

Game Changers

Julia Bailey, American Gas
October 2015

THE ABUNDANCE AND AFFORDABILITY OF NATURAL GAS ARE CREATING NEW MARKETS FOR THIS CLEAN FOSSIL FUEL. HERE ARE THREE LONG-AWAITED - AND PERHAPS SURPRISING - NEW APPLICATIONS.

The revolution taking place in the natural gas industry is creating some new – even unanticipated—consequences across U.S. markets. As a transportation fuel, natural gas has been providing cost savings and environmental benefits for years. But most recently, it has begun to lead to sweeping changes in the marine and railway transportation segments, while in the commercial building sector, natural gas heat pumps are attracting renewed interest as a sustainable and cost-saving alternative to electric systems.

High electric rates and affordable and stable natural gas prices have opened up new opportunities for new natural gas technologies and products in the commercial building market.

Commercial Buildings - For example, the NextAire GHP system is a gas heat pump developed by IntelliChoice Energy, a subsidiary of Southwest Gas Corp. formed to commercialize natural gas-fired heat pump technology and to act as exclusive North American distributor for the NextAire product line. While the product isn't exactly new, it's getting a lot of attention from some unexpected market segments.

An unexpected market – legal marijuana – as legal marijuana continues to be the fastest-growing industry in the U.S., according to The ArcView Group,

more marijuana growers are moving their cultivation sites to large-scale facilities where growing can be done in a controlled environment. "They were looking for a low energy-consuming environmental system," said John Cole, ICE's chief executive officer. "That's how they discovered us. Our product doesn't use a lot of electricity; instead, we use natural gas to run our engine. We soon became an ideal HVAC alternative for them..."

Railways – The glut of affordable natural gas has also brought about the switch from diesel to natural gas for railways—a historic change in the traditionally slow-to-change train industry. This transition is now on the fast track, and it's promising to revolutionize the industry as much as the transition from steam to diesel did in the 1950's.

GE Transportation was one of the leaders in the development of technology for retrofitting existing locomotives to use natural gas as a fuel source. GE's NextFuel Natural Gas Retrofit Kit, the first dual-fuel-powered locomotive kit in North America, enables engines to run on up to 80 percent natural gas and 20 percent diesel and back to 100 percent diesel with no loss of performance. GE estimates that its kit can provide up to a 50 percent reduction in fuel costs.

Marine – More stringent emissions regulations are also bringing big changes on the world's waterways. In Europe, a new wave of the future is being seen as more passenger fleet operators are looking to fuel their fleets with clean fuels like LNG. The Cruise industry is another transportation segment that is jumping onboard the LNG bandwagon. This past summer, Carnival Corp., the world's largest cruise ship operator, announced plans to launch four "next-generation" cruise ships featuring capacity for 6,600 guests—the largest ships in the world—and fueled by LNG. The four ships are targeted for delivery beginning in 2019, and two are already planned to sail for Germany's AIDA cruise line.

The use of LNG is a first for the cruise industry, providing a fuel that is much cleaner than bunker oil and other fuels used in the past.

Both environmentally and economically, it's clear that natural gas has an important role to play both here in the U.S. and abroad. These kinds of firsts are sure to continue as new markets continue to be explored for natural gas – and particularly as natural gas production looks forward to continued growth and as the infrastructure to support these new uses is further developed.

For the complete article, visit www.aga.org

Natural Gas News

CNG-Powered Bus Breaks Speed Record

American Gas, October 2015

Reading Buses of the U.K. recently set a new land speed record for a service bus running on biomethane compressed natural gas.

The single-deck vehicle achieved a top speed of 80.73 miles per hour and an average speed of 76.785 mph over a full lap. The U.K. Timing Association confirmed the new record, which was celebrated by the environmentally conscious bus company.

Part of the reason for the record attempt was to promote compressed natural gas and biomethane in particular as a credible, sustainable and clean power source for transport, according to company officials.

By the Numbers – World Domination: U.S. and Many States Lead the Way in Natural Gas

American Gas, October 2015

The United States is in the number one spot for natural gas-producing nations in the world with 65.73 bcf per day. Second is Russia with 59.46, Iran is third with 15.43, and Qatar fourth with 15.09.

Texas, Louisiana, Pennsylvania, Wyoming, Oklahoma, Colorado, Arkansas and New Mexico each would rank among the top 30 natural gas-producing nations in the world if they were countries, according to a report released this year by the American Petroleum Institute (API).

Rapid growth in shale production unlocked by hydraulic fracturing and horizontal drilling has helped the United States take the top spot among global producers. "This is what energy security looks like," said Kyle Isakower, API's vice president for regulatory and economic policy.

For the complete articles, visit www.aga.org



Board Nominations Being Accepted

The Nominating Committee of the board is currently accepting the names of members interested in being considered for board positions opening January 2016, please contact Diane at dswintek@blueflame.org or 763-424-1841. The deadline is Friday, November 20th, 2015.

Ballots Coming Soon!

Watch your e-mail in late November for your ballot to vote for three board members to fill the three positions expiring in January 2016. More details to come with the ballot.



M State Program Addresses Gas Industry Need for Skilled Workers

Minnesota State Community and Technical College - Feb. 27, 2015

Wadena, Minn. – A new Minnesota State Community and Technical College program will help fill a “huge” need for trained employees in the gas industry, according to Ward Westphal of MP Technologies, which contracts to provide new construction and maintenance services to a wide range of private and public utilities and power companies.

“Our industry is facing a shortage of workers right now,” said Westphal, who coordinates operator qualifications and quality assurance for the company. “Finding qualified employees is difficult, especially for gas and electric utilities. There’s a whole different set of skills that aren’t required in the other trades.”

Westphal and other industry representatives are working with M State to develop and support the Gas Utility Construction and Service diploma program, which will be offered on the college’s Wadena campus beginning the summer of 2015, with a maximum enrollment of 24.

Graduates of the 32-credit program will be prepared for a range of career options within the natural gas industry.

The impetus for the program came from conversations between industry representatives and Monty Johnson, senior dean of academic affairs on the Wadena campus. At meetings of the Minnesota

Energy Consortium, where Johnson is a member, he learned there are currently no gas industry training programs at technical colleges in either Minnesota or North Dakota.

According to regional labor market statistics, the number of gas technicians needed is expected to increase by 9.1% over the next four years.

For more information about the Gas Utility Construction and Service program, visit www.minnesota.edu/programs or contact M State at 877-450-3322.



Minnesota State Fair-Blue Flame Lodge

Delicious Grilled Treats & A Patio Campfire in a Boat!!

Final attendance for the 2015 Minnesota State Fair was 1,779,738. Down from last year's attendance of 1,824,830.

The Blue Flame Lodge is the association's primary vehicle to interact with consumers and to promote natural gas, natural gas products, educational materials, and provides visibility for the association and its members. Located in Carousel Park across from the Giant Slide.

A Patio Campfire in a Boat? Only at the Blue Flame Lodge! Haley Comfort Systems created an eye-catching display in their outside booth at the Lodge featuring a patio campfire in a boat!

Rich Walter with Minnesota Gas Grills & Fireplaces grilled delicious treats of chocolate chip cookies, pizza, wings & dumplings, etc. on a natural gas grill in front of the Lodge! The Chocolate Chip Cookies really caught the fairgoers' attention!

Natural gas equipment featured in

the lodge included: fireplaces, grills, generators, water heaters-tank and tankless, furnaces, boilers, garage heaters, natural gas vehicles and more.

New this year! A short video was made to give members a "sneak peak" at what was happening at the Lodge and to encourage members to come and visit! Though the video wasn't done professionally, it gave members a great overview of the Blue Flame's display this year! Couldn't make it to the Fair, we brought the fair to you (at least the Blue Flame Lodge display)!

In addition to the NGV display the Blue Flame created last year, this year we added a couple of "sidewalk seminars" to try to encourage fairgoers to stop and learn more about NGVs. Lisa Thurston with the American Lung Association-Mn came and put on 5-10 minute seminars.

Also on display in the NGV Info area, we had a home fueling station for fairgoers to come and check out. Thank you to American Fueling for supplying it!

Thirteen members displayed at the Lodge this year. Thank you for your support and great displays!

In addition to natural gas product displays, the Blue Flame Lodge also had safety, rebate and energy assistance information.

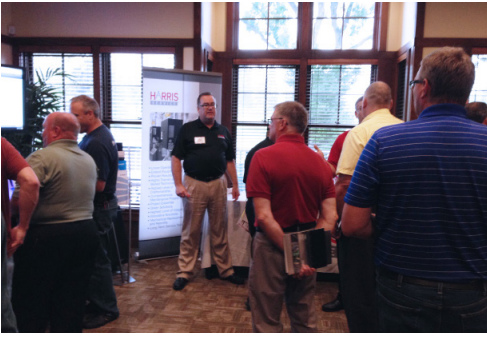
Gopher State One Call had their spinning wheel for the colored yardsticks and it was a real hit as usual! They also had 811 informational literature for visitors.

The Salvation Army had a HeatShare display to increase awareness that energy assistance is available.

CenterPoint Energy, Minnesota Energy Resources and Xcel Energy rebate program information was also displayed in the Lodge.

If you are interested in displaying in the lodge in 2016, please contact Diane to get more information.

SAVE THE DATE! THURSDAY, AUGUST 25 - LABOR DAY, SEPTEMBER 5, 2016



Commercial/Industrial Fall Natural Gas Conservation Conference

On September 22, the Commercial/Industrial Committee held its annual Fall Conservation Conference at the beautiful Hillcrest Golf Club in St. Paul. Xcel Energy was a major sponsor of this event along with supporting utility sponsors CenterPoint Energy and Minnesota Energy Resources.

Trade Ally Sponsors were: Platinum Sponsor – Mulcahy Company
Gold Sponsors – Energy Insight, Harris Companies, HumeraTech, and R. M. Cotton Company

Attendees were able to visit vendor table top displays put on by the above sponsors and the following members: Campbell-Sevey, Temp-Air, Tioga Air Heaters, & Ziegler Power Systems.

A big THANK YOU to these utility and

trade ally sponsors for helping to make this conference the great event it was!

The conference drew over 100 attendees from all over the state to attend presentations and visit vendors displaying their natural gas products and services at the tabletops.

The lunch keynote speaker was Cliff Haefke, Director, U.S. DOE Midwest CHP Technical Assistance Partnership. He presented on the Current State of CHP (Combined Heat & Power). He flew in from Chicago and gave an overview of CHP which included Minnesota projects such as the Schmidt Brewery and the University of Minnesota.

The breakfast keynote speaker was Mike Boughner, Director-Gas Supply, Xcel Energy. Mike gave the Natural Gas Price & Supply Update to inform attendees on

the projected outlook for natural gas this heating season. Sounds like it should be a mild winter! Mike came in from Denver, CO, to speak to the attendees and gave a very interesting presentation.

Two sessions, each with two tracks, presented the following seminars: Maximizing Steam Trap Efficiencies, Hot Water Boiler Efficiencies, Mn Commercial Energy Code Update, Supply Options-Firm vs. Interruptible Service. Special thanks to all the speakers for helping to make this event a huge success – Thank you!

Most of the conference presentations are posted on the Minnesota Blue Flame website under the Commercial/Industrial Committee tab – click the following link to see them <http://blueflame.org/commercialindustrial-committee/>

SAVE THE DATE! TUESDAY SEPTEMBER 20, 2016

Member News

2015 Marks Temp-Air's 50th Year in Business!

Established in 1965, the founder of Temp-Air had a vision to aid the construction industry in operating year-round despite extreme winter temperatures by providing portable temporary heaters. Today, Temp-Air is recognized not only for offering mobile rental heating solutions but has expanded over the years to become America's leading provider of temporary, portable heating, cooling, and dehumidifying services to the United States construction industry.

Welcome New Member!

American Fueling
www.americanfueling.com
Oscar Hallquist, CEO
(800) 497-5894
has@presenter.com

Mark your 2016 Calendars:

Blue Flame Fishing Event
Tuesday, June 7

Blue Flame Golf Event
Cannon Falls Golf Club
Thursday, June 16

Minnesota State Fair
August 25-September 5

Commercial/Industrial Fall Energy
Conservation Conference
Thursday, September 20



QUOTE OF THE QUARTER

"Problems tend to growl at us like cowardly dogs. If we face them and challenge them, they back away. If we run from them, they run after us, snapping at our heels."

Freddie Mitman



INTERESTED IN JOINING THE ASSOCIATION?

Contact Diane at dswintek@blueflame.org or visit our website at www.blueflame.org
Associate memberships are \$200 per year.

Join the team now!

Benefits to joining:

Networking Opportunities, Industry Contacts, Advertising Opportunities, Member rates (reduced rates) for Association events, seminars, etc., Increased Company Visibility (via our website product sort and hotlink to your company from our site, in our Member Directory, etc.), Possible opportunity to display in the Blue Flame Lodge at the Mn. State Fair, Blue Flame events provide a venue for members to take customers to, Companies can leverage their time and financial resources, and you receive the Association Newsletter, to name a few.

Have something to submit?

E-mail change?

If you would like to submit information to be considered for the next member newsletter or have an e-mail change, contact Diane at dswintek@blueflame.org




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www.CarbTurbo.com



CenterPoint Energy

Mindy Morrissey
Account Executive
CenterPoint Energy Services, Inc.

7337 S 102nd Ave
La Vista, NE 68128
Direct: 402 619 7919
Toll Free: 800 495 9880
Mindy.Morrissey@CenterPointEnergy.com
www.centerpointenergy.com



Wade Wiken

Direct (952) 525-2235
Cell (612) 910-2225
wwiken@continuumes.com

5775 Wayzata Blvd
Suite 700
Minneapolis, MN 55416



ENERGY INSIGHT, INC.

MATT HALEY
PRESIDENT

952-767-7464
www.EnergyInsightInc.com

7935 Stone Creek Drive, Suite 140 Chanhassen, MN 55317



HARRIS SERVICE

TOM DANLEY
GENERAL MANAGER, SERVICE

DIRECT (651) 602-6663
CELL (612) 363-3200
tdanley@hmcc.com

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www.kozyheat.com T: 800.253.4904 F: 507.662.6644



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Commercial Fuels • Superintendent

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Fax: 608-781-4144 • jhirschboeck@kwiktrip.com
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Kwik Trip, Inc.
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Primoris Services Corporation

Jay Osborn
 President

Q3 Contracting
 3066 Spruce Street
 Little Canada, MN 55117
 e-mail: jay.osborn@q3contracting.com
www.prim.com




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direct: 651.365.7344
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1313 Plymouth Avenue North
 Minneapolis, MN 55411-4065
 USA
www.standby.com

Jim Hoch
 Vice President

jrhoch@standby.com
 T: 612.721.4473
 F: 612.724.8434



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Keith Valentyn
 Regional Sales Manager

Tioga Air Heaters, LLC
 9201 International Parkway
 Minneapolis, MN 55428
kvalentyn@tiogaairheaters.com
www.tiogaairheaters.com

Office: (763) 525-4000
 Fax: (763) 525-9796
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