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THE ILLINOIS Manufacturer

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Fall 2016

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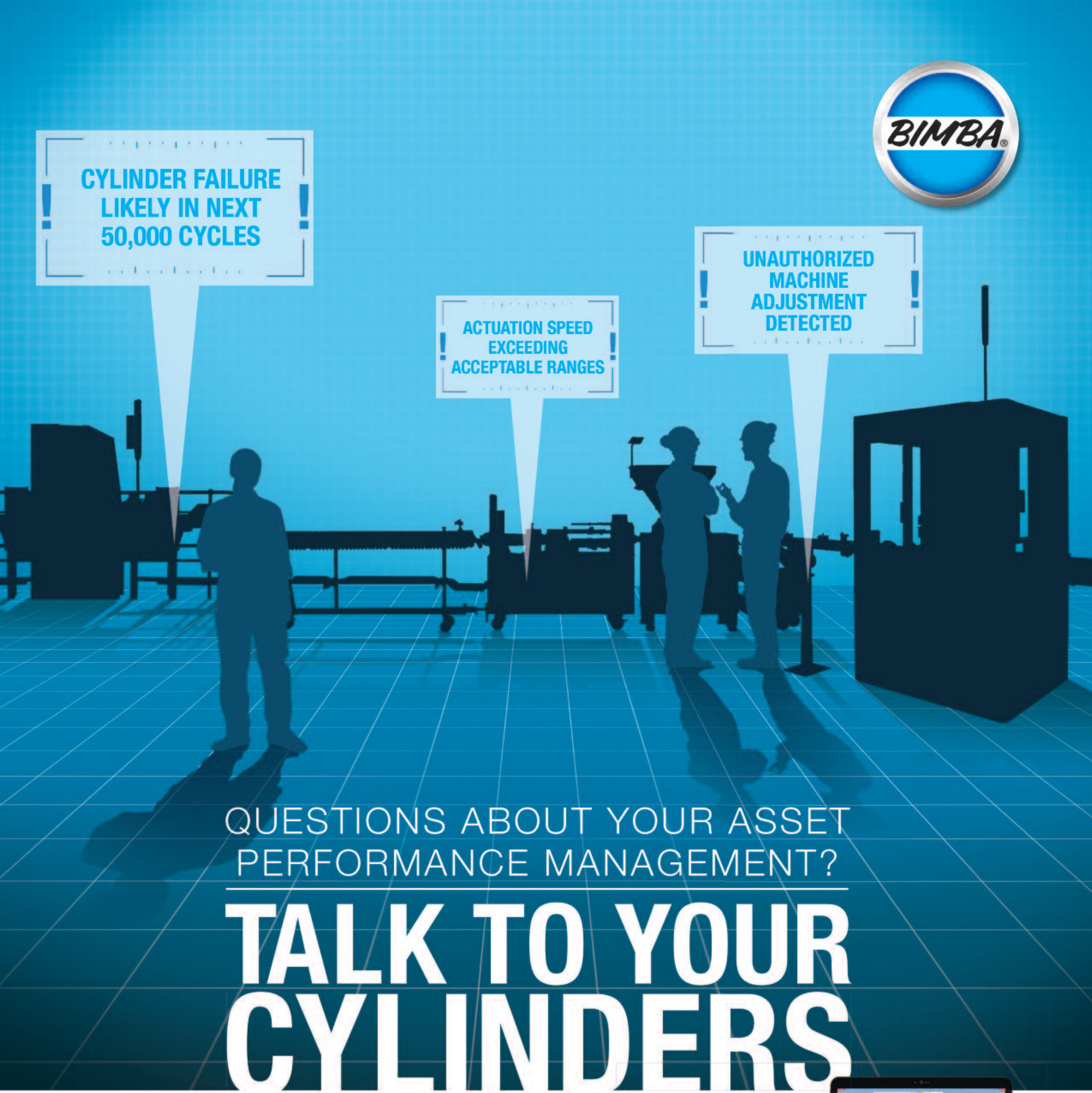

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Columns

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Mission Statement

The object for which the Illinois Manufacturers' Association was formed is to strengthen the economic, social, environmental and governmental conditions for manufacturing and allied enterprises in the state of Illinois, resulting in an enlarged business base and increased employment.

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The Illinois Manufacturer is published quarterly by the Illinois Manufacturers' Association.

For address changes and adjustments, write to *The Illinois Manufacturer.* Presort standard postage paid at Bloomington, IL. Postmaster: Send address changes to *The Illinois Manufacturer,* 220 East Adams Street, Springfield, IL 62701. Telephone: 217-522-1240.

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Share your company news with IMA . . .
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GREGORY W. BAISE

Navigating the new, uncharted energy terrain

In total, Illinois may lose a staggering 5,780 MW from its generation portfolio . . . Illinois policymakers stand at a crossroads.

For decades, our state's energy landscape has proven to be a key factor in retaining current manufacturers and attracting new facilities and jobs. "Low" and "stable" have been common descriptors of energy prices in Illinois. This has been true in our state since competition was introduced and the energy market was restructured in 1998. Amid years of budgetary struggles, failed pension reform and stalled economic growth, energy prices have remained a constant positive for our manufacturers.

In fact, July 2016 data from the Energy Information Agency (EIA) shows our state enjoys the lowest commercial and industrial energy rates in the Midwest. This is well below our neighbors in Indiana, Michigan, Wisconsin and Ohio. Illinois' edge stretches beyond the Midwest, too. July 2016 rates in our state were far lower than states with a large populous and strong manufacturing presence such as Pennsylvania and California.[1]

Restructuring and competition have had a suppressing effect on Illinois energy prices, though our robust generation mix has also played a vital role. These factors have helped our state and the manufacturing industry greatly. This foundation, though, may weaken in the future, absent some proactive, strategic decision-making on the part of our policymakers. This could put Illinois' energy advantage in jeopardy.

We face concern on the federal level aside from the unknowns linked to the presidential and congressional races. Earlier this year, the U.S. Supreme Court issued a "stay" of the Environmental Protection Agency's (EPA) Clean Power Plan regulations. It remains to be seen whether these regulations will go into effect at all. They require that states form plans to satisfy emission reduction targets as determined by the EPA. A final judgment may not be reached until 2017. Depending on the outcome, our state may need to alter its generation mix in the years to come.

As we await a decision on the Clean Power Plan, we have seen a sudden rash of announced closures of large generation resources in Illinois. Exelon, the owner and operator of six nuclear facilities in the state, announced it intends to close its Clinton and Quad Cities facilities. This hinges on the actions of the legislature and Governor by this December. Dynegy, the owner of 13 power stations in the state, is closing several coal-fueled units as well. In total, Illinois may lose a staggering 5,780 MW from its generation portfolio. MISO, the Regional Transmission Operator in central and southern Illinois, is thinking about changes to its market structure to address reliability concerns. Environmentalists and renewable developers have advanced legislation to expand the Renewable Portfolio Standard (RPS) and energy efficiency efforts. Illinois policymakers stand at a crossroads.

Like state policymakers, our manufacturing community may face telling decisions in the near future. Energy policy may have an impact on energy prices within the state and beyond. In turn, this could affect your energy bills. Gain more insight from Constellation's article on page 16, as well as other informative articles in this issue of *The Illinois Manufacturer*.

We encourage you to work with our endorsed energy provider, Constellation, to take an active role in developing a customized energy management strategy. As we face the uncertainties of fast-changing state and federal energy policies, Constellation can help you manage your energy needs and budgets in an unpredictable environment. ■

1. U.S. Energy Information Agency, Electric Power Monthly — July 2016, released Sept. 26, 2016. (https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a)

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MARK DENZLER

Why the IMA?

Our manufacturing army in Illinois is comprised of 570,000 workers who are engaged in good, high-paying jobs that are the heart and soul of the middle class.

Let's face it — selling a membership in a trade organization is getting more difficult every year. Changes in demographics, combined with the Internet and mobile devices, make it easier for the next generation of leaders to get information at the drop of a hat.

Some individuals find trade associations to be antiquated and increasingly irrelevant in today's modern world regardless of whether they represent manufacturers, nurses, insurance brokers or realtors. I'm often asked about the IMA's value proposition and return on investment.

It's very simple — the IMA is the powerful voice of the Illinois manufacturing community and the only statewide organization in Illinois dedicated exclusively to advocating for manufacturers in the policy arena. There is no other association in Illinois fighting for your company every single day. As Teddy Roosevelt once said, "the credit belongs to the man in the arena, whose face is marred by dust and sweat and blood . . ."

The Illinois Manufacturers' Association is that "man in the arena" on behalf of the manufacturing sector. Today, manufacturers face unprecedented challenges from federal, state and even local units of government. We are on the front line of policy battles ranging from labor relations to energy and the environment, to tax law and workers' compensation. However, we are only as strong as our membership.

Our direct action and involvement has saved manufacturers millions and even billions of dollars over the past decade in Illinois. Examples are numerous:

- The IMA successfully negotiated an Unemployment Insurance Act reform in December of 2015 that eliminated a 0.3 percent across the board surcharge on all employers. This is saving employers nearly $38 per employee annually beginning in 2016.
- The IMA defeated the Tenaska Energy Project which sought to hike electricity prices by $400 million per year for the next 30 years. The cost of energy for an average manufacturing facility would have jumped from 3.6 cents to 21 cents per kilowatt-hour — a whopping 500 percent hike for Tenaska's power generation.
- The IMA saved manufacturers millions of dollars by stopping a government-subsidized synthetic natural gas plant that would have sold gas at more than $8 per million BTU compared to the market price of less than $3 per hour. Illinois consumers would have missed the benefits of the energy revolution had the Leucadia plant been built.
- The IMA helped defeat numerous paid leave proposals and minimum wage laws that sought to create artificial and costly mandates on employers.
- A broad coalition, including the IMA, defeated a state GMO food labeling law and successfully enacted a federal law banning a patchwork of state regulations. Food manufacturers will not have to worry about creating different labels for different states.

Every year brings new challenges and battles in the form of nearly 6,000 legislative proposals. The new General Assembly, to be inaugurated in 2017, will be no different.

Our manufacturing army in Illinois is comprised of 570,000 workers who are engaged in good, high-paying jobs that are the heart and soul of the middle class. But these jobs are under attack, and those involved in the Illinois Manufacturers' Association are the "boots on the ground" who are actually doing the work on behalf of manufacturers to help them compete in today's constantly changing global economy.

We are more than proud to represent companies that make things in Illinois and we want to keep it that way!

Thank you for your investment in the Illinois Manufacturers' Association and your commitment to the economy. If you know of a manufacturing company (customer, supplier, or neighbor) that is not an IMA member but should be, please let me know (see below).

After all, we are stronger together. ■

Contact Mark Denzler — email: mdenzler@ima-net.org — telephone: 800-875-4462, Ext. 3726

Mark Denzler is Vice President and Chief Operating Officer of the Illinois Manufacturers' Association. Mark can be reached at 217-522-1240, extension 3008, or mdenzler@ima-net.org.

The unique partnership of two industry leaders

by Bruce Hauk, President, Illinois American Water and
Debra Shore, Commissioner, Metropolitan Water Reclamation District of Greater Chicago

American manufacturing is at a crossroads. Foreign competition, rising operational costs, and the search for a qualified workforce are enough to keep any manufacturer awake at night. However, partnerships between private and public organizations with visionary and proactive strategies can offer U.S. manufacturers a competitive advantage.

Manufacturing is vital to the country's economy, but it can leave behind a big environmental footprint. The opportunity for companies to save money through environmental stewardship has often been considered an elusive, if not entirely unattainable, "win-win" scenario.

But when it comes to water, all that is changing.

Most manufacturers in the United States are paying full-price to use high-quality drinking water for processes that do not necessarily require potable water. It's an expensive and ultimately wasteful practice. Fortunately, an affordable, safe, and practical alternative to potable water can be found in municipal effluent — that is, treated wastewater from homes, businesses, and industries.

As leaders in the water industry, Illinois American Water (IAW) has partnered with the Metropolitan Water Reclamation District of Greater Chicago (MWRD) on an innovative effluent reuse project. This public-private partnership will offset manufacturers' operational expenses by supplying companies with low-cost treated effluent, also known as recycled water. Properly recycled water meets health and safety standards required for the vast majority of industrial uses, such as fabricating, processing, washing, diluting, cooling, and transporting.

This partnership will explore opportunities for industrial reuse of effluent water from MWRD's Calumet Plant, which treats approximately 237 million gallons of wastewater per day while eliminating 90 percent of contaminants. IAW will build and maintain the necessary infrastructure to deliver the recycled water to industrial users while MWRD continues to process and treat wastewater. Once-used recycled water will be conveyed back to MWRD for another round of treatment and subsequent reuse.

As both a member of the Illinois Manufacturers' Association (IMA) and a steward of our natural environment, IAW shares a common interest in helping preserve, protect and enhance manufacturing operations while also advancing sustainable water solutions throughout the Chicago area. A growing percentage of the U.S. population recognizes the importance of water stewardship and expects companies to adopt greener practices, yet day-to-day industrial operations are often inherently water intensive. Recycled water provides an opportunity for manufacturers with even the largest water footprint to become environmental champions.

The idea that saving money and saving water are on opposite ends of the spectrum is an outdated way of thinking, long past its sell-by date. Instead MWRD and IAW are seeking to capture the economic value in what was once considered waste. Recycled water is an affordable and realistic alternative for manufacturers currently paying full-price for potable water. It's good for the planet and good for the bottom line.

ILLINOIS AMERICAN WATER

Illinois American Water

IAW serves approximately 1.2 million people in 127 communities across the state of Illinois, providing high-quality water and wastewater service. IAW is a regulated utility governed by the Illinois Commerce Commission. The company operations follow strict regulations created by the United States Environmental Protection Agency (USEPA) that help to provide high quality drinking water.

IAW's parent-company, American Water, was founded in 1886 and today is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. With headquarters in Voorhees, New Jersey, the company employs 6,700 dedicated professionals who provide regulated and mar-

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Metropolitan Water Reclamation District of Greater Chicago's Calumet Plant


Are you
overwhelmed
by the cost of
your insurance?
The IMA
can help!
Contact Mark Frech today!
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Budget for success: With Q4 2016 underway, it's time to think about 2017

Running a manufacturing operation in today's regulatory environment can be challenging, to say the least. From OSHA compliance matters to human capital management, manufacturers are forced to navigate a myriad of unique and increasingly complex risks on a daily basis.

Personally, I find the fourth quarter to be particularly fascinating because while manufacturers are making their final push to meet year-end sales and production targets, owners and operators must begin the process of thoughtfully and strategically developing a budget for the upcoming calendar year. To be clear, not all businesses align their fiscal year with the calendar year; but whether your operation's fiscal year falls on January 1st or July 1st, effective budgeting is full of challenges.

While financial accounts relate to the past, budgets are about the future. Therefore, all data is planned rather than actual, probable rather than definite.

Budgets are based on a number of assumptions. Some of these are obvious, such as what the cost of labor and raw materials will be or what market research indicates about customer demand. Others are more implicit. A change in your sales or production staff, a burgeoning relationship with a new supplier, or changes within a competitor's organization could all affect budget projections.

So, clearly, developing a responsible budget should be a relatively simple task. All you need to do is look into your non-existent crystal ball, forecast the state of the local, national, and global economy, identify and prepare for changes in industry regulations, fluctuations in fuel costs, insurance, healthcare, and/or the tax code, then determine the financial impact it will have on your business model.

Oh, and in case you were confused by the recently aired reality television shows that have pinned two ["intriguing"] candidates against one another in a live, no-holds-barred, name-calling, "I-Know-You-Are-But-What-Am-I" debate forum, it's also an election year! So planning for your businesses future should be fairly easy, right?

All kidding aside, effective budgeting is a difficult and complicated task because there are so many external factors that are out of your control. I'm not qualified to speak on the impact the current election cycle will have on your business. I also can't forecast consumer buying habits into 2017 and beyond. So instead, I'd like to focus my attention on another familiar four letter word: Insurance.

Business insurance programs [Property, Liability, Workers' Compensation, Auto] and Employee Healthcare [Group Medical, Disability, Dental, Vision] represent two of the largest annual expenses in a manufacturer's budget. To that end, let's explore trends and forecasts in the insurance marketplace to help you better prepare for the 2017 fiscal year.

Property & Casualty Insurance

Both the property and casualty industry sectors are experiencing continued soft market conditions that favor business owners (with the exception of auto insurance). In a traditional "soft market" insurance companies are experiencing tremendous profitability and, as such, begin underwriting businesses more aggressively in an attempt to gain market share. Absent another major catastrophic loss [this article was published after Hurricane Matthew struck the southeastern coast of the United States], we anticipate that declining rate positions will continue into 2017.

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Adam Hackman is Executive Vice President of Property & Casualty for Manufacturers Insurance Services of Illinois (MIS of Illinois), an Acrisure Agency Partner. MIS of Illinois helps members of the IMA manage and reduce their bottom line costs with innovative insurance strategies and valuable compliance tools. For more information, visit www.mis-360.com or contact us at info@mis-360.com or 855-607-6190.

INSURANCE

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Most incumbent insurance agents will advise clients to anticipate flat renewal pricing; however, if your business has experienced favorable losses over the last 3-5 years, applying competitive pressure (either through agency competition or advising your agent to solicit quotes from other insurers) can generate rate savings in excess of 15 percent on property and general liability renewals.

Automobile Liability

Unlike general liability and product liability, the auto liability underwriting process continues to be a challenge for many insurers. The commercial auto market reported its fifth consecutive underwriting loss year in 2015 and is on track to do the same in 2016 according to Fitch Ratings. Reductions in fuel costs and the subsequent increase in motor vehicle traffic on the roads has been a major contributing factor to the industry wide underwriting loss. In sharp contrast to the premium reductions being forecast for other liability lines of coverage, it is expected that auto liability premiums will increase in 2017. If auto insurance represents a substantial portion of your business insurance expense, work with your agent to explore alternative funding methods to control cost.

Workers' Compensation

Although 2017 rates have not yet been released, according to a report put out by the National Council on Compensation Insurance [NCCI], Illinois employers could see a decrease in their workers' compensation rates of as much as 12.9 percent in the upcoming calendar year. It is important to note, however, that a reduction in your respective payroll classification rate will not guarantee a reduction in total premium as there are a number of additional underwriting factors that go into determining final pricing (ie. payroll, class of business, individual loss experience, MOD factor, etc). That said, the state of Illinois is currently trending towards a rate reduction for the upcoming calendar year.

Cyber Liability

If you don't have it, get it!

Cyber intrusion is becoming an all-too-popular issue in today's business environment and a comprehensive cyber liability insurance program can mean the difference between a data breach creating a PR headache versus bankrupting your business. The IMA has resources to assist in quoting and placing this important line of coverage. I strongly recommend that you contact your IMA representative immediately to learn more.

Health Insurance

Health insurance premiums continue to rise across America and while the manufacturing sector is certainly not the only industry that will be impacted, the increased healthcare costs for workers is putting considerable pressure on already fragile manufacturing cost structures.

> Technology solutions are rolling out daily to help employers navigate regulatory red-tape and maintain compliance.

U.S. manufacturers face the burden of providing healthcare for employees while their foreign competitors are not necessarily required to. Therefore, it's extremely important that manufacturers partner with an agent who can help identify loss trends in their employee census and develop a plan design and contribution strategy that attracts and retains talent within the confines of their budget.

According to the National Business Group on Health, a Washington, D.C.-based organization that represents large employers, health insurance premiums will increase by approximately six percent for employers and at least 10 percent in the public exchanges (some reports project rate increases in excess of 25 percent in some states).

Winning Strategies

Much like manufacturing, the insurance industry is in a state of flux: Government imposed mandates are changing the way that agents and insurers do business. Pricing models are rapidly shifting to better position insurance companies to capture market share. Technology solutions are rolling out daily to help employers navigate regulatory red-tape and maintain compliance. And insurance agency M&A activity is at an all-time high. So today it is more important than ever that manufacturers partner with agencies who are equipped to help them stabilize their budget and maintain steady growth and profitability. Here are a few friendly tips for your next renewal cycle:

- Identify insurance professionals who specialize in manufacturing.
- Ask questions about how many direct carrier contracts they maintain and what their overall premium volume [aka leverage] is with those carriers.
- Do they have claims advocacy to assist in your cost-containment strategies?
- How are benchmarking and analytics used to negotiate pricing?
- What professional resources or expertise can they provide to help you control costs and make better business decisions?
- Don't lose sight of "compliance" in lieu of "cost."
- Does your benefits provider have technology resources to assist in ACA reporting?
- What fees exist for use of that technology?
- What strategies do they recommend to control cost without sacrificing plan design?

In the current commercial insurance space, competitive pressure can be extremely effective in efforts to improve coverage and pricing terms. Pressure does not mean that you need to sever ties with your existing agent, but make sure that your providers are positioning your business for financial success and providing you with the resources necessary to maintain compliance in today's regulatory environment.

The IMA has strategic resources available to assist you in the insurance placement process. Contact Mark Frech at the IMA if you'd like to learn about their resources and capabilities. ■

Variable Frequency Drives can significantly lower energy costs

by Richard Reese, CEM, CEA, Industrial Energy Advisor, Ameren Illinois Energy Efficiency Program

Motors are designed to operate at a constant speed. However, the devices they operate, such as pumps and fans, frequently run at a lower flow rate and are typically controlled with a mechanical valve or damper. Allowing the motor to run at a constant high rate, under these lower flow conditions, wastes energy. A variable frequency drive (VFD) can adjust the shaft speed of the motor drive electronically, allowing for flow or speed fluctuations, increasing motor efficiency and reducing energy costs. In addition to speed control, VFDs provide soft starting, which helps to maximize equipment life by reducing mechanical stress and voltage sags.

How VFDs work

A variable frequency drive is an electronic controller that adjusts the speed of an electric motor by modulating the power being delivered. It does this by converting alternating current (AC) to direct current (DC), and then converting the DC back to AC at a lower frequency and voltage level, which reduces the speed of the motor to the desired level. VFDs provide continuous control, matching motor speed to the specific demands of the work being performed.

VFD applications

VFDs are ideal for facilities with long operating hours and frequently changing load requirements for key equipment. Variable torque pumps and fans are the most common applications for VFD installations across a variety of industries. VFDs offer significant energy-saving opportunities for some processing equipment in manufacturing facilities, as well as heating, ventilation and air conditioning systems in commercial buildings.

Are VFDs a good fit for my application?

In general, the longer a motor operates, the more attractive it becomes as a VFD retrofit candidate. A motor/load system operating for 6,000 hours per year with throttled output will be three times more attractive for VFD retrofit than the same motor operating 2,000 hours per year. The issues of variable torque with speed and operating hours per year are much more important than motor size (horsepower) when deciding whether to retrofit with VFDs.

Benefits and limitations of VFDs

VFDs offer a number of benefits, some of which are easy to quantify, while others are less tangible. They also come with some limitations that should be considered.

Benefits

- Energy savings. By matching motor speed to equipment needs, motors run more efficiently and use less energy. VFDs on pumps for example, can reduce energy use by up to 50 percent.
- Increased equipment life. Single speed drives start a motor abruptly, resulting in high torque and current surges. VFDs gradually ramp up motors to operating speed (soft-start), reducing mechanical stress. This can lower maintenance and repair costs and extend motor life.
- Improved control. By matching motor speed to process or operational requirements, flow or speed variations can be achieved more rapidly and more accurately than with other control methods, improving overall performance.
- Low maintenance. VFDs are easy to install and have few moving parts, resulting in little wear and tear compared to mechanical dampening.

Considerations

- The initial cost of installing VFDs can be expensive. However, energy savings from these devices in many applications can lead to a rapid payback while lower maintenance and repair costs provide additional long-term savings. In addition, cash incentives through the Ameren Illinois Energy Efficiency Program can help offset project costs and reduce the payback period.

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ENERGY COSTS

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Installation precautions

- VFDs can produce harmonic distortion, which can adversely affect power quality in some situations. There are a number of solutions to correct this problem. For example, installing harmonic filters can help to reduce distortion.
- Standard motors with VFDs can experience increased degradation of winding insulation. Using special inverter-rated motors with VFDs will eliminate this problem.
- VFDs should not be used with conventional AC motors in applications where the unit must maintain high torque as the speed is reduced (machine tools, for instance).
- VFDs can cause bearing damage on motors with ungrounded shafts. Special grounding bushings are available to prevent damage from occurring.
- Long motor lead lengths can create nuisance tripping and possible damage of the VFD. This can be prevented with the use of load-side reactors and some manufacturers have precautions built into the VFD.
- Following proper installation guidelines as specified by the manufacturer will ensure reliable VFD performance and equipment longevity.

Real result: Aventine

In a sprawling campus nestled on the banks of the Illinois River, Aventine Renewable Energy transforms corn into clean, renewable energy. With renewed interest in its own energy use, the ethanol producer partnered with Ameren Illinois to get their motors running at the right speed.

Their motivation to take action took a quantum leap forward after taking a closer look at their power bills. When the company realized they were paying into the program every month but not actively submitting projects, they started looking for opportunities.

With 2,000 motors running in the 650,000-square-foot facility, they didn't have to look for long.

Motors make an easy target for efficiency efforts. Designed to handle maximum loads, motors typically offer only two speeds — "off" or "full speed."

In contrast, motors equipped with variable frequency drives (VFDs) don't work harder than necessary which can lead to dramatic reductions in energy use.

Scott Schultz, an energy program engineer for Ameren Illinois, compares VFDs to a kind of cruise control that automatically adjusts motor speed to meet changing demands.

"If a motor needs more power, then the VFD provides it; but if you're going 'downhill' and need less power, the VFD reduces the speed of the motor," says Schultz. "The motor is not constantly running at 100 percent and wasting energy."

Aventine partnered with Illinois Electric Works, a program ally, to identify fans, motors and pumps that would gain the most from variable frequency drives. That survey identified roughly 100 motors that would benefit from VFDs.

To whittle down that list, Aventine targeted VFD projects with payback periods of one year or less. That left them with a manageable project: installing VFDs on 12 motors ranging from 75 to 400 horsepower.

Many of Aventine's motors run at full speed, and use a control valve or

see **ENERGY COSTS** *page 14*

Four reasons investment and natural gas strategies work the same way

Have you ever compared the Standard & Poor's 500 ("S&P 500") Index and the New York Mercantile Exchange ("NYMEX") side-by-side? If you're like most people, no, why would you? But when you graph the activity of most markets over time, you'll see a jagged, up-and-down line that will most likely look different the next time you see it.

You'll see that the way we describe natural gas supply is the same. We talk about daily volumes, the day's high and low and historical trends. Natural gas and stock markets are very similar, but for some reason they are rarely treated that way.

Here we will focus on four reasons you might think about managing your natural gas supply like your stocks:

1. They both accept the fact that the markets are always changing. The S&P 500 is an index commonly used as a benchmark for the U.S. stock market, and it changes by the day. Investment experts monitor and try to forecast activity, but no one can predict for sure. In the world of natural gas, the NYMEX is the widely accepted natural gas benchmark price. It's determined by the futures price at the Henry Hub in Louisiana. Like the stock market, this is something that experts tirelessly monitor and analyze.

Many players and external factors have an impact on volatility. There are variables at each point in the delivery system of the natural gas market: production, transportation (interstate), distribution (intrastate) and consumption. Most of these costs are realized in the basis component of your energy costs. Basis can be thought of as the "other" gas costs. It directly relates to regional supply and demand factors that make gas either more or less expensive than the gas trading at the Henry Hub. In simplest terms, your basis costs are calculated as the NYMEX price subtracted from your specific delivery point price in Illinois.

When buying natural gas, you're monitoring the fluctuations at Henry Hub (NYMEX). You're also seeing fluxes as gas is delivered to you (storage, local production, etc.). Each of these factors can make it very hard to decide when and how to buy. Similarly, investment portfolio management is impacted by a company's stock performance, international economics and more. Again, both graphs are moving all the time and no one can predict where they're going.

2. They both know not to eat the whole pie at once. Since we can't predict market activity, there are other ways you can gain some stability. In natural gas and stock markets, buying all on one day is like putting all of your eggs into one basket. This is where investment diversification strategies, such as a 401k or Target Date Fund help. On a Target Date Fund, you can gain access to a number of different asset managers and classes without having to worry about when, and how much to buy.

When an investment company develops strategies for people, it often advocates for the concept of dollar-cost averaging. This concept is now quickly being adopted by many businesses that purchase natural gas. You can diversify your NYMEX cost, basis or both to achieve the budget certainty you're looking for. Think about it as instead of buying a collection of stocks, you're buying a

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Constellation is the preferred energy provider for IMA members. For more information, visit www.constellation.com/IMA.
Or, you may contact Constellation's **Richard Cialabrini** at 888-312-1563 or Richard.cialabrini@exeloncorp.com.

WATER

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ket-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada.

Metropolitan Water Reclamation District of Greater Chicago

Metropolitan Water Reclamation District of Greater Chicago

The MWRD's mission is to protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area. MWRD's strategic plan includes a goal to pursue resource recovery, including reuse applications for treated wastewater. ■

Metropolitan Water Reclamation District of Greater Chicago's Calumet Plant

ENERGY COSTS

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damper to control the flow of liquids or gases. The VFD allows the motor to speed up or slow down to provide the necessary pressure — eliminating the need for dampers and valves.

The sheer size of some of those motors made the Aventine project unique.

"It's not common to install VFDs on 400 horsepower motors," says Schultz. "Those are some very, very big dogs — but the bigger the motor, the bigger the savings."

In fact, by modifying just 12 motors, Aventine has reduced its annual electrical use by more than 4.2 million kilowatt-hours a year. Those energy savings boost the bottom line by nearly $300,000 every year — and help the environment, too.

To help fund the improvements, Ameren Illinois provided more than $170,000. The incentive money cut Aventine's project costs by more than half. And because Aventine has limited funds for capital projects, receiving incentives through Ameren Illinois helped push the project to the forefront.

The project proved to be a wake-up call to the power of energy efficiency. With an eye for energy efficiency, the team at Aventine hopes to transform their workplace — originally built in 1899 as a sugar processing facility — one project at a time.

Resources available for VFD projects

The Ameren Illinois Energy Efficiency Business Program has a number of valuable resources designed to help with your VFD energy efficiency project. The program offers free energy consultations, which can help identify the best applications for a VFD and detail how to secure cash incentives to offset project costs. For a limited time, Ameren Illinois can provide businesses with a cash incentive of $115 per horsepower controlled for motors of 500 horsepower or less, which could cover up to 75 percent of the project cost. The program also offers $0.06 per kWh saved for VFD installations on motors larger than 500 horsepower. Your facility may also be eligible for an additional incentive bonus when you complete your project before March 31, 2017.

> For a limited time, Ameren Illinois can provide businesses with a cash incentive of $115 per horsepower controlled for motors of 500 horsepower or less . . .

To schedule an energy consultation or inquire more about VFDs, please call us at 866-800-0747. You can also get more information at ActOnEnergy.com/VFD.

About the Ameren Illinois Energy Efficiency Program

Since 2008, the award-winning Ameren Illinois Energy Efficiency Program has helped Illinois businesses save over $360 million in energy costs. Utilizing more than $85 million in cash incentives, business customers have been able to cut project costs, decrease payback periods, and move energy efficiency projects forward. ■

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1. *U.S. Department of Energy (DOE). Variable Speed Pumping: A Guide to Successful Applications. May 2004.*

Visit ActOnEnergy.com/VFD or call 866-800-0747 for more information.

WILLIAM J. WALSH

What every manufacturer should know about TSCA reform

Recent amendments to the federal law governing toxic chemicals will bring significant changes that could impact a broad array of manufacturers. Manufacturers need to monitor the implementation of this new law to assess carefully and, when necessary, attempt to mitigate the chances of Environmental Protection Agency (EPA) prohibitions or restrictions on the use of chemicals that are necessary to make your products.

Federal designation and regulation of "toxic chemicals" have long been of primary concern to chemical manufacturers and importers (while the companies that simply use these substances have generally been less impacted). That all changed with the passage of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which amended the Toxic Substances Control Act (TSCA Amendments). The new requirements impose significant responsibilities on the myriad of manufacturing companies that use existing "toxic chemicals." As a result, prospects are significantly higher that EPA, on an expedited timetable, may find that chemicals that are commonly used in manufactured products present an "unreasonable risk" (as newly redefined in the Amendments) and impose labeling requirements, usage restrictions, or even outright bans on their use.

1. Existing products may be in peril

The TSCA Amendments have confirmed and expanded EPA's legal authority to regulate existing "toxic" substances (i.e., chemicals, mineral and manmade fibers, and particles) in products. The new provisions require EPA to designate at least 10 existing chemicals as high-priority substances by late December 2016, and at least 20 more by the end of 2019, with further designations to follow.

EPA must assess the human health and environmental risks to workers and consumers from these high-priority substances in manufactured and recycled products. In terms of timing, EPA generally has just a three and a half year post-designation deadline to complete each assessment. This is fast forward mode for EPA.

The TSCA Amendments instituted an innovative two stage process. If the human health or environmental risk from exposure to the priority hazardous substance exceeds an EPA-derived unreasonable risk exposure level (the so called unreasonable risk level), EPA must issue a binding regulation within two years, selecting one or more of the potential restrictions listed in the Amendments (ranging from bans, warning labels, record keeping, and notification and/or recalls). The restriction will be based on consideration of human health or environmental risk, benefits of the uses, and the reasonably ascertainable economic consequences of the rule (including costs and cost effectiveness). However, EPA is no longer required to choose the least burdensome restriction, increasing the likelihood that more stringent measures will become the norm.

Consideration of risk reduction options is triggered if the exposure presents an "unreasonable risk of injury to health or the environment," but unlike the pre-June 2016 TSCA definition of "unreasonable risk," EPA now explicitly cannot consider costs or other non-risk factors in determining the meaning of the term "unreasonable risk" and must protect "potentially exposed or susceptible subpopulation[s]." EPA must integrate and analyze available information on, among other things, toxicity, the potentially exposed or susceptible subpopulations, the likely duration, intensity, frequency, and number of exposures under the conditions of use of the chemical substance, the best available science, the extent of independent verification or peer review of the information or methods, and the weight of the scientific evidence, among other factors. If EPA considers "aggregate or sentinel exposures to a chemical substance under the conditions of use," it must

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Managing your energy strategy all year round

by Constellation

For many, the autumn months mean back-to-school time, football games and the leaves changing colors. However, as a manufacturer, you're focused on a few other things. You may be facing critical business decisions in the fourth quarter such as achieving year-end targets, budgeting for the upcoming fiscal year and keeping up with day-to-day operations. Despite these seasonal challenges, the natural gas and power markets can provide a great opportunity for you as the calendar turns to fall and winter.

In the "off-peak" period, or shoulder months, between late-August and October, falling temperatures typically result in a seasonal pullback in natural gas and power prices. From an energy demand standpoint, the peak of summer is over, but the weather is not yet cold enough to yield any significant heating demand.

By late summer or early fall, the energy market has a firm grasp on how summer fundamentals have impacted the supply-demand balance. However, there is still uncertainty about what the weather will be like for the upcoming winter months. As a result, this window of time between the peak summer and winter season is an ideal time for energy buyers to review procurement strategies and evaluate current market trends against budget goals.

With this in mind, every energy strategy should begin with a solid understanding of the market. This includes knowledge of where prices stand against historical benchmarks and knowing key fundamental drivers that could influence future price trends. Armed with this information, you can make strategic decisions that could impact your bottom line now and in the years to come.

How the natural gas market can help your facility

Whether your facility is in the market to procure natural gas, power or both, understanding the natural gas market can be key to evaluating where energy prices may be headed in coming months. This is due to the increasing correlation between natural gas and power prices as power generation at a national level grows more dependent on natural gas-fired power plants. In Illinois the prices of 24-month forward contracts for wholesale power and NYMEX natural gas have shown a correlation of 80 percent over the past three years. The relationship between natural gas and power can be useful for you as power prices followed natural gas prices to multi-year lows earlier this year. However, it has also resulted in changing risks in the power market as any increase or volatility in natural gas prices can translate into higher power costs.

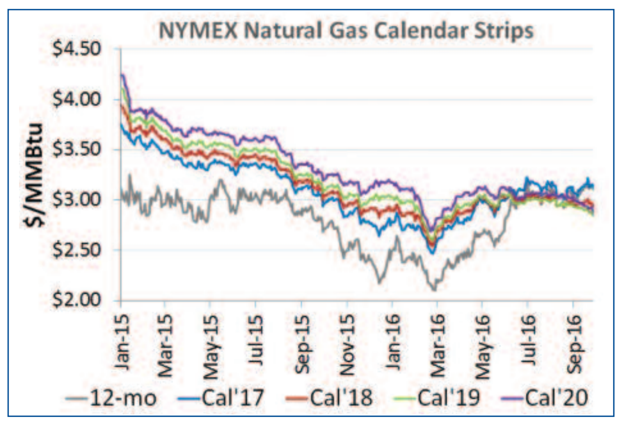
In early March, the NYMEX prompt month gas declined to a 17-year low of $1.61/MMBtu amid major oversupply in the natural gas market. This was due to a historically mild winter and record gas production. However, this summer, which was the hottest on record on a cooling degree day (CDD) basis, led to a quick turnaround in energy prices. On September 21st, the NYMEX prompt month natural gas futures price broke through the $3.00/MMBtu mark for the first time since May 2015 and reached the highest closing price since early January 2015.

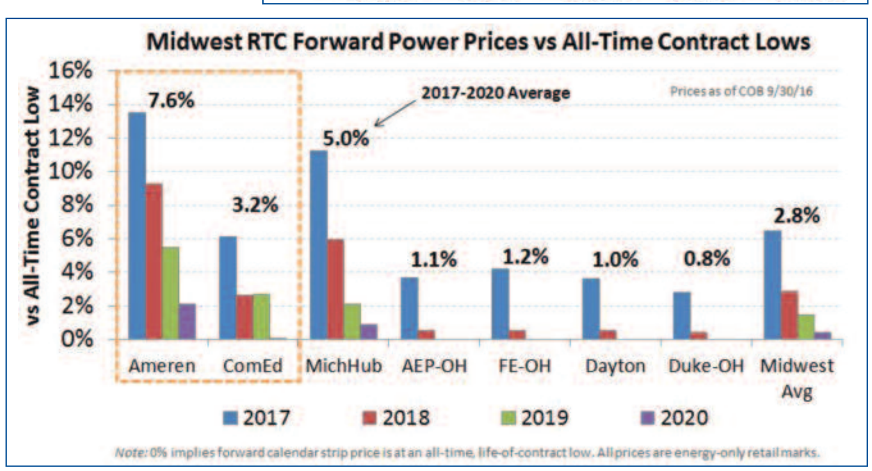
There are several vital drivers that resulted in this rally of short-term energy prices. First, the hot weather led to a significant year-over-year increase in natural gas demand in the power sector as air conditioning use increased this summer. Also, the increase in natural-gas fired generation on a national level boosted the demand for natural gas for power generation. In fact, according to the EIA, 2016 will be the first year on record in which natural gas will account for more power generation than coal. Along with power sector demand, the U.S. has seen record growth in natural gas exports via pipeline to Mexico this year. This added nearly 1 Bcf/day of incremental demand growth to the market this summer. This year, we have also seen the first shipments of liquefied natural gas (LNG) leave the Lower-48 U.S. bound for destinations in South America, Europe and Asia. The Sabine Pass LNG export facility in Louisiana has the capacity to export 1.2 Bcf/day, representing a noteworthy source of natural gas demand that did not exist in the market a year ago.

The growth in natural gas demand that we have seen this summer is projected to be the tip of the iceberg. Through 2020, forecasts predict that the U.S. will see 20 Bcf/day of incremental demand growth versus 2014 levels. Nearly half of this natural gas demand will be in the form of LNG exports (44 percent), with exports to Mexico accounting for 23 percent of that total. Continued growth in natural gas-fired power generation and industrial gas use are also key drivers of demand growth in coming years.

For energy buyers, natural gas demand growth presents a major upside risk for prices in the future. The key question about prices is whether the supply side of the market can keep pace with the growth in demand. Thanks to the "shale revolution" in the U.S. since 2009, dry natural gas production grew sharply through February 2016 when output peaked at an all-time monthly high of nearly 74 Bcf/day. Since that time, the decline in oil and natural gas prices to multi-year lows has caused producers to cut active drilling rig counts to 30-year lows, according to Baker Hughes. However, with natural gas and oil prices now rising off year-to-date lows, cash-strapped producers have begun to add drilling rigs back into service. This may lead to a rebound in natural gas supply in the next several months. According to the EIA's most recent projections, natural gas production in 2017 is predicted to grow by three percent from 2016 levels.

Based on the trend in longer-term NYMEX prices this summer, the market seems to be betting that production will be able to keep up with demand for years to come. While prompt month natural gas prices have moved back above $3/MMBtu recently and prices for 2017 delivery have rallied 25 percent since the spring, outer year futures prices for 2018-2020 are trading below $3/MMBtu. They have also declined by three to 10 percent since the beginning of June. Longer-term natural gas prices have likely drifted lower on expectations that prices over $3 next year will incentivize producers to increase natural gas production in coming years. With natural gas prices for 2018-2020 now trading at a discount to short-term prices, many energy buyers have started to procure natural gas and power for extended contract terms to take advantage of long-term value in the market.





How the power market can help your facility

For power buyers in Illinois, the forward market is also providing long-term opportunities despite an increase in prices versus the all-time contract lows achieved earlier this spring. Forward power prices for 2017-2020 at the ComEd zone are now one to six percent higher than spring lows. In downstate Illinois, prices at the Ameren zone are within eight percent of all-time lows. However, as with the natural gas market, power prices are slightly backwardated with 2018-2019 calendar strips now trading below prices for 2017. In fact, the current price spread between 2017 and 2018-2019 prices is the largest seen for these contract terms. This unique price trend could present you with an opportunity to procure power for longer contract terms at a lower average energy cost.

Fall is a time of year that you may be paying close attention to energy price trends given expectations for a seasonal pullback in the market. Forward power prices have generally trended lower since power demand peaked in the second half of summer. However, this year's sea-

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sonal price decline may be less dramatic than expected due to warm temperatures that have lasted into September, along with the rally in near-term natural gas prices. Thus, you may be inclined to wait until the spring shoulder season to make a decision about energy procurement. While the spring also tends to bring a seasonal low in prices, putting off a decision this year in hopes of lower prices next year may amount to a bet on the weather this winter.

What to anticipate in the coming months

With winter around the corner, there are several upside price risks that you should be aware of. The weather is one of the largest drivers of short-term energy prices, but it is also the least predictable far in advance. This year's initial winter forecasts point to a colder winter than a year ago and possibly colder than normal for the northern tier of the U.S. Last year's winter was the warmest on record on a CDD basis, driven by a very strong El Niño pattern. Over the summer, the strong El Niño gave way to a weak La Niña pattern. That could result in much stronger heating demand this winter. While there are several other factors that can influence winter temperatures – ranging from snowpack in Siberia to atmospheric blocking patterns – you should be prepared for a colder winter. Expect winter weather forecasts to gain clarity, and possibly have a bigger impact on prices, sometime around the end of October.

A year ago, ahead of what was forecasted to be a mild winter, natural gas storage inventories reached a record level of 4,009 Bcf. This was the first time on record that storage eclipsed 4,000 Bcf. By the end of winter, storage inventories totaled nearly 2,500 Bcf, more than a 1,000 Bcf surplus compared to March 2015. Over the course of this summer, injections of natural gas back into storage have been nearly 40 percent slower than the average over the past five years. This resulted in a year-on-year storage surplus that has been reduced from over 1,000 Bcf in March to only 90 Bcf as of September 23rd. In other words, the hot summer has alleviated oversupply concerns in the natural gas market and normalized inventories prior to what may be a cold winter. While storage inventories are likely to be just below 4,000 Bcf by the end of October and enough to meet requirements in cold winter months, a season of strong demand could leave natural gas stocks in a deficit to the five-year average level by next spring.

Last but not least, you should not forget the lessons learned during the Polar Vortex of 2013-2014. Even in today's low energy price environment, sustained periods of cold weather can still lead to major energy price volatility as power generators and heating loads compete for natural gas supply. Many advances have been made in the energy market to prevent a repeat of the Polar Vortex. These improvements include increased pipeline capacity, generator reliability programs, and greater coordination between pipelines and power generators. But, the risk of energy price volatility during the winter cannot be ruled out. As a result, with exposure to the index gas or power markets, you should consider winter budget protection a key building block of your energy risk management strategy.

> Last but not least, you should not forget the lessons learned during the Polar Vortex of 2013-2014. Even in today's low energy price environment, sustained periods of cold weather can still lead to major energy price volatility as power generators and heating loads compete for natural gas supply.

In summary, the energy market has undergone a period of transition this summer due to the impact of low prices and a hot summer. This has tightened the supply-demand balance in the market and worked off a lingering oversupply. As a result, natural gas and power prices have moved off of the multi-year lows we saw this spring. The potential for a cold winter and natural gas demand growth represent material upside price risks in coming months though. On the other hand, these bullish short-term fundamentals have had a muted impact on long-term gas and power prices. In some cases, prices in the 2018-2020 timeframe are back within striking distance of their previous lows. There is still a lot of value in this energy market if you have the right energy management strategy in place.

As this discussion makes apparent, there are many important factors that can drive prices up or down in the energy market, over both the short- and long-term horizon. How can you use this information effectively to make a strategic decision about energy procurement?

Here are five steps you can follow

1. Follow market trends to make proactive, rather than reactive procurement decisions.

Understanding the range of factors that influence energy prices can be a time-consuming and confusing process. Constellation, the IMA's endorsed energy provider, has various market intelligence publications available for you including daily, weekly and monthly energy update newsletters and bi-monthly energy market webinars. You can also subscribe to regular blog updates that cover regional information and regulatory updates.

Constellation's Market Watch tool enables you to follow price trends for specific contract terms through an email delivered directly to your inbox at a frequency of your choosing. Current forward prices can be monitored against a desired benchmark, such as your current contract price or energy budget goal price.

2. Perform a review of your energy budget and procurement goals.

The energy market has evolved immensely since 2009 when the shale revolution began. Has your view of how you buy energy changed in response? One of the keys to developing an energy management strategy is defining your procurement goals. Identifying where you want to go is the first step to getting there. Is your budget attainable given what you know about the current fundamentals? Or do you need to re-evaluate your goals and adapt your strategy to achieve your desired outcome?

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Intersect Illinois

Recruiting and retaining the next generation of manufacturing jobs is a primary objective for Intersect Illinois, Gov. Bruce Rauner's new private business and economic development corporation.

For years Illinois has lost ground to neighboring states in manufacturing jobs, which are the backbone of the middle class.

In August, the U.S. Bureau of Labor Statistics reported a two percent year-over-year decrease in Illinois manufacturing jobs, despite a .7 percent overall increase in nonfarm job growth. The Illinois manufacturing sector fared worse than Indiana, Wisconsin, Michigan and Ohio during the same time period.

By reimagining the way Illinois looks at manufacturing, Intersect Illinois seeks to position the state at the forefront of 21st-Century manufacturing.

We have world-class manufacturing assets — an educated workforce, the finest transportation and logistics network in the country — just waiting to develop and produce the products of the future. That's why we at Intersect Illinois are targeting more than just corporate headquarters, which yield big headlines but limited downstream results.

Intersect Illinois launched in February 2016 in an effort to make Illinois more competitive in the world of economic development.

Originally named the Illinois Business and Economic Development Corporation, our team rebranded the organization "Intersect Illinois" over the summer.

The brand captures what's best about the state, which is the nation's fifth largest economy and 19th largest in the world.

The center of the Heartland, this state is the nation's largest producer of agricultural products and has one of the largest interstate networks in the world, thirty-four Fortune 500 companies and a host of budding entrepreneurs call Illinois home; more of these great facts can be found on our website.

"Until recently, few states took seriously the job of marketing themselves," said Kelly Nicholl, who came to Illinois from a similar role in Indiana. "But Intersect Illinois is committed to selling what's best about the state."

INTERSECT
Illinois

Despite recent employment losses, Illinois manufacturers produced 13.4 percent of the state's output and employed 9.7 percent of the state's workforce in 2015, the National Association of Manufacturers (NAM) reported.

Manufacturers employed 572,500 Illinois workers in 2015, and with an average 2014 compensation of $81,048, according to NAM. In 2014, wages for employees at the average nonfarm business were only $54,425. The entire state relies on strong manufacturing and Illinois families rely on strong manufacturing.

In July, Intersect Illinois along with the Business Development team at the Department of Commerce and Economic Opportunity (DCEO) helped land FCA US's commitment to produce the new line of Cherokees in Belvidere. The manufacturer chose Illinois over Toledo, Ohio, where the vehicles are currently made. The $350 million investment will create about 300 new jobs.

"This investment will strengthen the FCA US presence in Illinois and create good paying manufacturing jobs for Illinois residents," Governor Bruce Rauner said. "We're proud FCA US chose Illinois for production of the Jeep Cherokee. Illinois has lost many of the manufacturing jobs that made our economy strong. We hope to continue to build on this success and get Illinois manufacturing growing again."

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Jim Schultz is the Chairman and CEO of Intersect Illinois. Visit http://intersectillinois.org for more information.

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3. Contact your Business Development Manager to review your goals and product options.

A changing fundamental landscape may require a different procurement strategy to capture value and account for new risks in the energy market. A key benefit of the competitive energy market in Illinois is that you have many choices in how you structure your procurement program. Constellation offers a variety of product solutions ranging from fixed to variable price, as well as blended or layered products that combine the certainty of fixed price with the flexibility of a variable price product. These products can be structured over various time horizons ranging from monthly to multi-year agreements. A discussion with a Constellation Business Development Manager can help you identify your optimal strategy in light of current market trends, risks and your budget goals.

4. Take advantage of value when the market presents an opportunity (and don't attempt to time the bottom).

Market fundamentals can change prices in an instant, and sometimes unpredictably. Evaluate market prices in light of your goals and take advantage of value when the market presents an opportunity. A common mistake among energy buyers is overreacting when prices increase, and underreacting when prices decline. Energy prices are typically volatile and they do not rise and fall consistently. Attempting to time the bottom of the market is not a stable energy management strategy. Waiting for an additional 25 cent decline in the market can result in prices that move in the other direction, especially if you are not watching the market closely.

5. Monitor energy cost and strategy performance.

Once you have developed an energy management strategy based on your needs, the final step is to monitor its performance against your goals. Ongoing assessment of strategy performance can make managing energy costs and risk decisions easier. Constellation can help you develop monthly budget estimates and track performance against your budget.

Staying informed on the market fundamentals and managing risk can seem like a daunting task, particularly given constraints on time and resources. That's why working with an experienced energy supplier is crucial to achieving your budget goals and potentially lowering your total energy costs over time. As the IMA's endorsed energy supplier, Constellation can work with you to navigate through a changing and volatile energy market landscape and help you develop an energy management strategy for this fall and years to come. ■

Constellation has been the IMA's preferred energy provider and partner since 1998. Contact Constellation's Richard Cialabrini at 888-312-1563 or Richard.cialabrini@exeloncorp.com to find our how they can help with your energy needs, or visit www.constellation.com/IMA for more information.

DANIEL HURTADO

Five features of tax deductions for energy efficient manufacturing buildings

If your company owns or leases commercial buildings used in manufacturing, and you have constructed or retrofitted the property to be more energy efficient, you may be eligible for an accelerated deduction for part or all of the costs associated with the property.

In late 2015, Congress and the President extended a number of tax credits and deductions through the Protecting Americans from Tax Hikes Act of 2015, which included deductions (or credits) for energy-efficient commercial building properties through 2016.

Here are five features of the incentive to keep in mind if your company is considering incorporating the credits and deductions available in its strategic tax plans:

1. The amount of the tax deduction depends on the size of the building and the components involved. The building, which must be located in the United States, qualifies for the deduction when the energy efficiency properties reduce total annual energy and power costs by 50 percent or more. The maximum deduction is $1.80 per building square foot. The tax payer will get the deduction even if the energy savings result from one component. A partial deduction at 60 cents per square foot is available for each of the building systems meeting certain energy cost reduction thresholds below 50 percent.

2. Incentives are available for three types of building systems components: Interior lighting systems; heating, ventilating and air conditioning and hot water systems; and the building envelope (the roof, exterior walls and floor of a structure). Parking garages are also eligible for the deduction (primarily through the lighting system). These incentives allow for the potential immediate expensing of costs that would otherwise be capitalized and depreciated over 39 years.

3. An immediate tax deduction may be available for existing facilities and newly constructed buildings: Section 179D is available for both newly constructed buildings and recently remodeled or retrofitted facilities. Improvements made to existing facilities to increase energy efficiency may qualify for a partial or full deduction under section 179D. Projects to replace interior lighting or heating, cooling, ventilation (HVAC) updates with high-efficiency fixtures and replacements are good candidates for immediate deductions.

4. Owners can evaluate tax returns going back 10 years. In the search for eligible properties, owners can review tax returns as far back as 2006 and receive deductions for qualified properties for the current year. The best part is an owner will not have to amend any prior tax returns in order to claim missed section 179D deductions. Instead a taxpayer may simply file a form 3115 to change their method of accounting and claim any prior year section 179D deductions on their next timely filed tax return.

5. Software and engineer must be approved. Companies or their vendors must use modeling software pre-approved by the Department of Energy when determining the energy savings. A certified engineer licensed to operate in the building's jurisdiction will also need to review the complete report before the deduction is taken on a tax return.

Given its history of multiple extensions, section 179D is expected to be extended beyond 2016 but this, of course, remains to be seen. Companies that have manufacturing facilities eligible for these deductions or credits will want to act now to take advantage of the opportunity for tax savings and increased cash flow. ■

Daniel Hurtado is a Senior Manager with RSM US LLP. RSM is a leading provider of audit, tax and consulting services focused on the middle market with more than 9,000 people in 86 offices nationwide. For more information, visit www.rsmus.com or, you may contact **Shane VanVeldhuizen** at 217-523-3355 or Shane.VanVeldhuizen@rsmus.com. RSM is an IMA member company.

mHUB is Chicago's first manufacturing innovation center — opening in January

Shop Technician Henry Africano tweaks a digital design before sending it to print on the dual extruder 3D printer, one of many in mHUB's rapid prototyping lab.

by Dan Naumovich

While Silicon Valley is the recognized home of innovation and ingenuity in software and digital technology, when it comes to manufacturing, the best and the brightest are producing the future right here in Illinois. The latest manifestation of this trend towards cutting edge leadership is the recent inception of mHUB, billed as "Chicago's first innovation center focused on physical product development and manufacturing." It is slated to open in January of 2017.

"We want IMA member companies to know, especially the small- and medium-sized manufacturers, the great opportunity that mHUB is going to offer them. They'll have a place they can go to get help in developing new products and processes. It gives them access to knowledge," said Jim Nelson, IMA Vice President of External Affairs and an mHUB board member.

So what exactly is mHUB?

Physically, mHUB is a 60,000 square foot facility with state-of-the-art equipment, labs and work spaces. Located at 965 West Chicago Avenue, it's a former prototyping lab for Motorola Mobility. Philosophically, mHUB is the collaborative brain power of hundreds of engineers, designers, business leaders and entrepreneurs who as a collective provide a formidable and affordable research and development resource for the manufacturing community.

Haven Allen is the Executive Director of mHUB. Allen has many years of experience in economic development and public policy focused on the manufacturing sector - including two-and-a-half years as a strategist at World Business Chicago, where mHUB was conceived — along with a background in technology and entrepreneurship. In describing the role that mHUB will play in the manufacturing community, he breaks it down into the three Ps: people, product and process.

"From a people aspect, we see this as a huge opportunity to attract and cultivate highly-skilled STEM talent in the Chicagoland area," Allen said. "Our goal is to give them the tools, resources, mentors and educators they need to thrive, and then make them accessible and a valuable resource to the manufacturing community."

This talent will come from a variety of backgrounds. There are engineers who crave the challenge of working on diverse projects. There are designers working at start-ups who will exchange their expertise for a manufacturer's product development capabilities. There are even grad students, eager to put their education to work on real-world applications while finishing their studies.

"One of things that we are constantly hearing is that small-to-medium-sized manufacturers are having difficulty attracting STEM talent," Allen said. "At the same time, some of them didn't necessarily need engineers full time, they just need them for very specific needs. So as this pool of talent is developed, it will become a R&D resource that manufacturers can leverage for design projects or to provide solutions to specific problems."

The second P in the formula is products. It's here where the manufacturers are the resource that will be tapped by the mHUB community.

"We have some brilliant engineers and entrepreneurs here, but they're not manufacturers," Allen said. "Some of these people are just here to innovate new products and they need assistance from manufacturers to help them think through the manufacturability and how to get their product to market. They may need assistance with how they design things, and they may also need advice on how to develop and maintain supply lines."

In such instances, a manufacturer may offer to produce a prototype or a small-batch run of a designer's product at-cost so the designer can evaluate and fine-tune that product before committing to full-scale production. In exchange for their services, the manufacturer can engage the community to help them develop new products or address inefficiencies in their operations.

Which brings us to process. One of the biggest challenges facing manufacturers is the inability to optimize operations due to limited, or non-existent, budgets for research and development. This is especially true for smaller manufacturers whose owners have to focus on operations, finances and human resources, with little to no time for innovation or optimization.

In the area of process improvements at mHUB, there will be opportunities for educational sessions and mentoring. If a manufacturer wants to benefit from the full brainpower of the innovation community, however, they can initiate a "make-a-thon" with mHUB. Common in app development, this method for problem solving and solution generation is making its way to the production of physical products.

"With the make-a-thons, a manufacturer can define a very specific problem that they have say, with their operations or within their product development. The entire community can then be engaged in a two- to five-day exercise concentrated exclusively on solving that problem," Allen said.

After the exercise is completed, the best solution will be selected and the winner will be awarded a cash prize that is determined by the manufacturer who initiated the make-a-thon. The intellectual property will be transferred to the manufacturer.

Allen said that initial expectations are to do around six-to-eight make-a-thons each year. A company can engage the entire community in their effort, or select certain people. Through the mHUB website (www.mhubchicago.com), members can search for other members and review their credentials, work experience, product experience, educational background, certifications and other qualifications.

It's not just the small- and medium-sized manufacturers who stand to benefit from mHUB and some of the major players in the industry have already signed up as partners, including GE Ventures, Marmon and UL, to name a few.

> One of the biggest challenges facing manufacturers is the inability to optimize operations due to limited, or non-existent, budgets for research and development.

"These larger organization also have some challenges in terms of innovation and there are things with which they could really use help from people outside their organization," said Steve Kase. "They've invested sponsorship fees to be able to come onto the campus and interface with the bright young people who are assembled here."

Kase is the founder of ASK Power, an Aurora-based company that specializes in the production of electrical connectors. ASK is also an mHUB corporate partner.

"I've been involved in workforce development activities for around seven years," Kase said. "I worked with World Business Chicago's Jobs Committee that was able to help add around 700 advanced manufacturing jobs. A lot of the same people involved in that effort are also involved in mHUB."

Among the organizations that have already signed on are Argonne National Laboratory, Illinois Institute of Technology, Northwestern University, GE Ventures and Catalyze Chicago, which will now operate under mHUB.

"We have a very robust partnership program, but we're always looking for more. What we're building here is a community place where any of these groups can operate from and have access to our extensive resources and equipment. They can also do mentoring, education and business development here," Allen said.

mHUB is being self-funded through various means including sponsorships and contributions. There are also 15 naming rights opportunities, four of which have been sold and three others with provisional agreements. Membership types range from simple shop access to larger multi-person offices with the goal of being reasonable to product manufacturers, while making the initiative self-sustaining.

"You can basically define your own involvement here," Allen said. "This is a resource for the entire industry. Our mission is to support, strengthen and connect manufacturers.


Outernet Founder Syed Karim and Rachel Feinberg, COO, review manufacturing specs for their receivers, which bring news, information and educational programs to people in developing nations.

Ready to get involved?

If you would like to start leveraging this valuable resource, go to www.mhubchicago.com and click on the "Get Involved" button in the upper right corner. Or you can contact Haven Allen at email Haven@mHUBChicago.com, or telephone 773-580-1485 for more information. ■

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NATURAL GAS

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collection of dates. Buy once on January 1st, buy once on February 1st and so on.

3. They both customize plans based on risk tolerance. When you started working, you likely had a 401K portfolio with a higher proportion of equity than securities or real estate. At the start of your career, you can take higher risks because you have time to build back up from any potential market dips. As you near retirement, you level out to a more conservative portfolio and take fewer risks. While this formulaic progression over time doesn't quite equate to how the natural gas market works, you do have the flexibility to control the level of market exposure you wish to assume.

Energy decision makers typically try to get the lowest price possible for their energy supply. However, through an investor's eye, that strategy is like buying for all of your retirement on one day. Stop shopping for a low price and, instead, build an investment strategy for your supply. You're not going to get the lowest price — you're going to get an average, more consistent price.

With this strategy, you think long-term and can gain more value. If you diversify for less than a year, it's possible you might gain some benefits of market lows. On the other end, with a three to five-year strategy, you have more time — or think "stocks" — to dollar-cost average. This can help you better achieve your desired results of steadier, more predictable natural gas costs as opposed to what you might be gambling to achieve by purchasing all on one day.

4. They both allow for "I'll do it myself" or "you do it for me" options. Most retirement investors jump for the "you do it for me" strategy. You may work with your employer or an external investment agent because you don't have the time or expertise to do it while maintaining a career, family life and other priorities. When do you have time to ask whether it's really the right time to be buying stocks? Instead, a diversified strategy allows for a smooth progression to invest over time without life's interruptions to achieve the retirement goal.

For many manufacturers, sourcing or facility managers are juggling much more than just energy supply. By letting your supplier help you manage your energy strategy, you can focus on other priorities and sourcing decisions.

That being said, in both investment and natural gas markets, there are some people that want to manage their strategy themselves. For that, there are tools and intel available to help you make more confident decisions.

So what does this mean for your business? The strategy you use for investments can also work for your natural gas supply strategy. As a manufacturer, not only do you rely on natural gas to power your facility, you also use it for mechanical processes and machinery, such as burning, cooling and refining. This can all add up to a large portion of your operational budget. What are you doing to minimize your risks? Do you know what your degree of risk tolerance is? Do you have the time to manage it yourself, or could you use the help of some experts?

However you might answer these questions, a strategic diversification plan can be built to meet these needs. To return to our comparison, despite age, career path or financial situation, thousands of people trust this same strategy — relying on a diversified retirement investment plan for the long-term. As an IMA member, you have access to a trusted, IMA-preferred energy supplier, Constellation, to develop this same strategy for your business.

Search for today's NYMEX and S&P 500 Index. Put them side-by-side and you'll see a jagged, unpredictable line for both — but if you look at your latest 401k investment report next to your natural gas contract, the methods your using to manage that jaggedness might not be so similar. Interested in finding out how an investment strategy might work for your natural gas supply? Contact Constellation about how we can help you develop an energy strategy. ■

TSCA REFORM

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provide an explanation of this decision (see further discussion below).

How to apply these new "unreasonable risk" criteria and select a specific risk reduction requirement are not explicitly defined in the statute and are different from the approach historically taken by EPA. As a result, EPA is likely to have the broader flexibility to impose more stringent risk reduction requirements more expeditiously. EPA staff have indicated that this new "unreasonable risk" and risk reduction determinations will be performed on a substance-by-substance and use-by-use basis, and the relevant analyses will include exposures throughout the lifecycle of the product. The Amendments also allow EPA to issue worker protection requirements if the Occupational Safety and Health Administration (OSHA) fails to issue a regulation or order to reduce the risk after being notified by EPA. OSHA already has informed EPA that TSCA provides EPA with a "means of eliminating or reducing the risks associated with these chemical uses in a more coordinated fashion across both consumer and occupational settings." With this provision and others that allow EPA to impose costs of testing priority chemicals on manufacturers, even if a substance is not subject to an outright ban, companies could be incurring additional costs throughout the life of the product.

Historically, EPA has been criticized for its slow pace under TSCA. With the new requirements, EPA will now move full speed ahead to regulate existing chemicals in products.

2. Substances that may be classified as "high-priority" (as early as this year)

EPA will continue to address identified risks from trichloroethylene (TCE), methylene chloride (MC) and N-methylpyrrolidone (NMP), chemicals for which EPA has already performed or begun a risk evaluation, with deadlines ranging from October to December 2017. The other initial "high-priority" substances must be selected before the end of this year. The most likely candidates, in the author's opinion, are:

- asbestos and asbestos-like fibers (which may be broadly defined

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INTERSECT IL

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Jeep Cherokee production will begin in 2017 and will affect other manufacturers.

"This investment will also have a multiplier effect on the regional economy, growing the manufacturing and auto supplier ecosystem in the Northern Stateline region," Illinois Department of Commerce Acting Director Sean McCarthy said.

The state will also be expanding pharmaceutical production. Intersect Illinois and the Illinois Department of Commerce and Economic Opportunity recently announced that German pharmaceutical serve provider Vetter will open a new production and distribution center in Des Plaines.

The $320 million facility, the first of its kind outside of Germany, will create at least 300 new jobs. The facility will expand the company's Chicagoland presence, where it already operates a U.S. production facility and sales office in Skokie.

"The collaboration between the State, the ILBEDC and our local partners was instrumental in attracting an investment of this scope and magnitude, which will reap economic benefits for Illinois for years to come," Rauner said.

Intersect Illinois President Andria Winters and I met with Vetter executives in April in Germany while representing the state at Hanover Messe, the world's largest industrial fair.

Our central location, with unparalleled access to North American markets, and our skilled workforce are major strengths to companies like Vetter. By working in partnership with the Illinois DCEO and local governments and marketing Illinois' assets in person to Vetter executives, we were able to drive a deal that's good for Illinois and good for Vetter.

McCarthy described the recruiting process as a "full court press." "Skokie Mayor George Van Dusen laid the groundwork through his relationship with Vetter, and support from local utilities companies, the city of Des Plaines and Cook County came together to create this success shared by the entire state," McCarthy said. "This was a team effort that epitomizes the model for economic development and what Illinois can achieve moving forward."

More recently, Intersect Illinois announced on Sept. 8 that the state is making a $26 million investment in a bioprocessing lab at the University of Illinois that could yield as many as 20,000 new jobs in central Illinois over the next decade. The Integrated Bioprocessing Research Lab (IBRL) will conduct biochemistry research and eventually develop bioprocessing/bio-green chemicals using corn and soybeans to convert petroleum chemicals into green chemicals.

> By reimagining the way Illinois looks at manufacturing, Intersect Illinois seeks to position the state at the forefront of 21st-Century manufacturing.

Additionally, Intersect Illinois along with DCEO has also been committed to expanding distribution centers. Amazon made several recent announcements about plans to build new fulfillment centers and expand others.

Two new centers will be in Edwardsville, where Amazon plans to hire at least 1,000 new workers.

"Illinois has been a great place to do business for Amazon and we look forward to adding two additional fulfillment centers and creating another 1,000 full-time jobs with benefits on day one in the state," said Akash Chauhan, Amazon's vice president of North American operations. "The elected officials throughout the city and state have been very supportive of Amazon and we thank them for helping make this possible. We're excited to soon call Edwardsville home and become an active member of this vibrant community."

Amazon will add a second center in Joliet, expand an existing center in Romeoville, and add a warehouse in Monee. Companies like Amazon need a strong transportation hub and logistics. Illinois provides both.

Though we are committed to growing and recruiting large manufacturers, we are also aware that small and mid-sized manufacturers are crucial to the state's continuing international export growth.

NAM's most recent statistics show that small businesses make up 90 percent of exporters in the state. In 2015, the state exported $58.26 billion in manufactured goods. That figure was a 25.9 percent increase from 2010.

Illinois is and will continue to lead the way in international growth. ■

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to include, talc, other fibers, and even mineral fragments),

- metals (such as arsenic, lead, hexavalent chromium, and cadmium),
- phthalates,
- bisphenol-A (BPA),
- tetrabromobisphenol A,
- flame retardants (chlorinated and brominated),
- 1-bromopropane,
- p-dichlorobenzene,
- perchloroethylene,
- bis(2-ethylhexyl) adipate,
- vinyl chloride,
- bromoform,
- styrene,
- ethylbenzene, and
- 1,4-dioxane.

These chemicals are widely used in a variety of manufacturing industries. Any company that uses these substances at any point in its process should actively monitor EPA's forthcoming high-priority substance lists (in December 2016 or subsequently) and become involved in EPA's follow-on actions.

3. Many critical issues remain unanswered

A number of critical issues were not explicitly resolved in the Amendments and, therefore, will be decided in EPA risk evaluation and other regulations or in guidance. While it is difficult to predict precisely what EPA will do, EPA is likely to default to its existing practices, unless the statute mandates a different course or parties convince EPA that another approach is more appropriate. At a minimum, EPA will have to grapple with the issues described below.

In the last few years, although the trend at EPA has been toward a more precautionary approach, EPA has been criticized for basing its toxicity determinations on limited and/or flawed data from worst-case studies rather than using the weight of the evidence from the best scientific studies. In comments to date, industry has advocated use of the best science, with weight of the evidence approaches. Not surprisingly, many in the environmental community have urged EPA to adopt more precautionary assumptions and policies to ease, simplify, and speed up the risk reduction process.

EPA staff has stated that determinations of the exposure levels that trigger the new "unreasonable risk" determination (i.e., the human health or environmental risk that is unreasonable at a corresponding exposure level) may focus the nature of the population subject to the exposure (e.g., perhaps setting "unreasonable risk" levels lower for susceptible subpopulations or even using risk management goals lower than the one-in-one million risk level). EPA's wide discretion has prompted concern in the regulated community about the lack of certainty in this process.

Importantly for manufacturers, EPA acknowledged that it often does not have data on uses and resulting exposures and lacks even generally accepted methods to measure many exposures; a clear warning flag for products subject to regulation. EPA is explicitly seeking input on how to gather use-specific exposure information, and how to define and apply concepts such as "sentinel exposure," (i.e., when to limit the risk evaluation to a plausible upper-bound exposure), "aggregate exposure," from all sources, and "potential exposure." Some claim that EPA should obtain data on exposures, vulnerable populations, and other critical risk evaluation information primarily from public outreach. Industry and environmental groups appear to be at loggerheads over, among other things, when and how to consider aggregate exposure from all uses and pathways, as well as sentinel exposures. Because of the absence of common meanings for many of these terms, many public comments are likely and EPA must establish new policies consistent with the Amendments.

Once EPA determines that an "unreasonable risk" exists, the Agency has broad discretion to determine the type of risk reduction action that should be taken. Recent EPA TSCA chemical risk assessments have proposed risk reduction requirements more frequently, and EPA has adopted more stringent requirements.

Given the significant business risks and uncertainties associated with these new requirements, early engagement is warranted to permit the development and submission of actual data for the risk evaluation as a better basis for evaluation than the default option of worst-case assumptions. Such information also must be in the record in case litigation becomes the only viable option.

4. Action items for manufacturers

First, evaluate and monitor your business risks. Increasingly, environmental groups, the media, regulators, and the plaintiffs' bar allege that the mere presence of substances in products may cause personal injury (although most risk evaluations are based on exposure of test animals to high concentrations), and, therefore, should be removed from products. At a minimum, companies should confirm the inventory of chemicals used in their processes, identify the chemicals that EPA (or states in a few instances) is likely to regulate, and track EPA's implementation of the TSCA Amendments. Based upon that assessment, a determination can be made on whether, and to what degree, to get involved in the EPA implementation process.

Second, do not assume you can rely on chemical manufacturers. The interests of the chemical manufacturers and product manufacturers may be different. A product manufacturer that has cost-effective substitutes for high-priority substances in its products may prefer to avoid the considerable transaction costs of trying to convince EPA not to ban or restrict the use of a substance.

Also, many industry stakeholders argue correctly that if a risk evaluation is performed using hypothetical (i.e., unrealistic) high end exposure and other assumptions, and this so called screening risk evaluation does not find an "unreasonable risk," then more detailed evaluations using lower (albeit more representative exposures) are not necessary. While this kind of approach saves cost and should accelerate the risk evaluation process, it may have potential downsides. For example, some uses of "high-priority" substances in certain products may present a low-priority or de minimis risk. However, the federal preemption of duplicative state or local laws in the TSCA Amendments apply "only to...the hazards, exposures, risks, and uses or conditions of use of such chemical substances included in the scope of the risk evaluation." The use of such a screening risk evaluation is unlikely to include the hazards, exposures, risks, and uses or conditions of use for these low risk uses. As a result, a product manufacturer may not be able to avail itself of the preemption protection intended by the TSCA Amendments.

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USS Illinois commissioned in New London, Connecticut

IMA Chairman William Hickey, his wife Leslie Hickey and Jay Tuthill, Chairman of IMA member company Tuthill Corporation, were honored to attend the commissioning of the USS ILLINOIS (SSN-786) on October 29, 2016.

The U.S. Navy with assistance from the First Lady Michelle Obama commissioned and brought to life the newest Virginia class submarine, USS Illinois (SSN 786), during a ceremony attended by more than 2,500 at Naval Submarine Base, New London on October 29, 2016. Illinois is the 13th Virginia-class, fast-attack submarine to join the Navy's operational fleet.

Illinois is the third of eight Block III Virginia-class submarines to be built. USS Illinois Commanding Officer, Cmdr. Jessie Porter, highlighted the Illinois' capability to dominate the undersea domain and enable military success in any engagement.

"The Illinois has joined the fleet," said Porter. "The crew of Illinois has assumed our watch — a watch that will continue for the next 30 years — always waiting for the call, always ready."

The submarine is 377 feet long, has a 34-foot beam, and will be able to dive to depths greater than 800 feet and operate at speeds in excess of 25 knots submerged. It will operate for over 30 years without ever refueling.

Construction on Illinois began March 2011; the submarine's keel was authenticated during a ceremony on June 2, 2014; and the submarine was christened during a ceremony October 10, 2015.

Source: U.S. Naval Submarine Forces Atlantic.

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The Carroll-Keller Group, Ltd., is committed to helping organizations nationally and internationally translate business strategies into results by developing the skills and performance of their people. Clients achieve significant, measurable and sustained improvements by changing strategies, processes and competencies to ensure increased competitiveness in today's rapidly changing global economy. They are a total training resource for aligning employee performance with organizational strategy in critical areas:

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To register for your complimentary seats, or for more information, contact Ken Keller, 630-495-0505 or kkeller@c-kg.com.

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ConAgra Foods acquires Frontera, Red Fork and Salpica Brands

ConAgra Foods, Inc., recently announced that it has acquired the packaged foods businesses of Frontera Foods, Inc. and Red Fork LLC, including the Frontera, Red Fork and Salpica brands. These businesses make authentic, gourmet Mexican food and contemporary American cooking sauces.

"We are excited to add the Frontera, Red Fork and Salpica brands to our portfolio. In particular, the Frontera brand is a preeminent gourmet Mexican food brand in North America. We believe it provides a tremendous platform off which we can build," said Sean Connolly, president and chief executive officer of ConAgra Foods.

Founding Chef Rick Bayless says, "In ConAgra, we've found people who respect our integrity and uncompromising standards. We will continue to make high-quality food with the same standards of excellence and operate with the same values and fresh ingredients that have helped the business to become the premium brands they are today. This is the start of a new era for Frontera, Salpica and Red Fork, and we are thrilled."

Frontera Foods CEO Manny Valdes says, "Frontera has grown through a passion for innovation and hard work. We have made a difference in the American grocery store and the American home. We believe ConAgra is a fantastic partner to help us deliver the same level of authentic, gourmet food products to even more homes across the country."

Chef Rick Bayless, owner of the highly-acclaimed Frontera Grill, Topolobampo and Xoco restaurants in Chicago, established Frontera Foods in 1996 with partner and CEO Manny Valdes. Today, the company makes more than 50 regional Mexican food products using premium ingredients and time-honored cooking methods.

IMA member ConAgra Foods, Inc., is one of North America's leading packaged food companies with recognized brands found in grocery, convenience, mass merchandise and club stores. For more information, visit www.conagrafoods.com.

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Advertiser Index

CITGO celebrates 90th Anniversary of Lemont Refinery

On September 1, 2016, CITGO Petroleum Corporation capped off celebrations of the CITGO Lemont Refinery's 90th anniversary by welcoming community leaders, nonprofit partners, employees and retirees to the refinery for a commemorative ceremony.

Located 35 miles southwest of Chicago, the CITGO Lemont Refinery has grown to be a valuable part of the CITGO network and the Lemont community, contributing more than $300 million every year to the area's economy and thousands of volunteer hours supporting local organizations.

"The CITGO Lemont Refinery employs more than 550 full-time employees and 500 additional contractors, representing about 85 local communities," said CITGO President and CEO Nelson Martinez. "Our connection to the Lemont area is deep and long-lasting, and we will continue to strive to be a good neighbor throughout our next 90 years."

"Through our TeamCITGO volunteer program, CITGO Lemont employees have taken personal time to give back to their communities on nearly 300 occasions," said Jim Cristman, vice president and general manager of the CITGO Lemont Refinery. "By cleaning up the environment, making donations to food and supply drives and participating in other efforts supporting the community, we are saying thank you for nine great decades in Lemont."

Operations at the Lemont Refinery began in 1925 with a major expansion, doubling the facility, in 1933. Over the years, new units were added to meet the demand for a better quality of gas for automobiles, aviation fuel for WWII, and the production of asphalt. Petróleos de Venezuela, PDVSA, acquired 100 percent ownership of the refinery in 1997 and began operations as CITGO Lemont Refinery.

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Linda Boasmond, Cedar Concepts, honored as "Hometown Hero" by YWCA Metropolitan Chicago

YWCA Metropolitan Chicago will host its 44th Annual Leader Luncheon on November 17 at the Hyatt Regency Chicago. This year's event will celebrate the organization's 140th anniversary as well as honor the accomplishments of five "Hometown Heroes" who are examples of Chicago-bred leaders who through innovation, compassion and courage have significantly contributed to the greater good, particularly for women and girls.

Honoree Linda Boasmond, Founder and President, Cedar Concepts Corporation, is the first and only African-American woman in the U.S. to own a chemical manufacturing plant. Boasmond serves on multiple boards including the Illinois Manufacturers' Association and is board chair of Girls 4 Science, Chicago's only all-girls science initiative.

Other 2016 honorees include Cynthia Rowley, Fashion Designer & Entrepreneur; Jessica Malkin, CEO, Chicago Ideas & Co-Director, Bluhm/Helfand Social Innovation Fellowship; Valerie Jarrett, Senior Advisor to President Barack Obama, Office of Public Engagement and Intergovernmental Affairs, Chair of the White House Council on Women and Girls; and COL (IL) Jennifer N. Pritzker, IL ARNG, Retired, President & CEO, TAWANI Enterprises, Inc.

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Blue Cross Blue Shield of Illinois' Chicago office was illuminated again this year in honor of Manufacturing Day, October 2, 2016.

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On the other hand, if a screening risk evaluation exceeds the "unreasonable risk" exposure level, consumers, juries and even judges in litigation may misinterpret the meaning of the screening level and assume that EPA's regulatory designation as a "high-priority" substance means that the substance causes actual harm (in layman's terms) in any product. Either of these eventualities may adversely affect manufacturers that use even de minimis levels of these substances in their products.

Third, consider providing input on exposure issues. EPA's TSCA decisions will largely be a function of the worker, consumer, and postconsumer exposures related to the substances used in products. Generally, neither EPA, the chemical manufacturers, nor the public possess the quantum of exposure information necessary for a detailed risk evaluation of whether an "unreasonable risk" exists. Measurement protocols may not exist or existing methods may be inappropriate for the product-specific risk assessment. It takes time and resources to develop the data necessary to enable EPA to calculate the regulatory risks. Given these difficulties, much of the critical exposure information may be more cost-effectively gathered voluntarily by manufacturers that use these substances in their products (as opposed to EPA). Similarly, situated manufacturers also might consider sharing the costs of information gathering.

5. Conclusion

The TSCA Amendments enacted earlier this year have brought about significant changes, which may come as a surprise to manufacturers that were not involved in the legislative debates that took place over the course of several years. All manufacturers should examine the new requirements closely for business risks and prudent manufacturers also will seek potential new business opportunities. ■

New IMA members

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ALL-RITE SPRING COMPANY
Spring Grove, IL

AMTEC PRECISION PRODUCTS, INC.
Elgin, IL

CLARK HILL PLC
Chicago, IL

DHALIWAL LABORATORIES
Bedford Park, IL

DIXON AUTOMATIC TOOL, INC.
Rockford, IL

GENERAL DYNAMICS/ORDNANCE TACTICAL SYSTEMS DIVISION
Marion, IL

GERDAU AMERISTEEL US, INC.
Belvidere, IL

M.C. PRODUCTS, INC.
Rockford, IL

MATTOON PRECISION MANUFACTURING COMPANY
Mattoon, IL

MB STEEL COMPANY, INC.
Madison, IL

MINUTEMAN INTERNATIONAL, INC.
Pingree Grove, IL

PAUTSCH SPOGNARDI & BAIOCCHI LEGAL GROUP, LLP
Chicago, IL

RICHARDSON MANUFACTURING COMPANY
Springfield, IL

SMITH AND RICHARDSON, INC.
Geneva, IL

SONOCO
Batavia, IL

SONOCO ALLOYD
Dekalb, IL

TENNECO AUTOMOTIVE
Lake Forest, IL

WELDING MATERIAL SALES, INC.
Geneva, IL

2016-2017 Calendar of events

November 14-18, 2016
Certified Energy Manager Training from Ameren Illinois
8:00 am-5:00 pm at OSF Healthcare, 3300 Willow Knolls Drive, Peoria — Cost: $1,900 — $1,795 UNTIL SEPTEMBER 14TH. For more information, contact Angela Holloway at 309-677-6116 or aholloway2@ameren.com

November 14-20, 2016
National Apprenticeship Week

Friday, December 2, 2016
IMA's Annual Luncheon
JW Marriot, Chicago — 9:00 am–2:00 pm
Keynote Speaker: Dennis Muilenburg, President & CEO of The Boeing Company

Thursday, January 19, 2017
IMA Breakfast Briefing:
Conflict Management & Mediation
Ditka's Restaurant, Oakbook Terrace — 8:00-10:30am

Carroll-Keller Group Public Workshops . . .
(held at DePaul University, O'Hare Campus, Chicago, from 9:00 am–4:30 pm)
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December 8, 2016
Effective Business Writing Skills

December 15, 2016
MS Excel: Formulas and Functions

January 17, 2017
Effective Presentation Skills

Carroll-Keller Group Public Workshops . . .
(held at DePaul University, O'Hare Campus, Chicago, from 9:00 am–4:30 pm)
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January 24, 2017
Project Management Skills for Non-Project Managers
MS Excel: Database Analysis & Pivot Tables Made East

January 30, 2017
Essential Leadership Skills for Front Line Managers & Supervisors

February 7, 2017
Influencing Without Authority: Achieving Results Regardless of Your Positional Power

Visit ima-net.org/calendar for information, pricing, registration, etc., related to all events.
For more information on IMA events, contact Kimberly McNamara at kmcnamara@ima-net.org, 800-875-4462, ext. 9371


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