

The NEHES Fall Conference is Fast Approaching!



We look forward to welcoming you to scenic Burlington, Vermont for the 2017 Fall Conference. At the event, you'll have the opportunity to network with colleagues and business partners and learn essential tools for successful facility management through presentations that support this year's theme: "CHAMPioning Patient and Family-Centered Care."

KEYNOTE ADDRESS and 2017 AGENDA



Neale Lunderville,
General Manager of the Burlington Electric Department

Getting Better All the Time: How Our Communities Will Benefit from the Energy Revolution

The energy industry is evolving from large scale transmission and generation to customer-focused energy services powered by small-scale renewables. This seismic shift will put customers at the heart of the industry and will improve the health and well-being of our communities.

Explore the 2017 Fall Conference Agenda: www.nehes.org/2017-nehes-fall-conference-agenda/

CHC Review Course

NEHES will host a CHC review course on Sunday, September 24, onsite at the conference hotel. Designed to give you the tools for passing the Certified Healthcare Constructor (CHC) Exam, this course provides test taking tips, key topics, and sample questions identified in the CHC content outline (as listed in the CHC Candidate Handbook). For additional details and to register, visit <http://nehes.org/2017-fall-conference-chc-review-course/>.

Start Practicing Your Swing!



The 2017 NEHES Golf Tournament will be held on Sunday, September 24, prior to the formal start of the conference. Both active members and business partners are encouraged to participate in this popular event, to be held at the picturesque Burlington Country Club. Register here: <http://nehes.org/2017-nehes-fall-conference-golf-tournament/>

UVMMC Site Tour

Tuesday, September 26, 2017
 9:30 - 10:40 AM

Attendees will have the opportunity to tour the University of Vermont Medical Center as it undergoes several building renovation and construction projects. Dave Keelty, Director of Facilities Planning and Development for UVMMC, and representatives from E4H Architecture and Whiting-Turner will discuss the Master Facilities plan, which is fiscally responsible, minimizes impact on the environment, and includes input from patients and the community. You may RSVP for this tour when you register for the NEHES Fall Conference.

Monday Evening Gala



Join fellow attendees and business partners on Monday, September 25, at Waterworks Food + Drink, nestled in the Champlain Mill on the Winooski River. Enjoy food, drinks, live music from cover band Third Shift and a spectacular view!

Full conference information may be found online at www.nehes.org/2017-nehes-fall-conference/.



Alison Brisson, CHFM, SASHE
Sr. Manager, Regional Facilities
Dartmouth-Hitchcock
Bedford, New Hampshire
2017 NEHES President

It sure does feel like summer is passing by in the blink of an eye! I feel very fortunate to have had the ability to spend time with colleagues at the Twin State Seminar in July at Dartmouth-Hitchcock. This one day seminar was full of education to help our membership succeed in a busy profession. Thank you VHES, NHSHFM, Jona Roberts and all of our presenters for making that Friday in July time very well spent.

At the beginning of August I had the pleasure of attending the ASHE Annual Conference in Indianapolis, Indiana. Here I had the honor of accepting the Platinum Elite Award on behalf of NEHES for our work in 2016. This was a proud moment for our chapter, achieving the highest level of affiliation for our work on a number of different levels including education, advocacy, communications and sustainability efforts. None of this would have been

possible without the hard work and dedication of our volunteer board and active participation of each of our members. Thank you!

Now it is time to focus our attention toward the Fall Conference scheduled for Sept. 24-27th in beautiful Burlington, VT. This will be yet another extraordinary time to network with colleagues and industry experts. This will be the place to go if you want to hear about standards and codes from the folks that help to develop them, learn about the "energy revolution", barrier management, sustainability, project management, tips for successful surveys and much, much more! We will be holding our annual membership meeting Tuesday afternoon, where you will hear updates from our board, learn about and vote on bylaw changes and also vote for your 2018 Executive Board of Directors. I hope to see you there!

Enjoy the warm weather while it lasts... the leaves will begin to turn before we know it. If there is anything that I can do to help make your membership with NEHES more valuable or if I can assist you in any way, please do feel free to reach out. Thank you for being a member of this fine organization and for helping to create an experience that is one in a million.

Get Ready to Renew Your Membership

Beginning October 1st NEHES will begin sending Membership Renewal notices to all members. Each year, thousands of dollars are given back to members in the form of benefits. There's a tremendous return on investment for being a NEHES member. Here's how NEHES makes this all happen.

· **Educational programs are the backbone of NEHES.** With a single day spring seminar, a summertime Twin State event and a multi-day fall conference offered to its members, NEHES sets a standard of excellence for quality educational programs with acclaimed speakers. CHFM/CHC Courses are often offered at no charge and CEUs are offered for all programming.

· **NEHES provides a quarterly newsletter** with important information about upcoming events and NEHES programming. It is also a resource to share information among NEHES members. Members can receive an online or printed edition.

· The NEHES website is a source

of information for the New England society. Moving forward, we are looking at better ways to improve the value of the state chapter pages on the website.

· We provide current information on codes and standards. Each of us lives by these items and NEHES is a vital source of updated information. Oftentimes, new guideline books are given out free as part of attendance at one of our events.

· NEHES members receive advocacy support locally and nationally. When new or updated regulations are being proposed, you have someone in your corner willing to advocate for meaningful and reasonable changes in codes and standards.

· NEHES supports its state chapters as they recruit members and offer their own statewide programming. In fact, the Twin State Seminar is offered at no cost to members. NEHES stands ready to support special financial needs of state chapters.

· NEHES Scholarships help members reach their educational goals. With individual scholarships up to \$2000 per year, every NEHES Active Member has the opportunity to advance their career studies.

· Supporting Members have the opportunity to meet one-on-one with potential customers in need of their products and services. Exhibit space is offered at two major events each year specifically for Supporting Members.

· Networking for solutions! If you have a question or concern about a project, you have the combined knowledge of over 500 members to solicit information from. This, alone, can save you time and dollars.

In a presentation at the Fall Conference in 2015, former ASHE President and longtime NEHES member, Dave Dagenais, suggests that healthcare engineers "transition from an expense department to a cost avoidance ambassador." A membership in NEHES can help do just that.

ASHE Region I Update



Ed Lydon, CHFM
Director of Support Services/Facilities Northeast Hospital Corporation—a member of Lahey Health (Beverly Hospital, Adison Gilbert Hospital and Bayridge Hospital) ASHE Region 1 Director, NEHES Advocacy Chair

During the past several months, I have attended a variety of ASHE meetings including the ASHE Sustainability Liaison meeting held in Chicago Illinois, the ASHE Summer Board Meeting as well as the ASHE Annual Conference. The meetings provided updates on a variety of programs as well as the progress towards strategic goals. The ASHE Annual Conference offered excellent education programs as well as the opportunity to recognize the achievements of ASHE members and chapters. Here are the highlights from each of these programs. If you'd like more detailed information, please email me at info@nehes.org.

ASHE Sustainability Liaison Meeting

This was the first orientation held for the ASHE Sustainability Program. The program, under the direction of Kara Brooks, Sustainability Manager, was a great success.

ASHE Summer Board Meeting

The ASHE Board met on Friday and Saturday, August 4-5, 2017 at the Marriott Indianapolis Downtown Hotel. Key topics covered in this meeting included discussions on strategies to be considered when engaging individual constituencies in the healthcare facilities management field. Additionally, the board reviewed progress on ASHE's strategic plan imperatives and committee action plans. There was discussion of potential new projects to complete in 2017, and projects to be included in the 2018 budget.

PJ Andrus, ASHE Executive Director, discussed the final steps towards full integration of Health Facilities Management magazine into the ASHE family of publications. Don King, facilitator for the Healthcare Executive Leadership Council (HELC), presented activities of this group to the board. Outcomes from each of the three committees were highlighted: Capital Renewal, Data Analytics, and Influencing the Future. The HELC will host a plenary session at the next ASHE annual conference to discuss the group's purpose and activities to date.

PJ highlighted a first for the society: ASHE's participation in the 2018 edition of Future Scan – a C-Suite focused document published annually

by the Society for Strategy and Market Development - SHSMD (another Professional Membership Group under the AHA umbrella). Participation in this publication highlights ASHE members' potential for participation in C-Suite decision making in the future.

AIA, ACHA and AGC are industry partners, and we are seeing high demand for ASHE education and resources from these organizations. ASHE enjoys a strong relationship with AIA, including its sponsorship of the PDC Conference. Opportunities also exist to collaborate with AGC, including partnering on education programs such as HCC, and participation in the production of the PDC. Brad Taylor, Incoming ASHE President, will be appointing a task force to strengthen and expand our relationship with AGC, as well as engage in discussions with the American College of Healthcare Architects (ACHA) regarding mutual support of our certification programs.

ASHE Annual Conference

The ASHE Annual Conference was held August 6th – 9th in Indianapolis, Indiana and featured this year's theme "Full Throttle Navigating Change in Healthcare". The conference was a great success with a record breaking attendance of over 4,000 attendees. No doubt Region 1 was well represented by facility managers from New England, New York,

Continued on page 16

NEHES Board Proposes Bylaws Changes to Membership

The NEHES Board of Directors is proposing changes to the NEHES Bylaws to more accurately reflect the changes in roles and responsibilities which have occurred due to the change in Administrative Director. In addition, some of the changes reflect changes which have occurred over time. A full description of the proposed changes may be found on the NEHES Website at the following link: <http://nehes.org/2017-bylaws-proposed-revisions/?preview=true#sthash.A7LaP6F8.yTULwClw.dpbs>.

The Bylaws changes will be voted on by NEHES Members at the upcoming NEHES Annual Meeting to be held on Tuesday, September 26th at 3:45 PM in conjunction with the Fall Conference. All NEHES Members are invited to attend the Annual Meeting. If you have any questions concerning the proposed changes, please email us at info@nehes.org.

New England's Power Grid Transition: From Coal and Nuclear to Natural Gas and Renewable The Inconvenient Consequences



**Edward M. Browne,
SASHE, CHFM,
CHC**
*Vice President
Support Services,
Cambridge
Health Alliance,
Cambridge, MA
2017 NEHES
Sustainability
Chair*



**Shaun Pandit,
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Early Bird
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There is a huge shift happening to the power grid in New England – and what you don't know could impact you – and your utility bill.

The power grid in New England is rapidly shifting from coal and nuclear energy to natural gas and renewable energy. Between 2012 and 2020, about 15% of the region's generating capacity – more than 4,200 megawatts (MW) — is being replaced. Most of the new generating capacity is powered by new natural gas-fired plants. But this does not mean extra capacity; many coal- and nuclear-powered plants are closing.

Good news: New plants are opening – capacity going up

Natural gas powers 52 percent of electricity production. With ample United States-based supplies and production, natural gas is the least expensive resource to generate electricity. Now and in the near-future, gas simply makes more sense both economically and environmentally.

Mixed news: Older plants are closing – capacity going down

If we were adding gas plants to the mix without shutting any plants, this story might be a little different.

But the upcoming closures of two of plants, Brayton Point Station (May 2017) and Pilgrim Nuclear Power Station (May 2019) will remove 2,200 MW of non-gas-fired capacity. And they are not the only older plants at risk of closing.

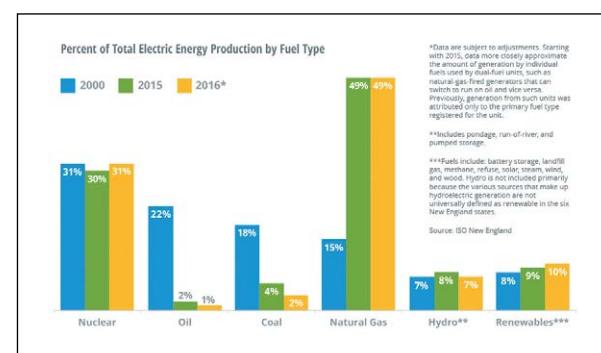
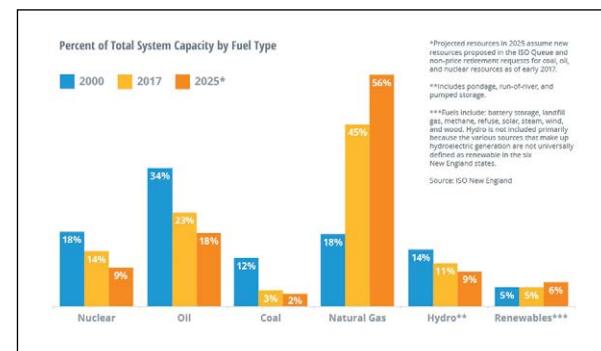
About 9,000 MW of existing coal- and oil-fired energy plants are at risk or face uncertain futures.

The transition from coal, oil, and nuclear energy to natural gas and renewables have two underlying reasons: economics and the environment. From an economic standpoint, gas is less expensive than coal and nuclear power. And gas simply does not carry the same environmental impacts and costs. With this dual punch, over 5,500 MW of oil and coal capacity are at risk for retirement in coming years. And another 3,300 MW from the region's remaining nuclear plants face an uncertain future.

Right now, there are only three other coal-fired power plants in New England – Merrimack Station (Bow, NH), Schiller Station (Portsmouth, NH), and Harbor Station (Bridgeport, CT) – but they are also scheduled to be shut down in the near future. Harbor Station is expected to close in 2021 and be replaced by a natural gas plant.

Nuclear energy is becoming extinct in New England.

New England's two nuclear plants have closed or are scheduled to close. Pilgrim Nuclear Power Plant Station (Plymouth, MA) will close no later than June 2019. Vermont Yankee Nuclear Power Plant (Vernon, VT) closed 2014. Entergy, the operator of both these plants cites the high costs of the environmental risks associated with a nuclear plant, the low wholesale energy market prices, and the competing low costs of natural gas-based electrical generation.



Consequences and Realities

While we can all agree that coal and nuclear power have environmental and economic consequences, there are problems with a large-scale shift to gas powered generation: fuel security.

Gas-fired electrical generation must compete for supply with domestic and commercial heating and cooking, and industrial usage. The Algonquin pipeline is the primary pipeline bringing natural gas into New England – and it does not have enough capacity to meet the increased demand. This is especially true during the winter months when natural gas usage increases due to heating demand.

As you can see on the chart below, the cost of the transportation, or basis, spiked in the winter of 2014 – and dramatically impacted the market

While there are significant upward trends in renewables and EE, it will be years before these resources can match both current and planned/proposed gas-fired system capacity.

So...what does all this mean to you?

Pay attention to the gas market. It will determine your energy costs and capabilities. Work with an energy consultant who understands how the market impacts your cost.

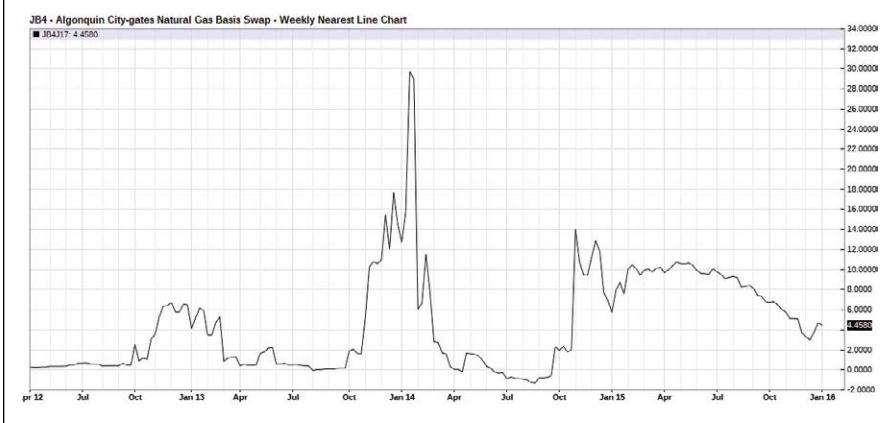
current power is being met with these closing plants, understand how this will impact your costs.

In closing

Energy generation is changing in New England, moving away from nuclear-, oil-, and coal-fired plants to gas-fired plants. This change is being driven by economics and environmental concerns. While renewables show long-term promise, they have their own set of issues around demand resources.

Gas-fired generation is currently the most economical fossil-fuel option, with lots of US-based capacity. But there are issues with pipeline capacity into New England.

To navigate the changing landscape of energy consumption, you need to look beyond your energy bill and understand the outside impacts of supply, weather, demands, and technology. Carefully consider aggregation strategies with other hospitals, government or municipal bodies, and buying groups to ensure you obtain the best arrangement for your institution.



What are the solutions to a more stable supply?

More pipeline capacity.

Increased natural gas transportation is critical but pipelines face incredible pressure from landowners and the public. Planning is both long and complex.

Better storage technology for renewable energy.

New energy-storage technologies are emerging in the region. In late 2015, grid-scale battery-storage projects requested interconnection to the regional power system for the first time. For renewable energy to be a reliable supplier, it must create adequate, scalable energy storage to meet baseload demand.

Better demand resources.

Demand resources, such as load management, distributed generation, and energy-efficiency (EE) projects, have

increased from 100 MW in 2003 to about 2,800 MW in 2017. This means that thousands of individual demand assets must be integrated into the power system.

Pay attention to the weather.

Cold weather – with increased heating demand – can impact supplies. Increased competition in the winter for natural gas for both heating and electric demand can drive up prices. Reducing your winter demand can prove more valuable than summer demand reductions.

Investigate renewables – but understand the challenges. Installing your own renewables or net metering installations can mitigate fluctuations in the natural gas markets. But the state of the technology can make implementation a challenge.

Invest in EE (energy efficiency).

If you're using less energy, you're spending less. You face fewer impacts from price fluctuations due to natural gas supplies or the need to increase capacity of your renewable energy projects. But EE projects often carry large up-front costs and long payback periods.

Understand the impact of plants that are going off-line.

Generation plant closings are announced well in advance. If your

Resources such as ASHE's Energy University can help you understand your power program options. Also review ASHE's 2017 Monograph Energy Procurement: A Strategic Sourcing How-To-Guide

Working with an experienced energy advisor can help you better understand and take advantage of market scale and future purchase price lock-ins. Ensure your internal team includes members of your finance and procurement departments as you approach this complex market.

The market is changing – and you need to be proactive. Plan, understand, install EE, and diversify supply where you can. Stay up to date on market changes and utilize free resources like ISO New England's website www.iso-ne.com.

Use the resources of professional groups such as ASHE and NEHES Sustainability Committee, along with independent advisors, and move confidently toward our new energy future.

NEHES Earns Platinum Elite Status



NEHES has earned the Platinum Elite Level of Affiliation, the highest designation

that can be attained by an ASHE Chapter, this year after 10 years of stellar Platinum status. The award was presented at the recent ASHE Annual Conference this summer in Indianapolis, Indiana.

In 2016, ASHE introduced a new option for chapters that participate in the Chapter Levels of Affiliation Award

program. Elite status was granted to NEHES due to our members' active involvement with Energy to Care and the Chapter Challenge program, ASHE's energy benchmarking and awards program that encourages facilities to reduce operational costs through energy savings.

"This achievement really demonstrates the NEHES Board of Directors' hard work and commitment to our members, especially in the areas of education, advocacy, and communication. We've now also added a stronger commitment to sustainability with the addition of the Elite Chapter status, awarded as a

result of our ASHE Chapter Challenge participation," said Alison Brisson, NEHES President. "Our chapter continues to be recognized for its leadership as one of the strongest in the country."

Platinum Level is given to those chapters that take leadership in membership initiatives, ASHE programs, chapter leadership forums, education programming, chapter communications, Regional Leader nominations, website development, and an annual report of chapter goals.

For info, visit: www.ashe.org.

ASHE Conference Wrap-Up

This years ASHE Annual Conference and Technical Exhibition was held in the friendly Midwest capital of Indiana, Indianapolis. The August event was "full throttle" with education, networking and a large exhibit stocked with tools, resources and technology that help us care for the healthcare built environment. Attendees were able to "get the wheels turning" with knowledge gained in one of the many education tracks including, Code compliance, PDC, business, patient experience, shifting care delivery, cost reduction and infection prevention.

Members of the NEHES Executive team, Alison Brisson, Wes Pooler and Peter Girard joined our ASHE Region One Director, Ed Lydon at the Chapter Leadership Forum on Sunday. Here they were able to learn about best practices for association management and network with other affiliated chapters from across the nation. For the work in 2016, NEHES achieved the Platinum Elite level of affiliation with ASHE, the highest level a chapter can reach. Attendance at this pre-conference forum by members of our chapter leadership is required for the Platinum Elite status.

Some NEHES members took advantage of the CHFM exam review course Sunday and then stayed Wednesday to sit for the exam. We hope to welcome them to the CHFM family soon!



ASHE Honors the nation's ten Regional Leaders

Other pre-conference activities included a session on leadership skill development and another on managing infection prevention during construction. All three pre-conference activities were taught by NEHES members - yet another testament to our dedication to the profession.

NEHES was truly in "victory lane" with our President, Alison Brisson receiving both the Regional Leader Award for Region 1 and her SASHE designation. Ed Lydon, received his FASHE designation for demonstrating his advanced level of expertise and leadership. NEHES members Lynn Kenney Koffel, Lennon A. Peake and Robby Robertson all received Senior status (SASHE) as well. Congratulations!



ASHE Recognizes Members Achieving SASHE Certification

"This year's ASHE conference in Indianapolis was a great experience. Great education, networking opportunities, food, and the supporting members put on a great show. The supporting members show not only

Continued on page 8

State Chapter Reports



Connecticut

President and Chapter Rep:

Paul Roth, CHFM
Facilities Operations Manager
Lawrence and Memorial
Hospital, New London
proth@lmhosp.org

Vice-President:

Al Wasko
Associate Director, Plan Maintenance
Yale-New Haven Hospital, New Haven
alwasko@ynhh.org

Secretary:

Ron Hussey
Manager of Facilities and Engineering
Johnson Memorial Hospital,
Stafford Springs
ronald.hussey@jmmc.com

Membership Update:

- 42 Active Members
- 8 Supporting Members



Maine

Upcoming program topic:

Compass Healthcare Facilities
Symposium
Portland, ME
September 7-8, 2017
www.compass-symposium.com

Recent program topic has included:

The Annual Cabbage Island Lobster
Bake was held on June 23 in
Boothbay Harbor with 68 in
attendance. See page 15)

President:

Timothy M. Doak, PE, PLS, SSGB
Eastern Maine Healthcare Systems
tdoak@emhs.org

NEHES Chapter Rep –

Secretary/Treasurer:
Cole Teague, CHC, CHFM,
Director of Facilities Management
Franklin Memorial, Farmington
cteague@fchn.org

Membership Update:

- 50 Active Members
- 64 Supporting Members
- 2 Lifetime Members
- 114 Total Members
- 58 Chapter Members are NEHES members



Massachusetts

2018 NEHES Fall Conference will be hosted by the Massachusetts Chapter

President:

Dave Fowler, MEP
Senior Director- Support Services,
Anna Jacques Hospital, Newburyport
DFowler@ajh.org

Secretary:

Dann Boyer, CHFM
Sturdy Memorial Hospital, Attleboro
DBoyer@sturdymemorial.org

Treasurer:

Paul DeViller, CHFM, NCT
Director of Support Services, Lahey
Medical Center, Peabody

NEHES Chapter Rep:

Corey McNulty, CHFM
Regional Director of Plant Operations
Vibra Healthcare, New Bedford
CMcnulty@newbedfordrehab.com

Membership Update:

- 72 Active Members
- 79 Supporting Members



New Hampshire

President:

Greg D'Heilly, CHFM
Facility Manager, Dartmouth-
Hitchcock Manchester
Gregory.E.DHeilly@hitchcock.org

Vice President:

Peter Girard, CHFM
Facility Manager, Dartmouth-
Hitchcock, Manchester
Peter.r.girard@hitchcock.org

Secretary/Treasurer:

Tim Bishop, CHFM, CHSP
Facility Manager, Dartmouth-
Hitchcock, Nashua
Timothy.m.bishop@hitchcock.org

NEHES Chapter Rep:

Scott Lever
Mechanical & Utilities Systems
Manager, Nashua
Southern NH Medical Center
scott.lever@snhhs.org

Membership Update:

- 42 Active Members
- 35 Supporting Members
- 4 Lifetime Members
- 81 Total Members



Rhode Island

Recent topic:

August at the GPUB in Providence,
RI: Critical Power Management in
Healthcare
By Mario Ibrahim, Director of New
Products and Innovation
At ASCO Power Technologies

Objectives: 1. To learn the most
recent regulatory compliance and
accreditation requirements for Joint
Commission and CMS standards
2. To learn NFPA 110 and NFPA
99 healthcare critical monitoring
requirements 3. To learn NEC and
ASHRAE energy and capacity
compliance requirements 4. To
understand how to utilize your critical
power management system comply
with required codes and standards

President:

Charles Brown
Facilities Operations Manager,
South County Hospital
cbrown@schospital.com

Vice-President:

Robert Dunning,
Director Facilities Management,
South County Hospital

Continued on page 8

State Chapter Reports

Treasurer:

John R. Zoglio, MBA, CHFM, CHSP
Manager of Safety and Emergency Preparedness, Kent Hospital
john_zoglio@mhri.org

NEHES Chapter Rep/Secretary:

James Carroll
Director of Facilities, Butler Hospital
jcarroll@butler.org

Membership Update:

- 23 Active Members
- 17 Supporting Members



Vermont

Recent program topic has included:

In May, there was a presentation "Nurse Call System Integration into Patient Care" well attended and informative.

President:

Erik Lahr
Supervisor of Facilities Management and Environmental Services, UVMC-Fanny Allen
Erik.Lahr@uvmhealth.org

Vice-President:

Joe Voci
Supervisor of General Maintenance, UVMC
Joseph.voci@UVMhealth.org

Secretary/Treasurer:

Robert Prohaska
Director of Plant Services, Brattleboro Memorial Hospital
rprohaska@bmhvt.org

NEHES Chapter Rep:

Erik Lahr—UVMC

Membership Update:

- 28 Active Members
- 14 Supporting Members

You can visit the Chapter website at:
www.vhes.org

ASHE Conference Wrap-Up

Continued from page 6

gives you technical advice but I was able to get some new contacts for ongoing issues in my facility. The most compelling reason that I would recommend going to an ASHE conference is finding out how other people are dealing with issues we face every day. Another key aspect is the opportunity to hear George Mills from the Joint Commission. People have the ability to get this information online but to hear the particulars of what will be expected of us is invaluable.”
—Peter Girard, CHFM

“Attending ASHE conferences are always rewarding. Think about it.... this is the largest gathering spot of industry experts in one place, you can't help but learn and be part of “best practice”, attending always gives me balance and perspective.

Starting with keynote speaker Paul Keckley, PhD, who brought mind opening information vision of where this industry is going. He worked for the Barak Obama to bring industries together for the first stab at a national health care plan. The speaker was not political, he gave some futuristic perspective of buildings, digital changes and their affect, and how dollars (as it relates to our buildings and systems) could be better put to work in the ever changing national health care delivery.

The concurrent sessions provided expert information and take homes from folks with the namesake of Sue McLaughlin, Chad Beebe, Dave

Dagenais and others on codes and standards, the buzz on Fire Door inspections, CMS Emergency Management rule changes, Explanations on how CMS looks at occupancies, great technical content from HVAC control in critical environment to energy strategies, bench-marking and much more.

I appreciate the networking where people are like us and not just contacts. Relationships built to provide future Q&A to help us get thru our 24/7 jobs. We also had some pretty good fun at the social functions receptions and delight in dinner with colleagues. I also especially enjoy the pride of our chapter, when bringing home the Platinum Elite as well as seeing our chapter leaders get their SASHE, Regional Leader and FASHE.

The trade show is always rewarding, not for the trinkets per se, but for the new technology and tools for efficiency and to keep our staff and customer base safe. I found remote switching tools to reduce Arc Flash risk by Martek, and real time IAQ mold monitoring by Pathogen Alert, and picked up some info as we approach upgrade or change to our CMMS.

Thanks to my many NEHES friends for being there! It was a truly great Conference!” -Ron Vachon

We hope that you will take advantage of the many benefits of being an ASHE member and attend next years annual conference in Seattle, WA.

ASHE Regional Leader Award



NEHES President, Alison Brisson, Received Emerging Regional Leader Award at the ASHE Conference

Alison Brisson, CHFM, SASHE, with Dartmouth-Hitchcock in Bedford, New Hampshire was recognized as the Region

1 Emerging Regional Leader at the recent ASHE Conference held August 6-9 in Indianapolis. The Emerging Regional Leader award recognizes people for their contributions to the fields of health care engineering and facilities management; planning, design and construction; safety, clinical and biomedical engineering; and technical management. NEHES extends Congratulations to Alison for this recognition and achievement!

CMS ANNOUNCES NEW FIRE AND SMOKE DOOR TESTING REQUIREMENTS



In a memo released on July 28, 2017, CMS announced new fire and smoke door testing requirements. The Survey and Certification Memo (S&C 17-38-LSC) outlines new requirements including the following:

- In health care occupancies, fire door assemblies are required to be annually

inspected and tested in accordance with the 2010 National Fire Protection Association (NFPA) 80.

- In health care occupancies, non-rated doors assemblies including corridor doors to patient care rooms and smoke barrier doors are not subject to the annual inspection and testing requirements of either NFPA 80 or NFPA 105.
- Non-rated doors should be routinely inspected as part of the facility maintenance program.

• Full compliance with the annual fire door assembly inspection and testing in accordance with 2010 NFPA 80 is required by January 1, 2018.

- Life Safety Code (LSC) deficiencies associated with the annual inspection and testing of fire doors should be cited under K211 – Means of Egress - General.

For additional information, please visit the CMS website.

Renewed and New Members

Delaware

Marc Oberacker
Regional Manager
American Technologies, Inc
Wilmington, DE

Massachusetts

Jason Butler
Associate Principal
Fitzemeyer & Tocci Associates, Inc.
Woburn MA

Deanna Carnazzo

Operations Coordinator
Sentenia Systems, Inc.
Wakefield MA

Michael Crowley

Vice President, Real Estate & Facilities
Tufts Medical Center
Boston MA

Paul Ducharme

Director of Facilities
Tufts Medical Center
Boston MA

Nancy Hanright

Director of Space Planning Boston
Medical Center
Boston MA

Hayley Jurkiewicz

Account Manager
thyssenkrupp Elevator
Westwood MA

Chris Mechler

Specification Manager
Panolam Marlborough MA

Daniel Shea

Sales Engineer
Air Filter Sales, Inc
Haverhill MA

Joseph Sziabowski

AIA
Hardaway Sziabowski Architects
Wellesley MA

Maine

Timothy Braun
Architect/ Project Manager
Maine Medical Center
Portland ME

Clif Greim

Principal
Harriman Associates
Auburn ME

Debra Jackson

Account Executive
Mohawk Group
York ME

Michaela Taffe

Strategic Sales Representative
Herc Rentals
Scarborough ME

New Hampshire

Katrina Reade
Project Assistant
Concord Hospital
Concord NH

Jim Richards

Senior Account Director
FirstLight Fiber
Portsmouth NH

New York

Thomas Gallo Senior
Field Sales Engineer
ASCO Power Technologies
E Fishkill NY

Pennsylvania

Jeffrey Henne
Safety & Emergency Manager
Penn Medicine - Hospital of the
University of Pennsylvania
Philadelphia PA

Rhode Island

Nelson DeSousa
Emergency Management Coordinator,
Butler Hospital
Providence, RI

Vermont

Robert Palumberi
Director Support Services
Rutland Regional Medical Center
Rutland VT

Jim Smith

Manager of Engineering & Maintenance
Rutland Regional Medical Center
Rutland VT

National Health Care Facilities and Engineering Week

Caring for Facilities. Caring for Patients. | October 22-28, 2017



You and your staff are important members of the healthcare team – your department keeps your facility operational, safe, and efficient. Because of

all you do, there is power; running water; and a clean, comfortable, and safe healing environment for all who walk through your doors. What you may think is ordinary is truly extraordinary. Without you and your staff's efforts, the doors of your facility would not be open.

Take advantage of the time to recognize your profession in meaningful ways. Consider some of the following:

- Check out the ASHE website to take advantage of their promotional materials. Each year, ASHE offers sample press releases, recognition ideas, gift ideas for recognition, and information about the facilities profession. ASHE will be a key resource in suggesting ways that you can promote National Healthcare Facilities and Engineering Week in your facility and in the local community.
- Hold an open house in your areas. Invite staff for a tour of your department. Have members of your team create an album of pictures that show the work that they are involved in

on a daily basis. Food and beverages are always guaranteed to bring guests to an open house.

- Include information in your hospital newsletter and on the website about the celebration. Talk to your public relations department to see what they can do.

- Work with your state chapters to have National Health Care Facilities & Engineering Week proclaimed by the Governor and Legislature. On the local level, have a proclamation named by your town or city.

- Hang posters to bring attention to your "Caring for Facilities. Caring for Patients" You can even purchase a banner to proudly display in your areas.

Stay tuned for details on the 2017 social media challenge!

<http://www.ashe.org/engineeringwk/index.shtml>

Your Article Could Be Selected as the NEHES Newsletter Article of the Year!

Telling your story in the NEHES newsletter could earn you a \$200 cash award! Each year, we honor the newsletter article of the year with this special recognition.

You all have experience with a variety of projects at your facilities. And no doubt, you have all had successes and struggles in completing these projects. Why not consider sharing your results in a NEHES Case Study or article? Have you recently had a survey crew at your facility? Do you have suggestions for NEHES members based on the experience from your survey. Please share. These items can be featured on the NEHES Home Page header and/or in the NEHES newsletter.

It all starts with an idea. Share your story idea with one of our editors. From there, we can help you form the case study or article and make suggestions on the direction of the piece.

Articles should usually run from 750 to 1000 words and photos are welcomed to accompany the piece. You can submit the article any time during the year.

Need help writing the article? That is not a problem. Our editor can work with you in any way that works best. Sometimes, this could simply be an interview by phone or in person. Others prefer to write a rough draft and submit it for review and editing, leading toward a final copy approved by you. Another option is sending an audio clip (from an electronic recorder or Smart Phone) that we will transcribe and edit for you.

Articles may be submitted to info@nehes.org for consideration.



CDC strengthens regulations against Legionella in Health Care Facilities

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The fight against Legionella bacteria within health care facilities has been a topic of health care industry discussions and concern for more than a decade.

CMS substantially raised the bar in June 2017 when it issued a revised [Survey & Certification Letter \[S&C 17-30-Hospitals/CAHs/NHs, REVISED 06.09.2017\] PDF](#) entitled “Requirement to Reduce Legionella Risk in Healthcare Facility Water Systems to Prevent Cases and Outbreaks of Legionnaires’ Disease (LD). This letter had been issued on June 2, 2017 but the June 9, 2017 revision was necessary “to Clarify Provider Types Affected” per CMS.

The [CMS S&C Letter’s summary](#) states:

- “Legionella Infections: The bacterium Legionella can cause a serious type of pneumonia called LD in persons at risk. Those at risk include persons who are at least 50 years old, smokers, or those with underlying medical conditions such as chronic lung disease or immunosuppression. Outbreaks have been linked to poorly maintained water systems in buildings with large or complex water systems including hospitals and long-term care facilities. Transmission can occur via aerosols from devices such as showerheads, cooling towers, hot tubs, and decorative fountains.

- “Facility Requirements to Prevent Legionella Infections: Facilities must develop and adhere to policies and procedures that inhibit microbial growth in building water systems that reduce the risk of growth and spread of legionella and other opportunistic pathogens in water.

- “This policy memorandum applies to Hospitals, Critical Access Hospitals (CAHs) and Long-Term Care (LTC). However, this policy memorandum



is also intended to provide general awareness for all healthcare organizations.”

CMS also made available its [35-page water management program toolkit](#) entitled “Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings” as a resource.

The [CMS water management program toolkit](#) content includes special considerations for healthcare facilities, along with the following more general topics:

- Identifying buildings at increased risk
- Legionella ecology
- Establishing a water management program team
- Describing building water systems using both text and flow diagrams
- Identifying areas where legionella could grow & spread
- Control measures & corrective actions – basics, where to measure, monitoring
- Ways to intervene when control limits are not met
- Examples of corrective actions and contingency response
- Keeping the program running as designed & effective
- Documenting & communicating water management program activities
- Identifying & investigating legionnaires’ disease cases

The [CMS water management program toolkit](#) webpage also includes links to the following additional resources:

- [ASHRAE Standard 188: Legionellosis: Risk management for building water systems \(ANSI approved\)](#)



- [Frequently Asked Questions: ASHRAE Standard 188](#) – “This webpage answers frequently asked questions about ASHRAE Standard 188, which outlines a legionellosis risk management program for buildings.”
- [ASHRAE Guideline 12-2000: Minimizing the risk of legionellosis associated with building water systems](#)
- [Worksheet to Identify Buildings at Increased Risk for Legionella Growth and Spread](#)

ASHE is also contributing to the healthcare industry’s body of knowledge with its recent news post entitled [7 Steps to Creating a Water Management Program](#) as well as its recently-published Management Monograph entitled [Water Management in Health Care Facilities: Complying With ASHRAE Standard 188](#).

The readers of this article are urged to avail themselves of the resources identified above as well as other salient resources.

You may contact the writer at DStygiest@ssr-inc.com if you have questions on this content.

The Four Keys to a Successful Pharmacy Design: An SBA Inside Look



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February 2016 marked a transformational moment in patient care and medication safety at Baystate Medical Center (BMC) in Springfield, MA. Though, if you were a patient during this time you would not have even noticed the shift, and that is exactly as it was intended. On the weekend of February 6th, four years of master planning, architectural and engineering design, and construction implementation coalesced, in that single weekend the entire Inpatient Pharmacy at BMC was relocated into its new suite, complete with technological, operational and administrative enhancement, all while uninterrupted patient care.

While the coming years will usher in a host of updates to Pharmacy regulations such as USP 797, USP 800, and MA Board of Registration in Pharmacy, just to name a few, having recently completed a 14,000 sf Inpatient Pharmacy suite complete with ISO Class 7 Clean Rooms, multiple automated dispensing carousels, a narcotics vault, and integrated managerial and administrative functions, I've learned four key points from the design and planning process I'd like to share with you. Don't take my word for it? The comments below also come from a summary of comments from the Department of Public Health site surveyors who reviewed both the physical space and operations of the new Inpatient Pharmacy at BMC prior to opening day.

Now that I've peaked your interest. Here are the four keys to a successful pharmacy design:

1. Sterile Compounding Areas:

Though every detail within a pharmacy suite contributes to a facility's overall

operations, much of the focus of forthcoming regulations will be on sterile compounding operations, which is why I'll lead off here.

- **Communication:** We employed large expanses of interior glazing, controlled access pass-through windows and hands-free intercom systems, but the significance here is with regards to detailing. As with all clean room elements, care should be given to reduce horizontal surfaces which collect dust and burden a pharmacist's critical clean room time with overly unnecessary cleaning duties.

- **Facility Maintenance:** Design for room-side replaceable HEPA filter units. Having to remove caulked ceiling tiles for something as routine as changing HEPA filters could have serious implications to a clean room environment, potentially requiring a costly room re-certification.

- **Door Swings:** Door swings are recommended to be in the direction of the airflow for ease of operational use. The conversations around door operations are always more complicated than would appear on the surface. In addition to swing direction special care should be given to tailoring visibility, security, and operation to your pharmacists' specific needs.

2. Flexibility and Adaptation:

- Design open spaces where possible using accent colors in floor finishes and overhead soffits to clearly define spaces without constructing hard walls. We specifically focused on highlighting a separation between work zones requiring concentration, dedicated areas for mobile equipment storage, and paths of circulation.

- In lieu of built-in millwork, our approach was to provide mobile storage units to support cleaning and future adaptability.

- Pharmacies should be able to incorporate the newest technologies, which we can only begin to predict. Instead of incorporating a consulting psychic on the team, we opted to build in "soft spaces" (offices, storage alcoves, etc.) which could be easily adapted into a future use and or allow other uses to shift into these zones to free-up other floor space.

3. Security:

- Security is paramount to patient and staff safety with regards to Pharmacy operations, though too much security can impede operational efficiencies. We implemented multiple levels of increased security as you work from public zones in the hospital to the most secure zones around narcotics storage and sterile product preparation.

4. Handwashing:

- Support hand washing operations at all costs! Truth be told, contamination within sterile environments typically comes from the users themselves, not the surrounding facilities. For this reason we made handwashing throughout the Pharmacy suite paramount to its' operations by incorporating a handwashing sink at every entrance and using accent colors to highlight their significance.

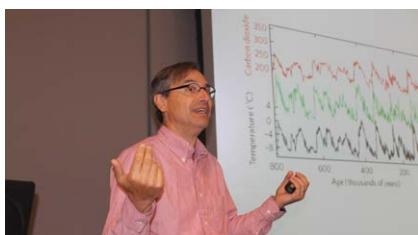
Clearly, this is a short list considering four years of master planning, design, and construction efforts were essential for the project's success, but hey, I am trying to spare you all the nitty gritty details. To create a successful pharmacy the elements noted above are key considerations, however if you only take away one thing from this article, let it be this, first and foremost, it is imperative to have a diligent design and construction team, who realize the full potential for patient care results from a great pharmacy team.

10th Annual Twin State Seminar Wrap Up

NEHES celebrated the 10th annual Twin State Seminar offered to participants at no charge whatsoever. It included great education, CEU credits, and great food and hospitality. Jona Roberts served as host for the day with Rob Prohaska introduced the array of speakers.



This was the 10th year anniversary of the Twin State Seminar which has offered summertime learning and networking at no charge to NEHES members.



NEHES had a taste of "Bill Nye-the Science Guy" with an energetic presentation by Greg DeFrancis, Associate Director of the Montshire Museum of Science in Vermont.

Science and Education

Greg DeFrancis, Associate Director of the Montshire Museum of Science and Director of Education, manages and develops all aspects of the museums teacher education programs including summer institutes, school district science education consulting, and in-service workshops. He manages school programs, such as the development and teaching of new programs.

Highlights:

- Carbon concentration levels have increased since 1960 in a formula that has previously been achieved in 100,000 year cycles.
- STEM education is important, especially in the development of engineers. Science, Technology, Engineering and Math are vital.
- We must find ways to make

learning math interesting.

- The attention span to see an animal in a zoo is 32 seconds. In a museum, the average time spent in an exhibit is five minutes. At the science museum, we create interactive challenges that occupy a participant for about 61 minutes.
- Don't be afraid to talk to people about what you do in healthcare engineering. What you do is totally cool!
- Women have found their way into engineering. At the Thayer School of Engineering at Dartmouth College, for the first time, this year's enrollees are equally split between men and women.
- Many at the seminar had been to the Montshire Museum of Science and said it makes for a great family outing.

Loss Prevention Each Day Keeps the Disruptions Away

FM Global is a property insurance company whose philosophy is that the majority of losses are preventable. Amy Daley, Staff Vice President, Education, Healthcare & Affinity Groups Global Practice Leader at FM Global and Matthew Daelhausen, Staff Vice President, Senior Engineering Technical Specialist in FM Global's Engineering Standards group will be presenting.

Highlights:

- In the face of loss, we must have resiliency; the capacity to recover from the unexpected.
- FM Global clients include about 8% in hospitals.
- The top healthcare losses come from:
 - Water, sprinkler leakage, broken pipes
 - Flooding or surface water
 - Earthquakes
 - Fire
 - Wind and Hail
- In terms of highly regulated industries, the top three are healthcare, banking, and nuclear waste!
- If there are shortcomings in codes, it is that they set the minimum requirements.



Carmine DeBlasi gave an interesting presentation on the ins and outs regarding the Americans With Disabilities Act. One in five adults will have some kind of disability in their lifetime.

ADA Standards Review

Lavallee Breninger Architects', Carmine DeBlasi, led a presentation and discussion on the accessibility standards, including ADA and ANSI.

Highlights:

- The ADA regulations are designed to help people with a loss of independence
- One in five adults (20%) have some kind of disability. In the group of 70 attending the Twin State Seminar, that would be 14 people.
- Not all disabilities are visible. ADA defines three areas of disability including mobility, hearing impairment and visual impairment.
- There is always a gap to be considered between employee reasonable accommodation and employer reasonable accommodation.
- We still use ADA regulations from 2010 which will probably be the same for a while.



The job of fire doors is to protect other areas of a building. This slide shows the damage done on one side of the door while the other side remained undisturbed.

NFPA 80 Standard for Fire Doors and Other Openings

Doors and hardware play a significant role in life safety as

outlined by Rodney W. Weaver, AHC, FDAO, CFDI, CAI, who has been in the door and hardware industry for over 28 years. He is an Architectural Hardware Consultant (AHC) per the Door and Hardware Institute, Fire Door Assembly Inspector (FDAO) per the Door and Hardware Institute, Certified Fire Door Inspector through IFDIA and ALOA, and Certified ACE Instructor per ALOA.

Highlights:

- Maintaining fire doors is vital to an institution. Weaver showed video of incredible situations where fire doors prevented massive amounts of damage.
- Top problems encountered with fire doors:
 - o Missing or painted over fire door labels.
 - o Poor clearance dimensions around the perimeter of the closed door.

- o Using kick down door holders.
- o Auxiliary hardware interferes with the functioning of the door.
- o Door is blocked in an open position.
- o Doors blocked by equipment.
- o Broken or missing hardware.
- o Inappropriate hardware installed on doors. (Remember those Christmas decorations?)
- o Missing or incorrect fasteners.
- o Bottom flush bolts that do not project ½ inch into the striking.

CMS Common Findings

David A Dagenais, CHSP, CHFM, FASHE, Director of Plant Operations/Clinical Engineering at Wentworth-Douglass Hospital presented the most common survey findings since the adoption of the 2012 editions of NFPA 99 and 101.

Highlights:

- Top three findings:



Always informative and entertaining, NEHES member and codes expert, Dave Dagenais covered lots of information about the most common survey problems encountered since the adoption of 2012 editions of NFPA 99 and 101.

- o In building rehab, change of use criteria is not being used properly.
- o Means of egress is not clear. In short, there is clutter.
- o Locks in the means of egress. When are they locked? How quickly can they be unlocked and by whom? Some systems like a child abduction system can even offer a second layer of locking.

The New England Healthcare Engineers' Society Success Story



Jenna Gibbons,
Project
Assistant
Dartmouth-
Hitchcock
Medical Center
Lebanon, NH

Dartmouth-Hitchcock Medical Center's project design manager, Andrew Houghton, needed additional help with some CAD work that had been on the back burner for too long. His solution was to hire an architectural student as an intern for the summer. Needing help to fund the position, Andy turned to NEHES and applied for an internship scholarship. The request for funding was granted and the student that was selected was already an employee at Dartmouth Hitchcock in the Environmental Services Department. This was in 2012, and the employee, Jenna Gibbons, had already been working at the medical center since 2007 while she attended Keene State College seeking a Bachelor of Science degree in architecture.

The help Andy needed was to get many of the hospital's critical system as-builts

from paper and field observations to CAD and Jenna's immediate task became documenting the potable water system. While the hospital was gaining much needed documentation, the learning objectives and experience Jenna would gain were just as, if not more, valuable. According to Andy: "Building systems are a very important aspect of the architectural and engineering profession and rarely in their studies do students get real-life exposure to building infrastructure. The domestic water system documentation project will allow an intern to see the complex nature and spatial requirements needed to bring water from the city line to a faucet on a patient care floor."

Jenna took on that project in the summer of 2012 and made good progress during the internship. She went on to finish up her course work in the spring of 2013, and was awarded a bachelor's degree and continued working at the hospital as a temporary employee with additional internship funding from NEHES. That fall, Jenna's internship led to a full time position as a CAD drafter within the Engineering Services department. As Jenna gained experience Andy found "she

could very quickly show the proposed scope of work on concept sketches that led Jenna helping in an estimating role and then later to supporting the project management team". Jenna's initiative and her desire to become more involved led her right back to school that same year as a student in the Masters of Science in Project Management program at Granite State College where she received her degree this spring.

In 2014 Jenna joined the New Hampshire Society of Healthcare Facility Managers along with NEHES and began taking advantage of their educational offerings. Being a member of NEHES also afforded Jenna the opportunity to apply for and receive three annual scholarships while attending Granite State College. Follow graduation Andy reports that, "this year, due to her graduate work, we promoted her to a project engineer to build on her newfound project manager skills".

Jenna's initiative and hard work, a supportive work environment, and a little help from the New England Healthcare Engineers' Society definitely built a strong foundation for a rewarding and successful healthcare career.

Maine Healthcare Engineers' Society
2017 Year-End Celebration



Thanks for Coming!



**NEHES
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Affiliated with the American Society for Healthcare Engineering (ASHE)

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The opinions expressed by authors do not necessarily
reflect the policy of NEHES.

All material in this newsletter is provided for information
only, and should not be construed as professional advice.
Please consult with your own professional advisors.

Region I Update

Continued from page 3

Germany, and Italy. The annual Region I breakfast was well attended.

Congratulations to Region I members who received the following awards:

- Robby Robertson, Lahey Health and Alison Brisson, Dartmouth-Hitchcock Medical Center, received their SASHE designation, and myself who received the FASHE designation.
- Alison Brisson was also the recipient of this year's ASHE Region I Emerging Leader Award.
- Chapter Awards were given to John A. Gaetano, Central New York Society of Health Care Engineers, Platinum, and Alison Brisson, New England Healthcare Engineers Society, Platinum Elite.

ASHE's future is bright according President Elect Brad Taylor who outlined the following focus areas for 2018 during the annual ASHE Business Meeting in Indianapolis: Energy to Care; Career Ladder and

Succession Planning; Certifications; Awards and Recognition; Regulation and Advocacy; Codes and Regulations; Strategic Planning; and ASHE Chapters.

Other News

A recent survey by ASHE determined members who have the CHFM designation are making on average \$22,000 more in salary than those who do not. In addition, more and more job postings are requiring CHFM as the minimum competency for the profession. ASHE members interested in the CHFM designation should take the ASHE e-learning prep class online at ASHE.org. Lastly, those interested in the CHFM / CHC designation should reach out to Ed Lydon for waiver consideration.

ASHE is now 12,625 (as of 7/28/17) members strong and growing, and out of this number we have at least 197 active ASHE members volunteering on committees and task forces. Thank you to those of you who volunteer from Region I.

4th Annual NEHES Motorcycle Tour



Join us on Friday, October 6th (Rain date: October 13th) for a motorcycle foliage tour with your fellow NEHES members and their guests. Cost per bike & driver is \$25, additional \$15 for passenger. Lunch is included via a generous sponsorship from BCM Controls Corporation.

This is open to all NEHES members and their guests. Please register

COMFORT SYSTEMS USA
BCM Controls Corporation

online by September 22nd. All driver registrations received by 9/22 will receive an event t-shirt.

We look forward to sharing a great day with you!

Paul Cantrell CE, CPE, CHFM
Director of Plant Operations
Lahey Health

Jeffrey P. Greene
BCM Controls