

ASHRAE BLUEPRINT

October 2016

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Reception
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Kasey Abbott

Refrigeration Committee
Jeremy Eitrem

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PRESIDENT'S MESSAGE John Schwartz

**Chapter Meeting: Wednesday October 5th @
The Country Club of Sioux Falls
Social 11:45, Lunch 12:00, Program 12:15-1:00**

**RSVP at our Chapter homepage (www.sdashrae.org) no later than Noon on Friday,
September 30th. <http://sdashrae.org/meetinginfo.php>.**

Chapter Members and Guests,

Fall is just around the corner! I look forward to this time of year with the warm days and cool nights, plus watching a little football now & again. With that being said, please keep the meeting dates in mind and I will try and remind you as often as possible so everyone can set aside the time to attend. I would like to continue the momentum from last month's great turnout & grow our numbers from previous years.

The ASHRAE Winter Conference and AHR Expo is just around the corner in Las Vegas! If you plan on attending or are thinking about it, the dates are January 28 – February 1, 2017. It is a great opportunity to be part of Technical Committees you might be interested in as well as training opportunities. Visit ashrae.org/lasvegas to see the winter conference information and ashrae.org/AHRExpo2017 for the AHR expo information.

We are still looking for two Members at Large positions to fill this year. If you are interested, please contact me or a BOG member. Again, I would request that Past Presidents encourage the people in their companies to consider joining the BOG.

Please note that next month the meeting will be an evening meeting on November 9th in lieu of the first Wednesday of the month. We did this to accommodate our Distinguished Lecturer and Blake Ellis our DRC.

Don't forget you may utilize our Chapter webpage (<http://sdashrae.org/>) to save future meetings to your calendar. Go to the Events tab, then you can select any of the future meetings which will take you to the link with that meeting's information and an icon to Add to Calendar.

I look forward to seeing you at The Country Club!
-John

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SPECIAL EVENTS

Kevin Eggert

The Sporting Clays Shootout will be held at Hunter's Pointe outside of Humboldt again this year on Friday, October 21. Arrive by 10:00 AM to go over rules and teams, we'll begin shooting at 10:30 AM followed by a meal around 12:00 PM. Look for an email with registration information coming soon.

CTTC

Justin Almond

Alan Niles

Western Region Commercial Sales Manager, WaterFurnace International
Gig Harbor, WA

Alan Niles is a mechanical engineer with over 28 years of experience working for manufacturers of commercial water source heat pumps (WSHPs) and ground loop heat pumps (GLHPs) concentrating on commercial tower/boiler system design and commercial geo-exchange system design. Since 2009, he has been at WaterFurnace International, a manufacturer of commercial 6 Pipe Modular Heat Recovery Chillers and commercial Water Loop and Ground Loop Heat Pumps.

Starting in July 2015, Alan Niles will begin his second two year post as a Distinguished Lecturer for ASHRAE, speaking on the topics of economics and design of commercial ground loop systems. In 2013, Alan Niles' article "Net-Energy Water Loops," published in the August edition of HPAC (Heating/Piping/Air Conditioning) Engineering, introduces the use of the water loop systems as the integral building block for a building-wide net zero energy system. And in March, 2015, Alan Niles and WaterFurnace, and cosponsored by HPAC Engineering, held a webinar on the use of the net energy water loop combined with simultaneous chilled water/hot water production using 6 pipe heat recovery chillers to achieve net zero energy goals.

LECTURE TOPIC

Net-Energy Water Loops: a clear path to Net Zero Energy Buildings

As mandates to reduce energy consumption continue to sweep through the United States, HVAC design professionals are confronted with a bewildering choice of products that claim to deliver on the "green" promise. In this webinar we will examine system types that will not only deliver the highest energy efficiency, but can be scaled and tailored to each unique building type.

In this webinar you will learn:

- Defining and comparing net-energy loops within a building
- Implementation of various net-energy loops
- Strategies in optimizing net-energy loops
- Importance of heat recovery

Membership

Nathan Larson

If you know of anyone that may be interested in joining ASHRAE, be sure to tell them about ASHRAE and invite them to a meeting. Membership information can be found at www.ashrae.org/members/ or call Nathan at 605-996-7548 with questions.

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The 2016-2017 South Dakota Chapter ASHRAE Line-up:

Sept 7	Noon	Jason Camarato, Greenheck <i>"Good Kitchen Design Principles"</i>
Oct 5	Noon	Alan Niles, WaterFurnace International (Distinguished Lecturer) <i>"Net-Energy Water Loops: a clear path to Net Zero Energy Buildings"</i>
Oct 21	ASHRAE Shootout	Hunter's Pointe, Humboldt. Sporting Clays and Lunch.
Nov 9	Evening	Douglas T. Reindl, PH.D., P.E., Univ. of Wisconsin-Madison <i>"ASHRAE Standard 15 – A Review & Update"</i> (Distinguished Lecturer) Student Night
Dec 7	Noon	TBD
Jan 11	Noon	TBD
TBD	Valentines Event	Olde Towne Dinner Theatre
Mar 8	Noon	TBD
April 5	Evening	TBD Student Night and Past Presidents Night
April 21	12:00-3:00pm	ASHRAE Sponsored Webcast <i>"Integrating Control Technology & Analytics for Optimal Building Performance"</i>
May 26		<i>Golf – Brandon Golf Course</i>

Government Affairs Kasey Abbott

How South Dakota Took the Money and Ran (Federal Funding for Building Improvements and Energy Code)

[Jonathan Ellis](#), jonellis@argusleader.com

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State failed to live up to pledge. Now, a deadline looms.

As the economy melted down in 2009, Congress created a giant stimulus package with orders to federal agencies to shovel money out the door.

The legislation included billions for state governments to promote energy efficient buildings. Within days of President Obama signing the package, states were lining up for money, including South Dakota. All they had to do to qualify for the

money was assure the Department of Energy that they would adopt energy building code requirements for both residential and commercial buildings, which would promote energy conservation.

South Dakota's haul amounted to \$23.7 million. And while all the states received money from the program, South Dakota is one of the only states that simply took the money and ran.

The state failed to make good on the assurances required by the federal government to enact statewide building code requirements making new homes and commercial buildings more energy efficient, an Argus Leader Media investigation found. Now, a 2017 deadline is looming: In return for taking the energy efficiency money, states have until 2017 to adopt more efficient energy codes and to create a plan to ensure that at least 90 percent of new buildings are compliant.

In South Dakota, there's no plan because the state has no mandatory statewide energy codes.

It's unclear how the Department of Energy, which administers the State Energy Program, will respond when South Dakota fails to meet the deadline. The law that created the program did not include punitive measures that the department can take against states that don't meet their obligations. Which likely means the department can't demand the state repay the money.

Realistically, said Maureen Guttman, the president of the Building Codes Assistance Project, which advocates for stronger building codes, the Department of Energy can't "claw back" the money it gave South Dakota. But if the state expects future funding, that could be put at risk.

"I do think they could use it as criteria for future eligibility. Absolutely I do," Guttman said.

The Department of Energy did not respond to an interview request.

Tony Venhuizen, the chief of staff to Gov. Dennis Daugaard, said the primary goal of the stimulus bill was to fund shovel-ready projects. The other requirements were secondary to that goal.

"There's no question this money was used as it was intended," he said.

But some building officials believe the state should honor its agreement.

"When you make an agreement, you need to stick to it," said Kasey Abbott, the president of Direct Digital Control in Sioux Falls. Abbott is among a group of industry officials lobbying for legislation that would identify a specific energy code in state law that commercial builders would be required to meet.

Meeting those requirements, which include better insulation, higher-rated heating and cooling units and more efficient lighting, is ultimately better for consumers.

"You build a building and the focus is on first cost," Abbott said. "However, many people fail to recognize the substantial future cost of heating and cooling that building. I've seen studies that show for every one dollar you spend on a commercial building, there is an associated future cost for utilities of about 50 cents. That is a substantial hidden cost, and it is why the energy efficiency of a building is so important – to lower those future energy bills."

Ron Bell, the chief building officer for the city of Sioux Falls, said building officials across the state support statewide mandatory requirements. Currently, local governments can adopt energy code requirements, but Sioux Falls is among only a handful that do so.

"That would put everyone at a level playing field in construction across the state," he said.

At the time it was applying for the money, the state was worried about its own energy bills. State government spent the extra \$23.7 million on itself.

"It was all used in our state-owned facilities for energy projects," said Michele Farris, the state energy manager.

The money came from a controversial \$800 billion stimulus package that included funding for so-called "shovel-ready" infrastructure projects, tax relief and aid to state and local governments that were reeling from collapsing revenues triggered by the Great Recession. The 407 pages of legislation included \$3.1 billion for the Department of Energy's State Energy Program. To qualify for additional energy money, the legislation required governors to send a letter to the

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Department of Energy assuring the department that their states would adopt energy codes for both new residential and commercial buildings.

Ten days after the president signed the package into law, then-Gov. Mike Rounds sent his assurance letter to the department. Rounds noted that he had asked both the Legislature and Public Utilities Commission to “consider actions to improve building energy codes.”

“I want to assure you, within the limits of my authority, we will move forward in these critical areas,” wrote Rounds, who is now in the U.S. Senate.

The letter was far from an ironclad commitment. Even so, the state got its money.

The language in Rounds’ letter wasn’t lost on a task force that he appointed the next year to consider strengthening building codes and energy efficiency. Dusty Johnson, then a public utilities commissioner and a member of the task force, noted in one meeting that the governor’s letter didn’t say the state had improved its building codes, only that the governor had asked that it be done.

According to minutes of the meetings, the members also concluded that the federal legislation didn’t include language allowing the Department of Energy to demand that the state return the money if the state didn’t meet the 2017 deadline, although they did express concerns about future funding.

But that risk didn’t prove great enough. Ultimately, the task force submitted a report with recommendations that fell well short of what the federal government had required. “It is unlikely that legislating a statewide residential energy code with a government enforcement bureaucracy is a viable solution,” the report said.

The report did encourage market-based approaches that would give homebuyers more information about energy efficient homes. In an interview last week, Johnson said instituting statewide mandatory codes wasn’t going to be politically possible.

“At some point, you have to live in the world of the possible,” he said.

“The federal government loves to bribe us with our own money,” he added. “I think South Dakotans have a pretty limited appetite to accepting that approach.”

The report also came during the final weeks of the Rounds administration. The issue was handed off to the incoming administration of Dennis Daugaard. Johnson, who served as Daugaard’s previous chief of staff, said the administration was concerned with how to fill a \$127 million budget shortfall and other priorities. Energy codes were not on the to-do list.

“The fiats of the federal government didn’t crack the top 100,” he said.

In 2011, the Legislature adopted a voluntary energy code, which Daugaard supported, but which fell short of what the federal government mandated.

Rob Skjonsberg, the chief of staff to Rounds, said Rounds appointed the working group, which identified recommendations for compliance. He then left office.

“I can’t speak to any of the post-2011 actions,” he said.

Venhuizen said the state has no statewide building inspector, so the state would have no way of knowing if it was meeting the 90 percent compliance requirement required by the federal government.

“I think there were certainly efforts made to comply with those requirements and move in that direction,” he said.

But others think the federal government should take action against states that fail to comply. Guttman of the Building Codes Assistance Project said the government should consider reducing future funding.

“We like to think there’s strings attached to federal funding,” she said.

For more information:

<https://www.facebook.com/events/231838550546441/>



SIXTH ANNUAL MAYOR'S NEIGHBORHOOD SUMMIT

Design Week kickoff partners with the sixth Annual Mayor's Neighborhood Summit:
Sustainable Neighborhoods keynote with Alicia Uhlig and Mayor Mike's annual Porch Talk

Saturday, October 1, 2016 | 7:45 a.m.-12 noon

The Bakery (910 North Main Avenue) | Event Information: www.siouxfallsdesigncenter.org/sfdesignweek2016



FEATURED KEYNOTE SPEAKER

Alicia Daniels Uhlig
Director

Living Community Challenge + Policy

Alicia Daniels Uhlig is an architect and passionate green building advocate, with over 20 years of sustainable design experience. The event is focused on accelerating the creation of vibrant, healthy, sustainable communities. The gathering will give event attendees a chance to call upon Alicia's expertise in relation to challenges specific to our neighborhoods and community as a whole.

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7:45-8:45 a.m.

Social/Welcome

8:45-9:15 a.m.

Introduction to the Equity Drafting Table with Alicia Daniels Uhlig

9:15-10 a.m.

Living Communities with Alicia Daniels Uhlig

10-10:30 a.m.

Q&A with Alicia Daniels Uhlig

10:30-10:40 a.m.

Mayor Mike's Neighborhood Champion Awards

10:40 a.m.-12 noon

Mayor Mike's 6th Annual Porch Talk Q&A



Mayor Mike Huether's sixth Annual Porch Talk is an opportunity to engage your Mayor about sustainability, green initiatives, and any other topic the folks of Sioux Falls wish to discuss. No topic is off the table.



City of Sioux Falls
SOUTH DAKOTA



If an ADA accommodation is needed, please contact the Human Relations Office at 605-367-8745 or humanrelations@siouxfalls.org at least 72 hours before the event.