TO:

**Terry Connor** Johnson Controls 8 Skyline Drive Hawthorne, NY 10532

Phone: 914-593-5223 Fax: 914-593-5201

Name	Member #		
Company	Chapter_ <u>Bi-State</u>		
Address			
City	StateZip		
Please check one: ( ) Personal ( ) Company contribution	contribution		
Charge my gift to: ()Visa ()Master 0	Card ( ) American Express		
Credit Card #	Expiration Date		
Signature			

Donors

Honor recognizing Giants in HVAC&R invention or innovation.

Individual Honor Roll beginning at \$100 Corporate Honor Roll beginning at \$150

<u>Investors</u> with contributions of \$250 or more receive a wall plaque that can display six commemorative coins.

Contributions in any amount are gratefully received and 100% of the contribution goes directly to research. All contributions are tax deductible.

## **Scientists Warn of Quake Risk from Fracking Operations**

Fracking-triggered earthquakes could become stronger over time as more wastewater is injected deep underground, new research suggests. It follows the release of several studies linking hydraulic fracturing directly to increased seismic activity. Scientists attending the Seismological Society of America (SSA) annual meeting recently said that underground disposal of wastewater and fracking likely induce earthquakes by changing the state of stress on existing faults to the point of failure. Most seismic events linked to fracking had been magnitude 3.0 or less.

Researchers had previously believed that such induced earthquakes could not exceed magnitude 5.0. But in 2011, two stronger earthquakes were recorded in heavily drilled areas near Trinidad, Colorado and Prague, Oklahoma. The larger quakes led researchers brought together by the SSA meeting to believe there may be a cumulative effect and that larger, "outlier" earthquakes could become the norm.

"I think ultimately, as fluids propagate and cover a larger space, the likelihood that it could find a larger fault and generate larger seismic events goes up," Gail Atkinson, professor of earth sciences at Western University in Ontario Canada, said at the SSA meeting.

Fracking is the process of injecting large volumes of water, chemicals, and sand at high pressure deep underground to dislodge oil and gas. Afterward, wastewater from the process is shot even deeper underground for storage. Several studies have linked earthquakes directly to fracking activities, and as fracking increases in the U.S. so too does the number of earthquakes — especially in heavily drilled areas. The United States Geological Survey (USGS) recorded five times more earthquakes over magnitude 3.0 on average annually from 2010-2012 compared with years 1967-2000.

Over time, as more wastewater is sequestered underground, larger faults further away from the well site could be triggered, creating stronger earthquakes tens of miles from fracking sites. "With these huge wells, the pressure they create can travel tens of kilometers," said Katie Keranen, assistant professor of geophysics at Cornell University, who led the study on the Jones earthquake swarm in Oklahoma. Earthquake swarms, where multiple quakes of around magnitude 3.0 occur almost simultaneously, have hit in Oklahoma in recent years, surprising residents not used to regular seismic activity.



Join ASHRAE in Seattle! Take advantage of the opportunity to discuss and examine the latest topics in the building industry, such as high performing buildings and integrated design, through the technical program; participate in technical tours; attend ASHRAE Learning Institute courses; and earn professional credits.

**Research Summit** – held in conjunction with the 2014 Annual Conference. The summit addresses the latest research results, innovative research techniques and forecasts future research directions.

**Technical Program** – presentations and papers focus on current research worldwide; core HVAC&R applications and systems; and Integrated Project Design, Energy Modeling and Building Efficiency Performance.

Networking – share ideas and learn from fellow members from your hometown and around the world.

**ASHRAE Learning Institute** – choose from two full-day professional development seminars and seven half-day short courses to stay current on new HVAC technologies.



## **New York State Energy Plan Would Alter New York Utilities**

New York State is proposing to turn its electric utilities into a new kind of entity that would buy electricity from hundreds or thousands of small generators and set prices for that electricity and for the costs of running the power grid.

The proposal anticipates a radically different electric system, dominated by decentralized production, much of it of renewable, intermittent energy sources like solar or wind power. The Public Service Commission is considering how the utilities would have to change.

Instead of distributing electricity themselves, the utilities would effectively direct traffic, coordinating distribution of electricity produced by a multitude of smaller entities, according to an outline published last month by the commission, which regulates utilities.

"It's really quite a revolutionary change that's being proposed," said Charles A. Zielinski, a lawyer in Washington who specializes in electricity and who was chairman of the New York commission from 1978 to 1981. "It's a big deal," Mr. Zielinski said. "If New York can pull this off, it would be huge."

In the 1990s, the state pushed companies like Con Edison to sell their generating stations to independent producers, and to become primarily distribution entities. Now they would become traffic cops in a two-way flow of power.

The new report predicts the gradual decline of big generating stations. In their place, the commission envisions rooftop solar panels, small wind turbines and small generating stations using natural gas to make both electricity and steam, which would be used for cooling or heating their immediate area. Some of these generators would be linked in "micro-grids" intended to stay afloat during a blackout.

The underlying idea is that the existing system of regulation does not encourage the utilities or independent parties to produce a cleaner, more efficient energy grid.

The Public Service Commission will hold a public session on the proposal Monday, May 12.



## **APPLY**

Each year the ASHRAE Foundation awards scholarships of up to \$10,000 each to qualified students.

## DONATE

Help support ASHRAE's student scholarship programs.

www.ashrae.org/scholarships

## **Bi-State Chapter Officers and Governors 2013—2014**

Position	First Name	Last Name	Email	Phone	Fax
Officers					
President	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
President-Elect	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
Vice President	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
Secretary	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	
Treasurer	Dennis	LaVopa	dlavopa@dlFlowTech.com	(845) 265-2828	(845) 265-2745
Governors					
BOG (term ends June 2016)	Michael	Circosta	mjcarmonk@optonline.net	(914) 273-9173	(914) 273-4097
BOG (term ends June 2016)	Dennis	LaVopa	dlavopa@dlFlowTech.com	(845) 265-2828	(845) 265-2745
BOG (term ends June 2016)	Robert	Roston	bob@rostonfamily.com	(914) 761-3364	(203) 504-7949
BOG (term ends June 2015)	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
BOG (term ends June 2015)	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	(845) 297-5864
BOG (term ends June 2015)	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
BOG (term ends June 2014)	Steven	Abbattista	sabbattista@olace.com	(914) 919-3102	(914) 747-0453
BOG (term ends June 2014)	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
BOG (term ends June 2014)	Joseph	Trongone	jatrong@optonline.net	(914) 332-7658	
Chapter Delegate	Brendan	Smith	bsmith@lynstaar.com	(914) 741-1290 ext 17	
Chapter Alternate	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
Committee Chairs					
CTTC	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
Research Promotion	Terry	Connor	Terry.Connor@jci.com	(914) 593-5223	(914) 593-5201
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Young Engineers in ASHRAE	TJ	Kieper	kiepertj@gmail.com	(917) 993-1023	
Membership Promotion	James	Dolan	jdolan@olace.com	(914) 919-3106	(914) 747-0453
Refrigeration	John	Fusco	jfusco@olace.com	(914) 919-3178	(914) 747-0453
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Historian	Robert	Roston	bob@rostonfamily.com	(914) 761-3364	(203) 504-7949
Reception	Joseph	Trongone	jatrong@optonline.net	(914) 332-7658	
Administrator	Cliff	Konitz	c.konitz@verizon.net	(845) 297-5864	(845) 297-5864
Golf	Steven	Abbattista	sabbattista@olace.com	(914) 919-3102	(914) 747-0453

## Why Be Involved in a Local Chapter?

- Learn about the latest technologies presented in the program sessions
- Attain continuing education credits
- Meet industry associates and discuss local concerns
- Network amongst designers, installers, vendors, educators, in your local area to help improve business for all
- Share experiences with others
- Enjoy a social hour
- Carry out ASHRAE's mission on a local level

To advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world.

## **Notice to business card advertisers:**

We are currently accepting business card advertisements for this year's newsletters. The cost of a business card ad is \$125.00. The newsletter is published monthly, September through June (ten issues). That means for \$125.00 (\$12.50 an issue), your business card ad will circulate to approximately 300 recipients a month or an advertising cost of approximately 4 cents/recipient.

If you are interested in placing an ad, please forward a business card and check (payable to ASHRAE Bi-State) to:

#### **ASHRAE Bi-State Chapter**

DL Flow Tech 2421 Route 52

Hopewell Junction, NY 12533



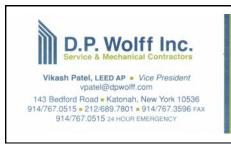
















## **Employment Opportunities**

Employment ads may be submitted for inclusion in **The Exchanger** as follows:

- 1. \$100.000 from companies placing ad for one (1) month.
- 2. \$150.00 from companies placing ad for two (2) months.
- 3. No charge for members looking for employment.

#### **Hydropower - Untapped Resources**

Waterways across the United States with no dams or hydropower facilities could add more than 65 gi-gawatts of hydropower to the grid, or about 128 percent of the nation's hydropower net annual generation, according to an Oak Ridge National Laboratory report. The study took advantage of advanced geospatial datasets to analyze the potential for hydropower development in more than 3 million segments of streams -- or "stream-reaches." With 17 gigawatts of untapped hydropower, the Pacific Northwest has the highest potential, followed by the Missouri River Basin with 11 gigawatts, according to the report, the most detailed evaluation of U.S. hydropower potential at undeveloped stream-reaches to date. Hydropower provides the U.S. with about 6 percent of its electricity. The report, prepared for the Department of Energy, is available at <a href="http://nhaap.ornl.gov/nsd">http://nhaap.ornl.gov/nsd</a>



ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.

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.

## Upcoming Meetings

Month	Date	Promotion	Main Presentation	Tech Session
May	5/14/2014	Student Scholarships	Golf Outing	
August	8/14/2004 through 8/16/2014		ASHRAE Region 1 2014 CRC hosted by Bi-State Chapter	

#### **Energy Department Announces First Regional Gasoline Reserve to Strengthen Fuel Resiliency**

Energy Secretary Ernest Moniz has announced the creation of the first federal regional refined petroleum product reserve containing gasoline. Based on the Energy Department's lessons learned from the major fuel supply disruption in the aftermath of Superstorm Sandy, the Department will establish two Northeast reserve locations near New York Harbor and in New England. Each location will store 500,000 barrels of gasoline, enough to provide some short-term relief in the event of significant disruptions. The new reserve complements the Northeast Home Heating Oil Reserve, a one million barrel supply of diesel for the Northeast. Emergency withdrawals from NEHHOR were used for the first time in response to Superstorm Sandy to supply first responders and emergency generators in the region.

With major product supply and distribution infrastructure located along U.S. coasts, Northeast energy supply and reliability is vulnerable to the impacts of hurricane winds, tidal surges, severe wind, snow and icing conditions. In 2012, Superstorm Sandy caused heavy damage to two refineries, and more than 40 terminals in New York Harbor were closed due to water damage and loss of power, leaving some New York gas stations without fuel for as long as 30 days.

At present, the Energy Department's Strategic Petroleum Reserve (SPR) contains crude oil but does not contain refined petroleum products. Establishing a refined petroleum product reserve of gasoline - acquired and owned by the U.S. government, and stored at leased commercial storage terminals along the East Coast - will help mitigate the impacts of sudden and unexpected supply interruptions. The Department anticipates awarding contracts for commercial storage, service, and product acquisition in order to launch the reserve by late summer of 2014.

## **New Material for Flat Semiconductors**

Researchers around the world have been working to harness the unusual properties of graphene, a two-dimensional sheet of carbon atoms. But graphene lacks one important characteristic that would make it even more useful: a property called a bandgap, which is essential for making devices such as computer chips and solar cells. Recently, researchers at MIT and Harvard University have found a two-dimensional material whose properties are very similar to graphene, but with some distinct advantages — including the fact that this material naturally has a usable bandgap. The research, published online in the *Journal of the American Chemical Society*, was carried out by MIT assistant professor of chemistry Mircea Dincă and seven co-authors. The new material, a combination of nickel and an organic compound called HITP, also has the advantage of self-assembly: Its constituents naturally assemble themselves, a "bottom-up" approach that could lend itself to easier manufacturing and tuning of desired properties by adjusting relative amounts of the ingredients.