

Supply chain and inflation issues affecting cities and utilities

by Steve Downer

From construction of pickleball courts to electric distribution system improvements, inflation and supply chain issues are affecting city and municipal utility budgets and operations.

Lead time for delivery of an item is “the first question we ask,” said Blue Earth Light & Water General Manager Tim Stoner. Even routine maintenance items may be difficult to procure. One utility reported a shortage of bolts.

Grand Rapids Public Utilities Commission (GRPUC) plans to rebuild the electric distribution system in a recently-acquired area have been clouded due to the uncertain availability of materials. Lead times and availability changed in September,

said Jeremy Goodell, GRPUC electric department manager.

GRPUC purchased cable in June. Expected delivery was in September or early October. Now the vendor is saying to expect delivery in early November. Some of the transformers he ordered in April arrived in October; some are expected in December. Prices increased in the meantime—a \$27,000 quote went to \$33,000.

If you cancel and re-do a transformer order, lead time can be 56 weeks.

With the lead time to acquire new transformers lengthening, Goodell inquired about obtaining rebuilt items. Not surprisingly, lead times for rebuilt items are also lengthening.

T & R Electric Supply Co.,

Inc., of Colman, South Dakota is a long-time MMUA associate member and annual sponsor. T&R specializes in rewinding and reconditioning power and distribution transformers and typically ships 16 to 20 truckloads per week. The company proudly maintains the largest transformer inventory in the nation.

Kelly McMahon of T&R said it is no rumor that some manufacturers of new transformers aren't taking orders until next year, with lead times of more than year.

That results in challenging times for rebuilders as well, he said, with lead times for a single-phase transformer lengthening to up to 32 weeks.

Maintaining a workforce is

the main issue for T&R.

Colman is located 30 miles north of Sioux Falls. Job opportunities in the area are plentiful. Amazon is building a Sioux Falls fulfillment center, hiring 1,000 people and offering attractive pay for work-from-home customer service people, with a significant signing bonus. That makes keeping good employees in Colman difficult.

South Dakota isn't the only area with intense competition for workers.

Howard Industries, of Laurel, Miss., is a full line supplier of transformers and related items. Laurel is also home to the nation's third largest poultry producer—Sanderson Farms.

Supply Chain: see back page

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Power players

Johnson, growing group of women, climbing the rungs of public power

by Steve Downer

Women have always been important to the success of municipal utilities in Minnesota. While early contributions were usually reserved for the business office, women have taken on increasingly influential roles in recent years.

Women play prominent political roles, and often serve as top-echelon city staff. It is no surprise now when a woman is hired to serve as a utility manager. MMUA has its first female president: Jenny Palmer of Excelsior; and its female CEO in Karleen Kos.

Wendy Meyer, former Mountain Lake city administrator, was the first woman to serve as

president of a municipal power agency, when she served as Central Minnesota Power Agency Services (CMPAS) president from 2014 – 2016.

It didn't take long for another woman to follow the trail that Meyer blazed: Crystal Johnson, Granite Falls city manager, in January took over the reins as CMPAS president.

Perhaps a mark of progress, Johnson hadn't considered herself any sort of trail blazer when she was elected president of the CMPAS board. She was only doing her job.

When Johnson came to Granite Falls, she quickly saw how owning the electric utility strengthened the city. With the



Crystal Johnson at her work space in Granite Falls city hall.

wholesale power arrangement crucial to the local utility's success, Johnson dove into work with the city's wholesale

supplier.

Tim Stoner, general manager of Blue Earth Light & Water, served as CMPAS president for

four years, after Meyer and prior to Johnson. That time coincided with

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Grid operators call for policymaking cooperation on technical issues

The best energy policies can easily flounder, say electric grid coordinators, without close coordination on planning, cost allocation and siting issues.

So warned the Eastern Interconnection Planning Collaborative (EIPC), a coalition of 19 major U.S.-based bulk power grid coordinators who serve throughout approximately two-thirds of the United States and Canada. The group in October released a white paper on “challenges and recommendations that local, state and federal policymakers should con-

sider when making decisions or taking actions that affect the transmission grid in light of a significant increase in the development of renewable generation.”

The EIPC paper focuses on lessons learned and studies of future electric systems with a high penetration of renewables. Expressing a critical need to better inform policymaking with technical expertise, the EIPC recommended that policymakers considering energy-related goals invite system planners and operators to

provide input as to planning and operational challenges, costs and trade-offs.

The energy transition is well underway, noted the paper, and the electric industry has already learned many lessons. As the electric generation fleet transitions, it is a challenge to maintain electrical reliability, efficiency and affordability.

The EIPC recommends that any policy initiative clearly provides regulators, the industry and other stakeholders the opportunity to monitor and correct course in a timely fashion

if it is leading to unnecessarily higher costs, limited choice for customers or negative reliability impacts.

More Transmission Needed

Because the electricity market must maintain a perfect balance of supply and demand at all times, legacy synchronous generators and strong transmission networks were built to transmit power to load centers. Renewable resources are located to make the best

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Johnson Avenue dedicated Oct. 8 at MMUA Training Center in Marshall

Steve Johnson Avenue was dedicated Friday, Oct. 8 at the MMUA Training Center in Marshall. Those gathered for the ceremony included staff from the City of Marshall, Marshall Municipal Utilities (MMU) and MMUA.

The day was extra special—it was also Johnson's last on the job for MMU, as he stepped into retirement.

"Thank you for making my last day at MMU a very special one," Johnson said. "The street sign was a very great surprise and I appreciate the recognition."

Johnson, Marshall Municipal

Utilities electric operations manager, was instrumental in the creation and ongoing success of the facility.

He came up with the idea of building a Training Center adjacent to the City of Marshall's MERIT Center project. He promised that if MMUA would build a Training Center in Marshall, it would have his and MMU's full support. And that has proven to be the case.

The City, at Johnson's urging, offered MMUA a favorable land rental agreement. MMUA purchased the 18-acre campus from the City of



Steve Johnson of Marshall Municipal Utilities (right) held a street sign in his honor. Among those joining Marshall at the dedication ceremony were MMUA Director of Training and Safety Mike Willetts and MMUA CEO Karleen Kos.

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Marshall on March 4, 2020. MMUA also received monetary donations from both our Regular and Associate mem-

bers, as well as other companies and private individuals who provided both money and in-kind donations of equipment and qualified skilled labor. Johnson always touted the benefits, from a member's perspective, that such a Training Center could offer.

When construction began, Johnson was MMUA's eyes and ears on the ground. Without his presence on-site and his tireless attention to the project, it would not have progressed as smoothly as it did.

At every step, Johnson was involved, and offered his services as an instructor or Ro-

deo judge when needed.

From the very beginning, MMU and Steve Johnson have supported every training session at the Training Center; providing equipment, trucks, instructors and anything else MMUA needed.

While Johnson thanked MMUA for all it does for utilities across Minnesota, MMUA thanked Johnson for his involvement with the MMUA Training Center, his unwavering commitment to the Training Center vision and to the on-going success of the facility.



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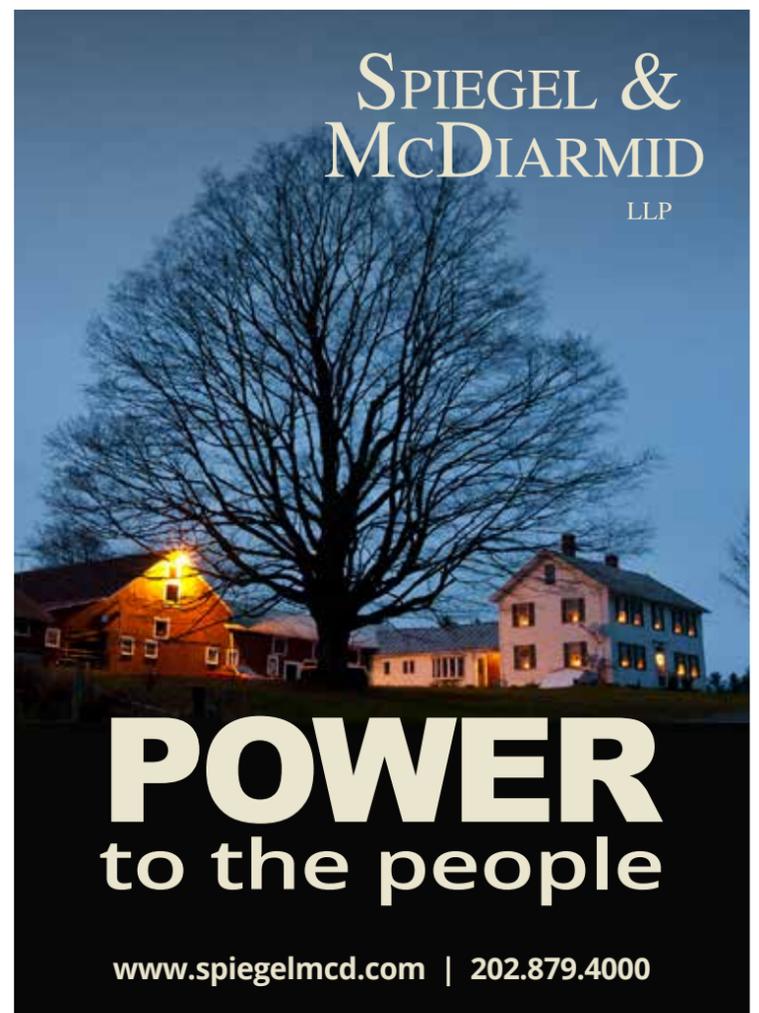
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Upcoming survey of members will help us check our assumptions

“Your assumptions are your windows on the world. Scrub them off every once in a while, or the light won’t come in.”

Isaac Asimov

It has been a delightful first few weeks at MMUA. I am enjoying getting to meet many of our members and stakeholders, some of whom have visited the office and some I’ve met on travels throughout the state. Each conversation has been full of welcoming ideas. There are a lot of people I yet hope to meet, and it will take time to reach everyone. Having only begun the process, I already know this: MMUA members appreciate their association and have a lot of thoughts about how it can be even better.

Meanwhile, back at MMUA headquarters, we have a terrific staff. Many of them have been around the organization for more than a decade. They

know the municipal utilities industry well, and they have a wealth of information about things that have been tried—or avoided—over the years. We also have some newcomers on the team. These fresh-eyed professionals bring ideas about how to improve things for our members. They base their input on the conversations they’ve had with the people they see in the municipalities they serve, and they don’t have any preconceived notions to keep them from seeing possibilities.

So, with all these good ideas floating around, what shall we do?

Well, nothing.

Not yet anyway.

Before we spend time and resources bringing in anything new, getting rid of anything old, or otherwise changing the value MMUA brings to members and stakeholders, we are going to take

the time to check our assumptions. What seems like a good idea to people with a particular viewpoint may not be as strong when tested more broadly. The beliefs that underlie a certain idea may not be supported by data. We aim to get that data, and to give everyone a chance to be heard.

The week of Nov. 15 MMUA will be launching a stakeholder survey. It will be focused, forward-looking, and take between 10 and 15 minutes of your time. We will be asking about things you are currently experiencing, things you expect to change over the next few years, needs that are currently unmet, and concerns that keep you up at night.

Watch for an email notification with a link to the survey around Nov. 15. You will also be able to access it via MMUA’s LinkedIn page,

From My Desk to Yours

Karleen Kos
MMUA CEO



and from the MMUA website. Please fill it out—because if you don’t, we will probably remind you about it. A lot. Your ideas really matter, and we want to hear them. So don’t hold back.

Once the results are in, you may wonder what we plan to do with the information. First, we’ll use it to “scrub our assumptions,” as Isaac Asimov suggested. We’ll be transparent about that, and we’ll tell you what we learned in future editions of *The Resource*. Next, the Board and staff will use the information to cheer the things MMUA is getting right, to guide MMUA’s strategic planning for the future,

and to adjust our sails where needed.

Make no mistake: this is not all about thinking and planning. The point of the survey is action. Taking the time to listen to you, both through face-to-face conversations and through tools like this survey, is essential so that we get it right. The goal is for MMUA to evolve with your changing needs in these changing times: that’s the point of anything we do going forward.

So please: take the time to help us clean the windows of our assumptions. We appreciate your help in letting the sun shine in.

Otter Tail makes good on \$29,000 billing error

The Minnesota Public Utilities Commission Oct. 7 granted Otter Tail Power a variance from the state’s utility billing rule. While the rule only applies to state-regulated utilities, it may be of interest to municipal utilities.

The billing error started when an incorrect meter multiplier was set up in the company’s Customer Information System (CIS) at the time of the meter installation in September 2011. The error was found in May 2020 by the Meter Department after the service representative re-energized the meter after seasonal closing.

The customer, billed the Small General Service (less than 20 kilowatt) Rate, was billed with a kilowatt-hour (kWh) multiplier of 40 rather than 20.

In March 2021, Otter Tail contacted the Minnesota Public Utilities Commission’s Consumer Affairs Office and the Minnesota Department of Commerce to inform them of the situation. (Any municipal utility discovering a similar situation should consult with its local governing board.)

To fully correct the inadvertent overcharges, Otter Tail requested a variance from the Billing Errors Rule three-year limitation on refunds and a one-time modification to Otter Tail’s Billing Adjustments tariff. The total amount overbilled, including interest, was \$28,850.50.

Otter Tail calculated and

provided the refund amounts in accordance with Minn. Rules 7820.3800 and calcu-

lated interest consistent with Minn. Stat. § 325E.02(b).

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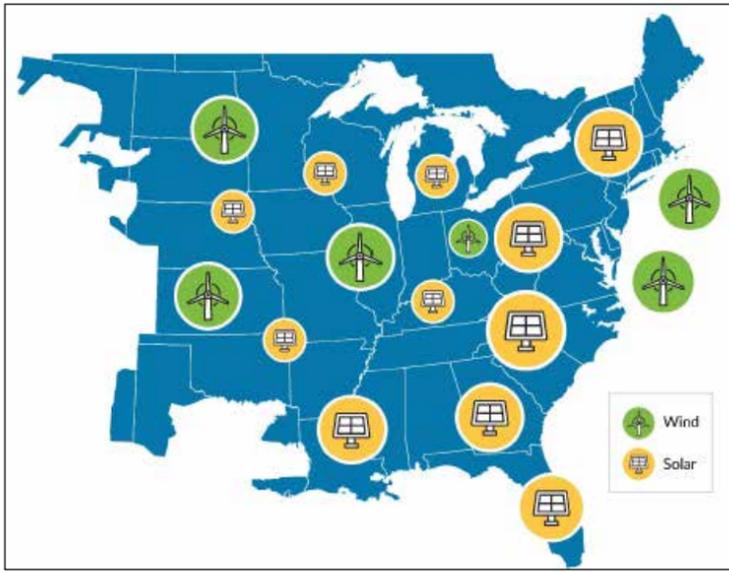
use of wind or solar availability, noted the paper, but are not necessarily located near existing transmission infrastructure. These resources often interconnect at the extremities of today's grid. Integrating these resources onto the transmission grid may require transmission upgrades and/or non-traditional assessments.

When digital, inverter-based renewable resources displace mechanical, synchronous machines, studies indicate a decline in grid performance.

Inverter-based solar and wind resources will need to be able to support system voltage and assist with primary frequency response due to system events (faults, generation trips). Regulatory support is needed to ensure appropriate control systems for such renewable resources.

The industry is also seeing changes in load composition due to the installation of home backup generators, home chargers for electric vehicles, conversion of gas and oil heating to ground-/air-source heat pumps, increased penetration of rooftop solar arrays, and whole-building battery backups. Some distributed energy resources trip offline before transmission-level resources, which can exacerbate outages or other grid disturbances.

The lack of standardized performance requirements for renewable resources with inverter-based control systems, said the paper, has been the cause of significant delays in the interconnection study queues.



The EIPC footprint covers two-thirds of the continental U.S. Each of its areas is enhancing use of renewable generation, as shown in this graphic provided by EIPC. EIPC members include the Midcontinent Independent System Operator and Southwest Power Pool.

Operating the power system is becoming more challenging due to: limited availability of transmission; the need for system operators to maintain the proper mix of generation resources to accommodate variable renewable resources; and load and resource uncertainty based on weather conditions.

System operators must carefully manage the impacts of renewable resources ramping up and down due to wind or solar variability, with a limited amount of dispatchable (likely fossil-fueled) generation resources quickly available to follow fluctuations and maintain system reliability. Monitoring and correcting for grid stability requires real-time assessments that are becoming more complex with the need—in real time—to study many more contingencies to determine adequate reserve requirements.

The energy markets face

future challenges in determining how to most effectively provide ancillary reliability services such as generator ramping, voltage support, reactive power, frequency response and system inertia. These ancillary services have been supplied by legacy synchronous resources either at no cost or through regulated rates. The reliable and efficient delivery of electricity requires those ancillary services.

Additionally, falling marginal energy prices due to the increase in renewable resources has already put pressure on existing resources that rely on energy or capacity revenues to remain operational.

Capacity of and energy produced by renewable resources varies a great deal. This makes it difficult to align the availability of renewable resources to when they are needed. In addition, flexibility (dispatchability) of all resource types will be necessary to ensure reliable integration of increasing levels of renewables and continued reliability. Pairing storage devices with new wind and solar resources can increase their effectiveness and add value to the reliability and efficiency of the bulk system, but these hybrid resources will require additional technological development to ensure that their capacity value is properly recognized.

Policy coordination vital

The EIPC believes that when policymakers craft timelines, goals and deadlines, it is essential to consider and balance the need to ensure that the power grid can remain reliable.

Policymakers must recognize the need for additional transmission to ensure that new generation can deliver electricity to customers. Who pays for the new transmission? Cost allocation requires

close coordination between federal authorities—which regulate wholesale transmission rates—and state (or local) authorities, which regulate retail rates.

Transmission development can take more than a decade.

Challenges in siting new transmission include issues of property rights, land use, and environmental and social justice. Siting issues have often foiled otherwise beneficial projects. Siting is primarily within the authority of states and, in some cases, local authorities, except on federal and tribal lands.

The EIPC encourages policymakers to engage with planners to harmonize policy discussions with the physics of the grid, to ensure the reliability of the power system and meet public policy objectives. Resulting decisions should create a system that is always reliable, efficient and meets customer needs.

Editor's note: A link to the complete EIPC report can be found on the MMUA website. Click and see the Breaking News item on our homepage.

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NISC's Dosch joins Cooperative Hall of Fame

Former National Information Solutions Cooperative (NISC) President and CEO Vern Dosch was inducted into the Cooperative Hall of Fame during a ceremony Oct. 7 in Washington, D.C.

NISC is a leading provider of software solutions to utility and broadband companies.

Under Dosch's leadership from 2002-2020, NISC's membership grew from 392 to more than 850; the employee

count grew from 400 to approximately 1,400; investment in research and development grew from \$1 million to more than \$50 million; and his stewardship delivered record annual margins.

Throughout his career and to this day, Dosch has been active in local and national efforts designed to advance the co-op business model and leadership excellence.

NISC President and CEO Dan Wilbanks said Dosch established a culture of servant leadership, was a person of very high integrity, trustworthy and enjoyable to work with.

The annual Cooperative Hall of Fame is a fundraiser hosted by the Cooperative Development Foundation (CDF), a non-profit affiliate of the National Cooperative Business Association. Through its fundraising, CDF is able to provide recovery grants to cooperatives impacted by disaster, scholarships to train local cooperative leaders, and funding for research and education to advance the understanding of cooperatives.



NextEra Energy Marketing is a wholesale power supplier responsible for the electricity and fuel management for all of NextEra Energy Resources' generation fleet, which includes the largest renewable energy portfolio in North America.

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Associated Member News

MMUA has three new Associate Members:

Southwest Minnesota Broadband Services is a municipally-owned fiber optic telecommunications company serving residential and business subscribers throughout its multiple member cities in southwest Minnesota.

The company is headquartered at 110 S. Hwy. 86, Lakefield, MN 56150. Mailing Address is PO Box 1006, Lakefield, MN 56150-1006. Phone is 507.662.7000 or toll free at 877.655.7627. Main contact is Travis Thies, general manager.

Learn more at www.mysmbs.com

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The company mailing address is PO Box 23118, Victoria, BC Canada V8V 4Z8. Phone is 250.940.4436 or toll free: 844.349.2837.

Main contact is Emily Mathison, sales and marketing manager.

Learn more at www.waterworth.net

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Jeff Hurd, P.E., General Manager / Hopkinsville Electric System & EnergyNet

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MMUA welcomes Gunderson, Helling and Ulmen; Lenz earns accreditation

MMUA has three new Safety Team members: Brad Gunderson, Jeff Ulmen and Paul Helling.

Gunderson is a familiar face to members in southeast Minnesota, as he worked under contract for a few months before being hired full-time.

Gunderson is a journeyman lineman and worked for Rochester Public Utilities (RPU) from 1994 until December 2020. He started with RPU as an apprentice. He achieved journeyman status in 1998 and by 2012 was a Lead Lineworker for two- or four-person crews. He also gained significant management experience before joining MMUA.

Gunderson worked briefly for Peoples Cooperative Power Association in 1993 before joining RPU. He graduated from the Lineworker program at Dakota County Technical College in Rosemount.

He is no stranger to MMUA, as a graduate of the Firstline Supervision program and Job Training and Safety Committee member. Along with serving as apprenticeship coordinator and mentor at RPU, he graduated from its Vision Companies Leadership Journey.

Jeff Ulmen of Madelia is joining MMUA as a regional safety coordinator. Ulmen certainly knows municipal utilities, as he is a member of the Madelia Municipal Light & Power Commission.

He most recently was employed as a safety consultant with the Minnesota Telecom Alliance (MTA), where he worked for more than seven years. He provided loss control services to 56 telecommunications carriers and conducted safety and education training for more than 1,400 employees. Ulmen also developed safety policies and practices, consulted and assisted management, conducted safety audits and incident investigations.

Ulmen was safety manager for the Minnesota National Guard from 1998 until 2011. He was responsible for a wide range of issues including Minnesota and federal OSHA requirements, driver's safety training and administration of the Army's Substance Abuse Program testing.

For 10 years prior to joining the National Guard, Ulmen was a United States Air Force security services supervisor. He evaluated security operations and provided technical advice to commanders.



Brad Gunderson

Paul Helling joins MMUA as a Generation Coordinator/Job Training and Safety Instructor.

He was most recently power plant foreman/journeyman lineman for Madelia Light & Power, where he started in 2005. Helling started as a groundsman/power plant operator and worked both in the plant and with the line crew. He is familiar with various municipal power plants and worked in a contract situation with three municipal utilities for the past three years. In that role he provided maintenance, training and repairs.

Helling worked for 13 years in the auto parts business before joining the utilities.

He earned his journeyman lineworker certificate working through the MMUA/



Paul Helling

Northwest Lineman College program. He holds a Class B commercial driver's license and a Special Engineer Boiler License. He has other certifications and has studied business, marketing and civil engineering.

While a number of MMUA regional safety coordinators have held a variety of certifications over the years—including the coveted certified safety professional status—

Anthony Lenz is our first Certified Utility Safety Profes-



Jeff Ulmen

sional (CUSP). Lenz joined MMUA in 2019 after working as a journeyman lineworker for the St. James municipal utility.

The Certified Utility Safety Professional certification program is the only program that offers safety credentials to utilities, related contractors and communication providers.

The credential is accredited by the International Society for Performance Improvement (ISPI).

CUSPs are required to recertify every two years by demonstrating continuing professional development. There are currently over 1,200 active CUSP credential holders.

Congratulations Anthony!



Lenz



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Cody Raveling (facing camera) was the lead instructor at the Cross Training School, held at the MMUA Training Center in Marshall. The School received high marks from participants.



Classroom work occupied part of the Cross Training School agenda.

Cross Training, Tree Trimming workshops meet different needs in different settings

MMUA held two training events in October: the Cross Training School Oct. 12-14 at the MMUA Training Center in Marshall and the Tree Trimming Workshop Oct. 20-21 at Brainerd Public Utilities.

Cross Training

The goal of our Cross Training School is to create a competent ground person able to recognize tools, equipment and hazards to help keep the lineworker safe and efficient. Cross Training provides fundamental "basic training" for utility personnel. Participants increased their knowledge of lineworker tools and equipment, broadened their understanding of electricity and its hazards, and gained confidence in their ability to assist in various situations.

Cody Raveling, MMUA Training Center Coordinator/Job Training and Safety instructor, combined safety and best practices into the hands-on-training.

The school received high marks from its 13 participants.

Tree Trimming

Twenty-one participants joined the Tree Trimming Workshop, where they gained

knowledge of a vital aspect of electric reliability. In addition, following a storm or strong winds, clearing trees from power lines may be necessary to restore service. This workshop for lineworkers included classroom and hands-on instruction in the field.

The training was designed to help utilities comply with applicable safety requirements, including OSHA regulations and ANSI standards. Instructors emphasized job briefings and planning.

James Monroe, MMUA's Job Training & Safety and Apprenticeship Instructor led the training. Monroe worked professionally for a tree service prior to joining MMUA. Also serving as an instructor was MMUA's Mark Hottel, a Certified Safety Professional.

Topics included:

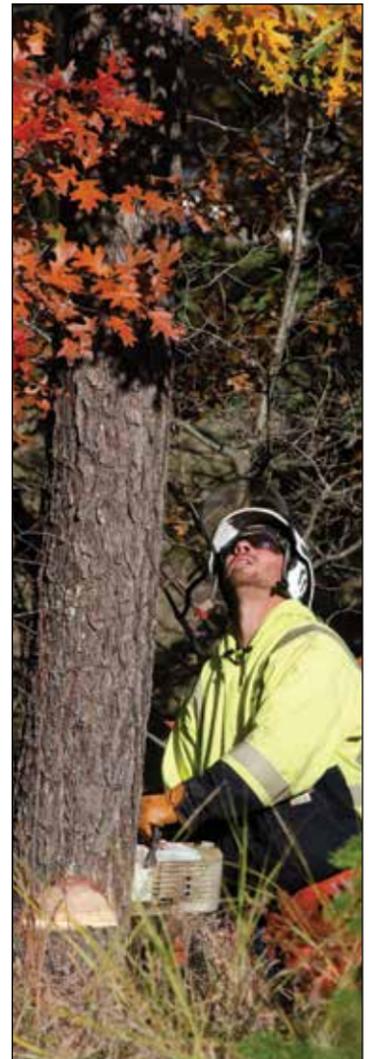
- Chainsaw safety and maintenance
- Overview of tree species
- Proper way to trim a tree and how much to trim
- Cuts for clearing trees and tree limbs from power lines
- Proper techniques for felling trees
- How to work safely on the ground and in the bucket
- Basic rigging for dropping limbs safely.



MMUA's James Monroe gave two thumbs up during a break at the Tree Trimming School as he talked with Jim Schmitt of Grand Rapids Public Utilities.



As they waited their turn, participants at the school kept a close eye on the various training exercises.



Participants were able to practice their tree-felling skills in a practical and safe environment. Various instructors provided guidance, including Monroe, who worked four years for a tree service.



Jim Schmitt of Grand Rapids commenced with clean-up work after toppling a tree.

photos by Steve Downer



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City of Granite Falls: from electric service pioneer to full service provider

The history of Granite Falls Municipal Utility dates to 1891 and is intertwined with that of the city—home of the Kilowatt Community Center—and the surrounding area. Over the years, Granite Falls supplied power to a wide rural area and, later, to fledgling rural electric cooperatives.

Today, the City of Granite Falls provides a wide variety of services. Along with electric, water, wastewater, streets and parks, the city also operates a liquor store, campground and airport.

Memorial Park runs along the south side of the Minnesota River and improvements

there recently wrapped up, including new or improved playground equipment, rest rooms, campground, and trail work.

The city acquired land for an industrial park expansion and is working to install infrastructure. Supply chain issues are providing a range of challenges and increased prices will ultimately affect budgets.

The city recently completed an electric rate study, which called for a 2 percent increase. The study is done every three years, commissioned by its wholesale power supplier (Central Minnesota Power Agency Services) and



This view of the municipal hydro plant looks downstream from a vantage point just south of the County Road 38 (Oak Street) bridge.

performed by a third party.

The picturesque and valuable municipal hydroelectric plant is slated for improvements. The city was awarded \$2.7 million in state Renewable Energy Development Account funding, including money for powerhouse repairs and a replacement of turbine No. 3. Bids for the work came in high and the project was pushed out until 2022.

The city's two electric substations are nearing the end of their useful lives. Planning has begun on how to replace them.

A third well, pulling water from a different aquifer, is also under development, as are upgrades to the wastewater plant.

But it's not all utilities and infrastructure.

A visitor soon notices brightly painted intersec-



This newly-painted crosswalk shows the artist's touch. This looks toward city hall on the far side of the street. The transmission line from the hydro substation is also visible.

tions. The city acquired an artist in residence grant, which covered the cost of an artist for a year. The artist helped engage the wider community, often through "pop-up" events. After gathering,

groups of people decorated and painted 18 intersections and sidewalks.

There are no vacant downtown storefronts and business is also strong along Hwy. 212.

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Power players:

continued from front page

Johnson's joining the CMPAS board. Stoner was impressed with Johnson and pleased to see another generation take great interest in the industry he had devoted much of his life to.

He was "100 percent" comfortable handing the reins over to Johnson.

"I couldn't have a better replacement," he said.

A Marshall native, Johnson graduated from Southwest State with degrees in political science and public administration. She went on to earn a Master's in Public Administration at Hamline University and interned for 18 months at the City of Oakdale.

She was glad to move back to southwestern Minnesota to serve as the Dawson city administrator in January 2012. Capable young city administrators often move to a larger city, and Johnson followed that path a half-hour east to Granite Falls in July 2016.

Education helped prepare her to serve as a city manager, but none of her coursework dealt with electric utilities. It was a new world to her.

"I've got a lot to learn," she said. "It's a huge industry."



Granite Falls city hall is situated on the east bank of the Minnesota River, across the river from the municipal hydroelectric plant.



Spanning the river between city hall and the plant is a dam and an electric transmission line.

But she is a quick study. CMPAS, which serves Granite Falls and 11 other public power members and affiliates in Minnesota and Iowa, is governed by a 12-member board comprised of a representative from each of its member's cities. Her fellow board members (all men) have been "an awesome group," Johnson said. The discussion is always respectful and open to considering

different perspectives.

The CMPAS staff has also been "great to work with," Johnson said. Board and staff are now deep into strategic planning, a fascinating topic for an eager mind.

While the learning curve is steep, Johnson also has a group of good and experienced people to work with back home.

Dave Smiglewski has been mayor for 25 years and served

on the city council for over 16 years before that. He also has broader experience, having served on the boards of the League of Minnesota Cities and Coalition of Greater Minnesota Cities. He also served many years on the Granite Falls utilities commission.

Electric superintendent Perry Peterson is capable and experienced. And former superintendent Don Reznechek eventually agreed to serve

on the utilities commission; he has adjusted from staff to policymaker very well.

Johnson said she is "fortunate" to work with the people at the power agency and the city and its utility. They all have been "warm and welcoming," she said, and a pleasure to work with.

All of which are positive developments for Granite Falls, CMPAS and the municipal utility industry in Minnesota.

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Editor's note: The last two months saw the passing away of three men known to much of the MMUA membership. Of such people are municipal utilities made. With fond memories, we note here their passing from our midst:

Stuart Smith, 68

Stuart "Stu" Smith, 68, of Spring Valley, MN, died on Tuesday, October 26, 2021 at Mayo Clinic- St. Marys Campus in Rochester.

Stu graduated from Spring Valley High School in 1971. Following graduation, Stu worked for the Spring Valley Light Plant as a linesman

from 1971-1980. From 1980-1993 he worked at Rongars Interiors and then worked as Superintendent of Spring Valley Utilities from 1993 until retiring March 1, 2020.

On July 16, 1983 Stu was united in marriage to Debra Frank at Our Saviors Lutheran Church in Spring Valley.

Stu was a member of the Spring Valley Sportsmen Club and the Fire Department from 1975-1995, and also served on the Southern Minnesota Municipal Power Agency (SMMPA) Board. While being a part of SMM-PA, he was nominated and received the national Larry Hobat 7 Hats Award.

Stu, often accompanied by

Debra, was a faithful participant in MMUA activities, including annual meetings and legislative rallies.

Stuart is survived by his wife Debra Smith of Spring Valley, mother Jeanne Smith of Harmony, eight siblings and other loving relatives.

A Celebration of Life open house was held Nov. 6, at Five Wynds Event Center in Spring Valley.

George Taylor, 70

George Taylor, Jr. passed away on October 8, 2021, at the age of 70 in St. Cloud. He lived in Rice, Minnesota but always considered Baudette, as his home.

George was born in Bemidji. He graduated high school in Baudette, in 1969.

George went to college at Bemidji State University. He married Doris Baade on September 4, 1976. They spent a majority of their life living on the Rainy River.

George spent much of his career as the City Superintendent in Baudette. He was always very proud of his work the team he worked with, and lifelong friendships.

George and Doris sold their home in Baudette and purchased a home near St. Cloud to be closer to their two kids and three grandkids.

George is survived by his wife, children and a sister. Funeral services were held Oct. 14, at First Lutheran Church in Baudette.

Toby Saxon, 58

Tobias J. "Toby" Saxon, 58, passed away on Sept. 16 at his home in Shakopee.

Toby worked for the City of Chaska for 19 years, starting in the water/sewer department. He transferred to the electric department and proudly became the Electric Director for the city. He appreciated the time spent with his family and friends and the memories made.

Toby was born on May 8, 1963 in Carrollton, Georgia, the son of Kenneth and Sandra (Awtrey) Saxon. He married Kim Marie (Mechtel) on June 21, 2002 in Las Vegas, Nevada. Toby is survived by loving wife Kim, three daughters, his mother and brother, and many nieces, nephews, other relatives and friends.

Visitation was held Oct. 14 and Oct. 15, along with a service, at St. John's Lutheran Church in Chaska.

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—Steve Downer



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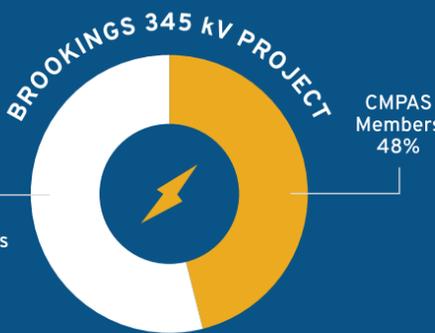
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Anoka Municipal Utilities (AMU) plays its part in the city's claim to Halloween Capitol of the World.

In 2020, in celebration of the 100th anniversary of Anoka Halloween, Inc., AMU gifted to the city a hand-made, 12-foot tall, 8-foot wide jack-o'-lantern named "Iron Jack."

Iron Jack is made from repurposed materials and took about 60 hours to construct. The main frame is made from reels which stored AMU's conduit. The top hat is a barrel that held waste and the brim of the hat is from a cabinet that housed electrical components. The light is an old streetlamp pole.

Around the State

A local artist and master welder donated many hours to the project. AMU employees volunteered their time to the project during lunch breaks and after hours. Iron Jack sits in City Hall Plaza.

The **City of Benson** will send representatives to visit biogas plants operated by the Danish firm Nature Energy. Benson is the site of the now-demolished Fibrominn biomass-fueled electric generating plant. Nature Energy



The 'Iron Jack' jack-o-lantern stands in front of Anoka City Hall.

has proposed to use area dairy cow manure, turkey litter and food waste to produce enough natural gas to heat between 11,000 and 12,000 homes.

Also, Benson recently received notice from the U.S. Economic Development Administration that it had been awarded a \$1.4 million grant to be used toward a \$1.8 million flood control project that would protect the city's wastewater treatment plant.

As part of its Public Power Week activities, **East Grand Forks Water & Light** held an LED light bulb giveaway and food drive Oct. 7-8. Utility customers received a free LED bulb in exchange for non-perishable, not-expired food items. One LED was given for two food items, with a maximum of three bulbs given per utility account. Food collected went to the local food shelf.

Austin Utilities (AU) was among the Minnesota municipal utilities that celebrated Public Power Week

and Public Natural Gas Week Oct. 3-9. Austin Utilities (AU) celebrated with live and virtual events.

On Oct. 6 AU held an Electric Vehicle Expo and Touch-A-Truck Expo in its parking lot and displayed its 2021 Nissan Leaf. Local car dealers displayed other new EV models. Members of the AU EVO Club (electric vehicle owners) brought their vehicles and talked about EV ownership.

AU also displayed a line truck, skid loader and tractor backhoe.

AU also held a 'White Truck Treasure Hunt,' where a model-sized replica of one of its service trucks was hidden somewhere in the city. Daily clues, posted online, led to the site and the winner received a new EnergyStar dehumidifier.

Web surfers who found 10 utility truck icons on its website were eligible for one of 10 AU Gift Kits.

The self-imposed Sept. 1 deadline set by the **Willmar Municipal Utilities Com-**

mission (WMU) to find a possible buyer for the moth-balled Willmar Power Plant has passed and attention is turning to the eventual demolition of the structure.

Staff are searching for a consultant to help plan for the needed asbestos abatement and demolition of the plant. WMU is estimating it will cost approximately \$2.7 million to complete the tasks needed.

Prior to the plant being torn down, a brand new downtown substation has to be built to house the power controls that are currently in the plant. The new substation, with an estimated cost of \$5.3 million, will be built in the old coal yard of the power plant.

While construction of the substation won't start until next spring, WMU is already purchasing equipment. The transformer for the substation was purchased in June for \$969,485, including spare parts. It is estimated to take nearly a year before the transformer is delivered.

The **Rochester Public Utilities Board** in October approved a potential 1.5 percent general rate increase.

The Rochester City Council also will review the rates and RPU budget before it approves the overall city budget in December.

Princeton, ECE file joint territory pact

Princeton Public Utilities and East Central Electric filed a joint request with the Minnesota Public Utilities Commission on Sept. 24 to update a portion of their shared electric service territory.

The request is to reflect the acquisition of 42 acres in the City of Princeton but in an area assigned to East Central. There are no customers in the area, encompassing the Aero Business Park first addition, adjacent to the municipal airport.

The transfer occurred pursuant to Section 216B.44: the Affected Area lies within the city limits; the Parties have agreed upon appropriate compensation; and the Parties have agreed to the Municipal providing service.

The agreement was patterned after an existing agreement signed in 2013.



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Dodge County raises solar plant issues; Grand Meadow re-powering approved

A proposal from Byron Solar, LLC, a wholly owned subsidiary of EDF Renewables, Inc., to construct and operate an up to 200-megawatt (MW) photovoltaic (PV) solar energy generating plant advanced Oct. 28 at the Minnesota Public Utilities Commission (MPUC).

In accepting the application as complete, the MPUC established joint review procedures, authorized an advisory task force under an alternative siting process, granted rule variances and set additional requirements.

The solar plant would cov-

er more than 1,800 acres of primarily agricultural land under an agreement with a landowner in the townships of Canisteo and Mantorville in Dodge County.

The project includes an approximately 3-mile 345-kilovolt (kV) high voltage transmission line and associated facilities (HVTL) in Dodge and Olmsted counties to interconnect the project to the transmission grid at the existing Byron Substation.

Byron Solar filed its site permit application under the alternative permitting process set forth in Minnesota

statute. The alternative permit review process differs from the full permit review process in a number of particulars, including the MPUC appointment of an advisory task force.

Dodge County questioned the use of prime farmland and requested the applications be referred to the Office of Administrative Hearings for contested case proceedings due to public interest and concern regarding the project. Dodge County requested the Commission to appoint the advisory task force to consider how zoning, permitting and other regulations could equitably address solar development.

Dodge County identified 33 separate issues and questions with respect to the representations made in the applications, including:

- Consultation with local governments
- Heritage and cultural values impacts
- HVTL route location conflict with City of Kasson Comprehensive Land Use Plan.

The MPUC issued an amended site permit to Xcel Energy to repower the up to 108-megawatt (MW) Grand Meadow Wind Farm Project in Mower County on Sept. 30.

Xcel proposed to repower all 67 existing turbines by installing new rotors with longer blades and replacing components within the existing nacelles. The repowered turbines will involve increasing the rotor diameters.

The Repower Project boundary has been reduced to 8,088 acres from the 2008 Site Permit area of 16,704 acres, but Xcel Energy is negotiating with additional landowners for wind rights-only leases to accommodate the Wind Access Buffer setback for the longer blades.

Some of the larger blades extend beyond wind project participation agreements. In some cases, the applicant has not been able to obtain an agreement and is requesting waivers from the turbine wind access buffer.

If no wind rights agreement is reached, the permittee acknowledges that the property will not be foreclosed from installing wind turbine generators at a later date, even if the turbine generators cannot be installed on the property in compliance with the setbacks stipulated.

Xcel was also directed to develop a project-wide Shadow Flicker Management Plan that reduces shadow flicker exposure to less than 30 hours per year.

An additional 80 acres of land (not previously part of the permitted project boundary) located within the town of Dexter will be used for a new operations and maintenance facility and potential laydown areas.

The 1.5 MW turbines will be replaced with 1.6 MW turbines. All repowered turbines will keep the current hub height of 80 meters (262 feet). The total turbine height will increase. The project's nameplate capacity will increase slightly from 100.5 MW to

107.2 MW but the generation interconnection agreement with the Midcontinent Independent System Operator will remain the same at 100.5 MW. The repowering will increase the capacity factor for the project to approximately 43.5 percent, which will result in a 23.5 percent increase in annual average energy production.

Xcel Energy plans to complete the work during the 2023 construction season.

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According to a news release from MiEnergy Cooperative, the cooperative has a power purchase agreement with OneEnergy Renewables to buy up to nine megawatts

of electricity generated by solar arrays in Rushford Village, Fountain, Lanesboro, and Stockton for the next 25 years.

North Dakota regulators granted several approvals Oct. 19 for what's expected to become the first carbon dioxide storage project in the state at an ethanol plant near Richardton.

The project at Red Trail Energy aims to capture the facility's carbon emissions for underground storage. The gas from the ethanol plant will be compressed and injected down a 6,400-foot well.

With California struggling to meet electricity demands as it transitions to clean energy, on Oct. 19 California regulators approved another extension to keep the natural gas-fired Redondo Beach power plant operating through 2023. All state power plants cooled with ocean water had been scheduled to close by 2020.

A Dane County (Wisconsin) judge Oct. 17 temporarily

Bits & Pieces



halted construction of a power line through southwest Wisconsin, provided opponents of the project, including the Driftless Area Land Conservancy and Wisconsin Wildlife Federation, can post a bond of \$32 million to cover potential costs of delay.

American Transmission Co., ITC Midwest and Dairyland Power Cooperative had planned to begin building the \$492 million Cardinal-Hickory Creek transmission line between Middleton, Wisc., and Dubuque, Iowa, on Oct. 25. The 102-mile line is the subject of multiple state and federal legal challenges.

The injunction halts the project while permit challenges are considered.

Opponents argued the

bond amount is unaffordable and amounts to a due-process violation.

The utilities say the line is "critical to ensuring Wisconsin can transition to a cleaner, more reliable, and more affordable energy future" by enabling the import of energy from wind turbines in Iowa.

The Minneapolis-based McKnight Foundation Oct. 18 said holdings in its \$3 billion portfolio would produce net zero greenhouse gas emissions by 2050.

McKnight is reportedly the largest private U.S. foundation to lay out such a goal, with similar declarations coming from bigger U.S. investors including BlackRock Inc., and Vanguard Group Inc.

MidAmerican Energy warned its 602,000 natural

Bits: see page 14 please

Short-Term Energy Outlook foresees costs increase significantly for a cold, upcoming winter season

The federal Energy Information Administration (EIA) released a Short-Term Energy Outlook on Oct. 13. The Outlook forecast that average U.S. household expenditures for all major home heating fuels will increase significantly this winter, primarily because of higher expected fuel costs as well as more consumption of energy due to a colder winter.

EIA forecast a 30 percent increase in natural gas expenditures increase and electricity by 6 percent. Winter forecasts from the National Oceanic and Atmospheric Administration (NOAA) es-

timate U.S. average heating degree days will be 3 percent higher than last winter

U.S. regular gasoline retail prices averaged \$3.18 per gallon in September, up almost \$1 per gallon from prices in September 2020.

In September, the natural gas spot price at Henry Hub averaged \$5.16 per million British thermal units (MMBtu), which was up from an average of \$3.25/MMBtu in the first half of 2021.

EIA expects the share of electricity generation produced by natural gas in the United States will average 36 percent in 2021 and 35 per-

cent in 2022, down from 39 percent in 2020. As a result of the higher expected natural gas prices, the forecast share of electricity generation from coal rises from 20 percent in 2020 to about 24 percent in 2021 and 23 percent in 2022.

Electricity generation from coal-fired power plants has not increased as much in response to rising natural gas prices as it has in the past. The lower price responsiveness of coal for electricity generation, which is likely the result of constraints on coal supply and low coal stocks, is contributing to upward pressure on natural gas prices. Coal production growth is unlikely to match the increases in demand in the near term due to many coal mines operating at a reduced capacity and limited available transportation.

EIA estimated that the U.S. electric power sector added 14.6 gigawatts (GW) of new wind capacity in 2020 with 17.1 GW of new wind capacity to come online in 2021 and 6.5 GW in 2022. Utility-scale solar capacity rose by an estimated 10.5 GW in 2020.

EIA estimated that U.S. energy-related carbon dioxide (CO₂) emissions decreased by 11 percent in 2020 due to less energy consumption.

The October Short-Term Energy Outlook (STEO) was subject to heightened levels of uncertainty related to the ongoing recovery from the COVID-19 pandemic. The forecast assumes continuing economic growth and increasing mobility.



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Bits:

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gas customers in Iowa on Oct. 12 that their winter heating bills could jump 46 percent to 96 percent over last year's due to rising costs. The company noted natural gas prices have more than doubled since last year because of reduced production and inventories and global demand.

Kansas Gas Service has proposed to collect \$451 million in higher-than-expected natural gas costs stemming from February's cold temperatures to residential and small commercial customers over five to 10 years. The plan, which has yet to receive regulatory approval, would increase average residential bills by \$5 to \$11 per month.

Spire has requested the U.S. Supreme Court allow it to operate its Spire STL Pipeline until the issue is resolved in court. The U.S. Court of Appeals in June ordered a shutdown of the natural gas pipeline, because the Federal Energy Regulatory Commission (FERC) "failed to adequately balance public benefits and adverse impacts" when it approved the line.

The federal Department of Energy announced Oct. 8 a target of five million homes served by community solar energy by 2025.

Nebraska's Omaha Public Power District (OPPD) said on Oct. 4 that it will add 400 to 600 megawatts (MW) of utility-scale solar and 600 MW of natural gas to OPPD's generation portfolio.

The solar and gas generation capacity "supports reliability and resiliency of the system as our communities grow, while significantly positioning OPPD on a path to meet its net zero carbon goal in 2050," OPPD noted.

The utility selected two combustion turbines to power a 450 MW facility and nine reciprocating internal combustion engines to power a 150 MW power station.

Both generating plants will be in commercial operation in 2023.

The Elkhart (Indiana) County Commissioners reportedly rejected zoning changes needed for a proposed solar energy development on Oct. 11.

The \$120-million-dollar

See top of next page please

project by Kansas City-based energy firm Savion would have built a solar farm on 850 acres of agricultural land south of Millersburg. The project originally came before the commissioners in August, but it was tabled until October to allow for further discussion.

Among the reasons offered by commissioners for voting against the zoning change was that residents of the area were overwhelmingly opposed.

The developer was reportedly interested in the site due to its proximity to electric transmission lines.

Johnson and Douglas counties in eastern Kansas, in anticipation of a 320-megawatt solar project covering 3,500 acres have reportedly developed draft regulations intended to balance various interests.

The draft regulations would require a public hearing, a 20-year cap, a 2,000-acre maximum on projects, a buffer of at least a mile from city limits, and panel setbacks of at least 50 feet from the property line and 250 feet from neighboring residences.

Residents said a large solar project would destroy views and undercut property values. Others supported solar development to reduce carbon emissions and increase tax revenues.

Potential conflicts over land use in the area are reportedly a growing issue.

The Worth County, Iowa Board of Supervisors declined a development agreement for Worthwhile Wind on Oct. 4. The wind energy development is proposed for Worth and Winnebago counties by Invenergy.

Supervisors said that the 1,500-foot setback in the Worthwhile Wind development agreement wasn't sufficient. A motion to approve the agreement died for lack of a second.

A proposed wind farm in Ward and McLean Counties, North Dakota could be revived—after permits were denied because of concerns with turbine lighting.

The developer had asked for a waiver on the light rules after the Minot Air Force Base raised objections about its Aircraft Detection Lighting System (ADLS). That system uses radar technology to turn the lights on only when an aircraft is nearby. Instead, Ruso Wind proposed the normal blinking red light system.

In 2020, the Public Service Commission voted 2-1 to not

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approve the application, saying state law did not allow waivers. The 2021 Legislature changed the law, to allow waivers.

Basin Electric is asking for a waiver on lighting require-

ments at its Prairie Winds North Dakota One facility south of Minot because the Minot Air Force Base has raised objections to the installation of an ADLS system there.

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1 www.bls.gov/oes/current/oes499051.htm | 2 www.bls.gov/oes/2017/may/oes499052.htm
3 www.bls.gov/oes/2017/may/oes472152.htm

Supply Chain:

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Cargill recently bought Sanderson Farms for \$4.53 billion. In late October, LinkedIn showed signing bonuses of up to \$25,000 for truck drivers in Laurel.

Those signing bonuses make it difficult for Howard Industries to keep truck drivers to deliver transformers.

On top of that, the American Trucking Association on Oct. 21 requested an exemption for truck drivers from a looming federal vaccine and COVID testing mandate, which is scheduled to go into effect Nov. 22 and apply to companies with more than 100 employees. Twenty-six percent of respondents to a September CDLLife.com survey said they would rather

get fired than undergo COVID vaccination.

Chad Backes of Irby, another MMUA associate member and annual sponsor, said Oct. 28 that he is generally well-supplied. He has a good supply of primary conductor and has secondary, but there is less selection of Aluminum Conductor Steel Reinforced (ACSR) overhead.

Some items from certain cable and transformer manufacturers have long lead times, however, or are unavailable. Irby's cable and transformer suppliers are U.S. based. Issues are labor, raw materials

and truck drivers.

One well-known cable manufacturer couldn't get reels for its product, Backes said. The shortage was due to labor market issues.

With extended unemployment benefits ending, many people returning to the workforce are not returning to their old jobs, as they pursue better employment. And *Forbes* reported in October that the early days of the pandemic saw 30 million baby boomers retire and over 75 percent of respondents to a recent survey planned to retire early. Consequently, the workforce

is shrinking overall while the needs of the post-pandemic economy are many. It will take time for all of this to sort itself out and, likely, continue to drive wages higher.

Construction cost increases of 20-30 percent this spring were already making projects very difficult. The City of Truman, with strong community support and donations, was planning to build pickleball courts. Bids came in extraordinarily high, putting the project on hold.

As Goodell said, "It's the new reality."

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Xcel requests three-year, 19.7 percent rate hike

Xcel Energy in late October filed with the Minnesota Public Utilities Commission a three-year rate proposal covering 2022 through 2024. For the three years, the Company requests an increase of present revenues of \$597.4 million, or 19.7 percent.

The company is requesting a net increase in gross revenues of 13.2 percent in 2021, 3.3 percent in 2022, and 3.2 percent in 2023, based on present revenue levels. While the multi-year proposal is under consideration, the company requested a 2021 interim revenue increase of 10.6 percent.

The Company is seeking a 10.20 percent return on equity as part of final rates.

An interim revenue request

for 2021 will be uniformly billed as a 14.82 percent increase on the base rate portion of customers' bills. The difference between the base rate and the overall bill percentage increases is primarily from the exclusion of fuel and purchased energy costs.

As part of its proposal, the company proposes that revenue recovery for three CapX 2020 transmission projects currently recovered in the Transmission Cost Recovery Rider, as well as nine wind-power projects currently recovered in the Renewable Energy Standard Rider be moved from rider recovery to base rate recovery.

The company said, on average, the proposed final rate change would increase the bill

for a typical residential customer by \$17.26 per month or \$207.12 per year.

The company noted that in 2020, its residential electric bills were 22 percent below the national average and 15 percent below the Minnesota average. It said its residential customers' bills would remain below the national average.

The company said it would "use the increased revenue to strengthen the energy grid, enhance reliability, expand clean energy and keeping bills low as we build toward our vision of providing 100 percent carbon-free electricity to customers by 2050."

Fuel cost charges will be handled separately.

Monthly customer charges would also increase.

Upcoming Events

Electrical Distribution Design

January 11-13, MMUA Office, Plymouth

This workshop offers participants a comprehensive and practical overview of principles and applications applied to the design of electric utility retail services.

Those who can benefit range from inexperienced personnel to those seeking to "refresh and update" their understanding of the underlying principles of electrical distribution and its application to customer service design.

Our main instructor is John Miner, a registered professional engineer in Minnesota and Texas. John is an accomplished manager and educator with more than four decades of utility experience. John will be joined by Tom Black, a registered professional engineer who has more than 30 years of experience in the electric and gas industry.

Register by Nov. 19 for best rate.



Emergency Preparedness & Restoration Conference

January 25-26, Holiday Inn, St. Cloud

The focus of this year's Conference will be management and system operations of a mutual aid event.

Training, exercising and planning provides an opportunity to collaborate—within your utility and with others. These valuable activities will enhance your Emergency Action Plan and can help you identify shortcomings, anticipate deficiencies, and proactively address potential consequences that an emergency may bring about.

Join other utility and city professionals at this conference, where you will engage in active discussion and idea sharing.

This is an ideal venue to increase your understanding of best practices, gain valuable insight to improve your effectiveness in an emergency, and develop or deepen relationships with fellow industry professionals. You must be an MMUA member to attend.



Register by Dec. 19 for best rate.

See your email or the Events Calendar at www.mmua.org for more information.

Last call!

T&O Conference and Transformer School/Pre-Conference

Last call for T&O Conference and Transformer School/Pre-Conference registration is Nov. 22. Register now!