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Utility supply chains: five years after COVID

It is hard to believe that it has been almost five years since the COVID-19 pandemic swept the world and caused so many changes.

Minnesota Municipal Utilities Association

From the impacts to our daily lives to the illnesses and deaths that affected millions of people, it was truly a difficult time outside of most people's frame of reference. Amid shutdowns and economic impacts came long-term disruptions of world-wide supply chains affecting everything from groceries, toilet paper, and medical supplies to the highly technical equipment used in the utility industry.

As we consider what it means to emerge from the Covid era and function in "the new normal," MMUA asked hometown utilities about their experiences then and now. We spoke with Pete Wyffels and Troy Wiebe from Chaska Electric Utility, Tom Geiser from Elk River Municipal Utilities (ERMU), Dave Schelkoph from Marshall Municipal Utilities (MMU), and



Chaska Electric's employees are looking forward to a new shop building.

Greg Drent of Shakopee Public Utilities (SPU). MMUA also reached out to Chad Backes and Brad Willetts of vendors Irby and Okonite, respectively, to reflect on the last five years and where we are headed in the future.

How it all began

As COVID began, Chaska "started out with lead times for a few materials getting pushed out, and then it expanded into almost everything," says Pete. "Transformers and conductors were soon over a year out, when

prior to that lead times were anywhere from a few days to a few months. I remember something we couldn't get in stock was plastic conduit. We put in for an order, and the lead times had shifted so far out. It had also gone up [in price] dramatically.

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Empowering the Next Generation of Utility Workers

By Shelly Dau

MMUA launches the MMUA Utility Workforce Scholarship in 2025.

The utility sector plays a critical role in powering our everyday lives, ensuring reliable access to electricity, water, natural gas, and other essential services. However, as the utility industry faces increasing demand. an aging workforce, and rapid technological advances, there is a pressing need to develop a skilled and diverse pool of workers ready to meet these challenges. One way to address this critical issue is through the launch of the MMUA Utility Workforce Scholarship, which was approved by the Board of Directors at its December meeting. The relaunch of the scholarship program is a timely and much needed workforce development initiative aimed at attracting the next generation of talent to the utilities sector.

The MMUA Utility Workforce Scholarship is designed to support individuals interested in pursuing careers in the utility sector including lineworker, gas operator, water and wastewater operator and other specific utility programs. By providing financial assistance and career development opportunities, the scholarship aims to help remove barriers to entry for underrepresented groups, students, and working professionals seeking to advance their skills in the utility sector.

In the 1990s, MMUA's Tom Bovitz Scholarship was initially introduced to promote visibility and appreciation of municipal utilities. However, with the evolving needs of the industry and the changing job market, MMUA's scholarship program is being relaunched with updates that reflect current trends and technologies in the utility space. By making the scholarship more

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MMUA Holds Annual Legislative Conference

By Kent Sulem

On Tuesday, January 28, 56 MMUA members gathered at the DoubleTree Hotel in downtown St. Paul for the 2025 MMUA Legislative Conference.

Attendees were welcomed by MMUA's CEO Karleen Kos and Government Relations Advisory Group Chairperson Roger Warehime.

The opening keynote speaker was well-known Minnesota political expert and podcast host Blois Olson. Blois gave an interesting presentation on the outcome of the 2024 elections and the shifting political demographics in the state. He also offered suggestions for maximizing message delivery when meeting with legislators.

The keynote was followed by a legislative panel made up of Senator Nick Frentz (DFL– North Mankato), Senator Jason Rarick (R–Pine City), and Representative Chris Swedzinski (R-Ghent). Members of the House DFL did not respond to their invitations to participate. The panel was moderated by MMUA's Director of Government Relations and Senior Counsel Kent Sulem. The panelists exchanged thoughts on a number of utility-related issues and how they might fare in St. Paul this year. All three members voiced support for repealing the nuclear moratorium and invited further discussion on issues like reforming the Earned Sick and Safe Time Act of 2023 to deal with challenges it poses to municipal utilities.

Closing out the first morning, attendees received a legislative briefing from Kent Sulem on MMUA's top issues for 2025.

Following lunch, attendees headed to House and Senate offices to meet with their legislators. Later, 33 of those representatives and senators came to MMUA's legislative reception in

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Jimmy Carter's diverse energy legacy



To unify, support and serve as a common voice for municipal utilities

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Beth Mattheisen retires from **Willmar Municipal Utilities**

After 44 years, eight months, and 24 days. Beth Mattheisen officially retired from Willmar Municipal Utilities (WMU) as of January 31st.

Throughout her time at WMU, Beth worked with eight general managers and countless coworkers and commissioners, always bringing professionalism and her commitment to the organization.

A lifelong resident of Benson, Beth graduated in 1979 and attended the Administrative Secretary program at Willmar Vo-Tech (now Ridgewater College). In May 1980, she accepted a position at WMU thanks to encouragement from one of her business instructors. Hired by then-Controller Mike Nitchals (who later became general manager), she began as a receptionist/secretary and worked her way up to administrative secretary and then executive secretary.

Over the years, Beth's role grew from handling receptionist duties to providing administrative support to general managers, commissioners, staff, and city officials. One leader who had a lasting impact on her was former General Manager John Harren, whom she credits for his exceptional leadership and knowledge.

Beth has seen a lot of changes at WMU, from the elimination of the district heating system to joining Missouri River Energy Services (MRES) and decommissioning of the power plant. She also saw the organization transform through advancements in technology and staffing efficiencies, going from 60 employees to approximately 28 while continuing to provide exceptional service to the Willmar community.

Now that she's retired, Beth is looking forward to traveling, golfing, and simply taking life as



it comes. Reflecting on her time at WMU, Beth shared these words:

"WMU has been a wonderful place to work, and I've been incredibly blessed with amazing coworkers and associates throughout the years. I wish $every one\ could\ be\ as\ lucky\ as\ I$ to have been a part of the WMU family. It's been a great ride!"

DOE's Loan Programs Office announces \$3 billion in loan guarantees for Wisconsin and lowa projects

On January 16, the US Department of Energy's Loan Programs Office (LPO) announced \$3 billion in federal loan guarantees for subsidiaries of Madison, **Wisconsin-based Alliant Energy** Corporation.

The funds will go to Interstate

Power and Light (IPL) in Iowa and Wisconsin Power and Light (WPL) in Wisconsin. Approximately \$1.4 billion will be allocated to IPL to add 2 gigawatts (GW) $\,$ of wind power and battery storage capacity in Iowa and Wisconsin. Another \$1.6 billion will be loaned to Wisconsin Power and Light,

which will enable the early closure of a Wisconsin coal plant and fund the aforementioned wind power and battery storage.

The loans will be offered at a lower interest rate than traditional financing, which will allow Alliant to save money and deliver savings to its ratepayers.

Tucson ponders public utility, community choice option

At a January 22 session of the **Tucson, Arizona, City Council,** officials heard about the results of a study that had been commissioned to explore two utility options: making Tucson's power provider a public utility or offering a "community choice" option by providing public power alongside the incumbent power provider, **Tucson Electric Power (TEP).**

The study estimated the cost of buying out TEP would be at least \$820 million, and likely more. With the community choice option, the City of Tucson would provide the power supply, with TEP providing transmission and delivery. There was no cost estimate attached to the community choice option at this point in the study period.

Tucson's goal with this work



is to transition to clean energy faster than TEP has been able to deliver it. TEP gets about 30 percent of its power from renewables and expects to reach 70 percent by 2035. Under a public ownership model, the study estimates Tucson could reach 50 percent renewable energy by

2028, and 100 percent renewable by 2045.

Tucson is having to move fast because the city's power agreements with TEP end in April of 2026. A 2023 ballot measure to approve the renewal of the contract with TEP failed to pass.

Tact, progress, and being nice

On May 22, 1856, there was an incident in the United States Senate.

On that day, Preston Brooks, a member of the House of Representatives from South Carolina, crossed the Capitol, entered the Senate chamber, and beat Senator Charles Sumner of Massachusetts nearly to death with a walking stick.

The victim of the attack was an abolitionist who had been on the offense in the days prior. During a fiery speech he had called one pro-slavery colleague a "noise-some, squat, and nameless animal." He called out another, accusing him of "taking a mistress ... who, though ugly to others, is always lovely to him." The mistress to which he referred was slavery itself, but the added insinuation of sexual sin was highly offensive, as it was doubtless intended to be.

Both the aggressor and the wounded became instant folk

heroes to their respective sides. Their names and causes were celebrated, nobody was prosecuted, and Sumner eventually recovered. Nationally, discourse grew ever harsher, and things continued to slide towards civil war. The debate ended only after 620,000 soldiers had died, 876,000 more had been wounded or captured, innumerable civilians had perished, and incalculable damage to finances and relationships had occurred throughout the country between 1861 and 1865. True, the issue

of slavery was finally settled, but the cost was tremendous.

You may wonder what any of this has to do with municipal utilities in Minnesota today.

I have been reminded of this story on multiple occasions recently as frustration and political posturing plays out in front of us. For example, a few months ago I visited one of our municipal utility member communities. There, a sitting member of the Minnesota House referred to another elected official as a "liar" and seemed ready to blame that person's party for everything short of original sin. Later, during the January standoff over calling the Minnesota House into session, legislators of both parties publicly used severe language, accusing one another of "engaging in a coup," "undermining democracy," and behaving in an "outrageous" and "illegitimate" manner. Both sides, according to the courts, were right sometimes and wrong sometimes.

The often adversarial and accusatory emotions being expressed in Minnesota are occurring against a backdrop of conduct at the federal level that can generously be described as suboptimal. As in pre-Civil War times, it is currently fashionable in Washington to use hyperbolic language about pretty much everything. To speak in sound-bites. To go for attention and the jugular at the same time. This unfortunate trend appears unlikely to stop any time soon

because, like Brooks and Sumner, the players are frequently rewarded with admiration, airtime, and authority. There is little downside to fostering drama.

What's going on is not new, but it's different. Whether one goes back to the US Civil War or to the records of the ancients thousands of years ago, we find periods where people focused on blaming others when problems seemed intractable and inspiration was in short supply.

Insults, negativity, and the assumption of bad motives have always fed on themselves. Now, there's a modern twist. In our endless 24-hour media cycles, anger sells, and the ante goes up at lightning speed. Many of us, raised by mothers who said, "If you can't say something nice, don't say anything at all," find ourselves sucked into a vortex of outrage at a rate and frequency that would have made a Roman throw his toga over his head and run for the hills.

The tendency toward tribalism finds us drawn toward people who agree with us, and together we get upset over the same things. Posts are reposted.

Memes go viral, and down at the coffee shop it may seem almost impossible to honor Mom's admonition to avoid snarkiness. So often we find her advice has openly morphed into, "If you can't say anything nice, come sit by me"

Whether it occurs at the high school basketball game, the city

From My Desk to Yours

Karleen Kos



council meeting, in a church basement, or on social media, communing with others in an us-vs-them mentality, along with the assumption of negative intent from "them," becomes a toxic, soul-sapping force. I fear it has turned us into a state—well, a nation—that no longer trusts its neighbors unless we are sure they agree with us. That's bad for living in peace with others, and it is an especially dangerous environment for municipal utility advocates.

Utilities and MMUA must "just say no" to the negativity. Easy as it is to fall into the cynicism, frustration, and animosity that is everywhere these days, it is my belief we need to lead our organizations outside of the pessimism paradigm. We serve customers of all political persuasions. More importantly, we need the support of ratepayers and legislators on both sides of the aisle if we are to get good results for our utilities and preserve the municipal model. We can't afford to alienate or ignore anybody merely because they suit up for a team with which we may not personally agree. It's our job to ensure they understand our issues regardless of their party's playbook.

Municipal utility issues are not partisan. Everyone needs the lights to come on, the heat and AC to work, and the water to be drinkable, so there is much to be gained by positioning the utility as an apolitical resource for all the people.

With that in mind, nothing good for munis can come of picking political teams and bashing the other side. It doesn't matter if we think one team is dead wrong and the other anointed by God. To serve our towns and our ratepayers, we have to successfully work with both sides, now and in the future, and our communities need to believe that we



are willing to do so.

We also need to do our part in dialing down the rhetoric and behaving with consideration towards everyone. Assuming how a legislator will react because that's how their party reacts will generally be seen as disrespectful. Name-calling, even if the name is fitting, will do damage. Nobody accused of being a liar ever suddenly saw the light and made a commitment to the truth. Exactly zero actual fascists—or socialists or communists or liberals or wingnuts-has ever taken a memo from their opponent and suddenly changed their ways after being called out. Humans don't roll like that.

If we really want people to embrace the validity of our issues, we have to keep them engaged. Let the tempest roar, let the not-so-civil wars go on if they must, but we are obliged to do our best to take the high road, play the long game, and make compelling points that resonate regardless of party. "Tact is the art of making a point without making an enemy," as Sir Isaac Newton once said.

Holding ourselves to political neutrality doesn't mean we should show up as spineless bootlickers. We will always be fierce advocates for our utilities and our

cates for our utilities and our communities. We are still going to be relentless in our pursuit of what is best for strengthening and maintaining the municipal model.

It's not bringing a knife to a gun fight if we use clear, firm language about what utilities need while avoiding conversation on the motives and behaviors of various politicians or their parties. Back in my college debate days, criticizing people ad hominem attacks—rather than sticking to the facts of the argument resulted in points being deducted, reduced credibility, and possible disqualification from competition. At best, any debate coach will tell you that attacking the person rather than offering stronger ideas is just lazy. Minnesotans want progress, not pugilism.

Municipal utilities require the support of all parties. We cannot afford to make enemies on either side of the aisle, something that

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Utility supply chains

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[That was a surprise, but] then it was the next thing, and the next thing."

In Shakopee, "some lead times doubled or tripled," says Greg. "SPU had to extend our long-range planning from yearly reviews or when stock was close to minimum re-order quantities to performing quarterly reviews and increasing minimum order quantities to accommodate the lead time with projected project demands for the lead timeframe."

Things were similarly dire at vendors and suppliers that serve municipal utilities. "[Irby] basically entered uncharted territory and didn't know what to expect," says Chad. "We had meeting after meeting with our manufacturers and tried our best to understand what they were going through so that we could plan accordingly. Labor was the main issue. Everyone realized there would be panic buying and lead time and price increases. We did experience periodic supply chain issues, but they were isolated to a particular commodity, or shortage caused by a natural disaster.'

"Okonite, being a 100 percent USA-based company, was less affected by supply chain disruptions compared to other cable suppliers," says Brad. "Our vertical integration, where we produce most components in-house, reduced reliance on external suppliers. However, lead times were extended significantly due to high demand. Okonite proactively communicated with customers about these delays and worked closely with distribution partners to increase stock levels and support customers.'

In Marshall, "MMU—as were all utilities—was hit hard by delay and increased costs surrounding our material and equipment needs starting from mid- to late-2020 forward," says Dave. "Deliveries pre-COVID were seldom over six months. Today transformer delivery time can exceed one year and even two years in length. Now that is a problem to manage through."

Surviving the backlog

As supply chain issues began to cascade and panic buying set in, wait times grew for utilities and vendors alike. Many utilities tried to not move into panic buying mode, but long lead times caused them to realize that waits and supply chain issues were lasting longer than they had anticipated. In Chaska, "we saw transformers and conductors come to be over a year wait; prior to that, lead times were everywhere from a few days to a few weeks," says Troy.

"We share space with different departments, so we are limited with what we can keep on hand due to space," says Pete. "We are in the process of building a new facility, but it has been a space issue, so we didn't carry a big [inventory] of supplies. That was a whole new way of thinking with COVID, ordering out ahead of time."

Marshall also reshaped its strategy during this time. "MMU became very conservative on maintenance changeouts of transformers and distribution infrastructure," says Dave. "We had sufficient inventory on hand to accommodate nearly two years of emergency needs and some maintenance work. This gave us time to better plan the purchasing of material for capital projects. For instance, what normally was budgeted for and purchased that same year would not work in the new world. We found ourselves ordering material and equipment nearly 18 months before the budget year even started. This is how we adapted to the extended delivery times."

Shakopee's team worked on internal planning procedures. "SPU allocated additional personnel time and resources to ensure an adequate supply of inventory, as well as working with rate analysis and finance to adjust budgets to accommodate the greater order quantities and higher item prices. SPU also considered alternates to standardized equipment specs," says Greg.

Elk River also had to adapt to the times. "We relied on other municipals and co-ops for help with certain material needs," says Tom. "In rare cases, some new customers just had to wait until we could source the required material. We also reworked things throughout the system to gain material from the field. If we needed a 1000 KVA transformer but didn't have one available, we found a spot where we could change one out with what we did have (such as a 750 KVA) to free up the 1000 KVA that was needed."

For Chad at Irby, it was all



Chaska Electric Utility has outgrown its headquarters and is getting a new facility. They weathered the pandemic by planning ahead and making supplies fit in limited space.

about communicating and networking to make it through. "We took advantage of industry-wide meetings, events, and planning seminars. We diversified when we could and trusted our top partners, hoping the plans they implemented would lead to successful deliveries. This is such a great industry. We realized we are here to help wherever we could, [and we] always held true to our customers and our suppliers."

Working together

When things got tough, utilities and vendors tried to assist each other as much as possible. "If anyone had extra material or equipment, we would help each other out," says Dave. "MMU had a spare underground switching cabinet when a sister

municipal utility had a failure to one of theirs. These cabinets were 18 months out for delivery. We helped each other to get their system back to normal. We also had nine transmission structures fail after a storm, and we asked around for new poles and equipment to help replace the damaged transmission structures. We found them from one of our neighbors—and we repaired the power line in less than a week. It is a wonderful family we have the privilege to work with."

Pete reiterated this point.
"There were times we needed to call on a neighbor utility if we needed a particular item. If they had it and were able to share it, we would go that route. Anoka helped us out. Glencoe helped us out, Shakopee helped us

out. Everybody is in it together, and being a part of MMUA, we know that the cooperating and working together is huge in what we do." "We didn't sugarcoat anything, making sure our customers had the most accurate price and lead time information so they could plan accordingly,' says Chad. "There were many tough conversations, but all we could do was be honest and pass information along as quickly as possible. We preached diversification and not to put all your eggs in one basket. We encouraged neighboring utilities to have a common spec, allowing us to stock more common items and get better pricing for larger quantity orders."

"Communication was really key to meeting customer needs Continued on page 5





Utility supply chains

Continued from page 4

during the supply chain disruptions," says Brad. "Okonite leveraged strong customer relationships to prioritize and move cable to those with the greatest need. We relied on distributor stock and incoming orders to fulfill requests. The Direct Sales Force model allowed local sales teams to have direct contact with production planning and factories, ensuring efficient cable movement to serve customers best."

"SPU cooperated with fellow municipalities in times of dire emergency," says Greg. "We also contacted alternative vendors and [reached out] more frequently to maintain open communication and working relationships."

How are we doing now?

Five years is a long time to wait for anything, but it seems the passage of time has slowly addressed supply chain problems, at least to a degree, and reset expectations. "The current state of the supply chain is improving," says Chad. "Many items are back to pre-COVID lead times. Other items are not. Transformers and switchgear are still out too far. We have done our best to speculatively order additional units into stock to help mitigate those long lead times."

"In the recent past, the primary concern has been transformer lead times, which have improved, but [they] still need to get better," says Tom. "Right now, for ERMU, our biggest concern is the long lead times on switchgear—they've grown to 10–12 months or more. I do think things have gotten a lot better since the pandemic, and they will continue to get better. I foresee both prices and lead times continuing to drop. I don't think they'll get to pre-pandemic levels, but they'll continue to improve over the next 2–3 years. as the backlogs work themselves out."

"Certain delivery times have gotten better," says Dave. It's "not like pre-COVID kind of better, but workable. Transformer delivery times, however, have not improved very much. Everyone got behind, and it will take some time for the factories to catch up."

"The supply chain remains volatile but manageable," says Brad. "Okonite's direct communication channels between the direct sales force and manufacturing plants help keep our product mix relevant to changing market conditions. Our focus on specific industries rather than commodity cable products allows us to stay well-entrenched in our markets."

"We are at a good spot now; we don't feel we are a bad place," says Troy. "We're comfortable with the growth that is coming [in Chaska]." "I think lead times are coming back [to normal, but] I think it's going to take a while for everything to get caught up." says Pete. "We are happy that we built great relationships with our vendors and other utilities throughout this ordeal."

Lessons learned

The COVID experience changed many things about how we do business, plan ahead, and organize our lives. What have utilities and vendors learned from this experience?

"I believe delayed delivery and inflationary costs in the supply chain were a wakeup call for all utilities," says Dave. "For MMU, we have learned to plan our work a little further out into the future and order equipment/material early enough to mitigate the changes in our supply chain. We are better able to handle a new pandemic should one occur. We have learned some lessons and, like all trials, are better for the time in the trenches."

"Okonite will continue to leverage the tools and relationships developed over our 150+ years in business," says Brad. "We are committed to investing in manufacturing plants and process improvements to maintain high-quality, on-time product delivery for demanding electrical industry projects."

"There is a new set of circum-

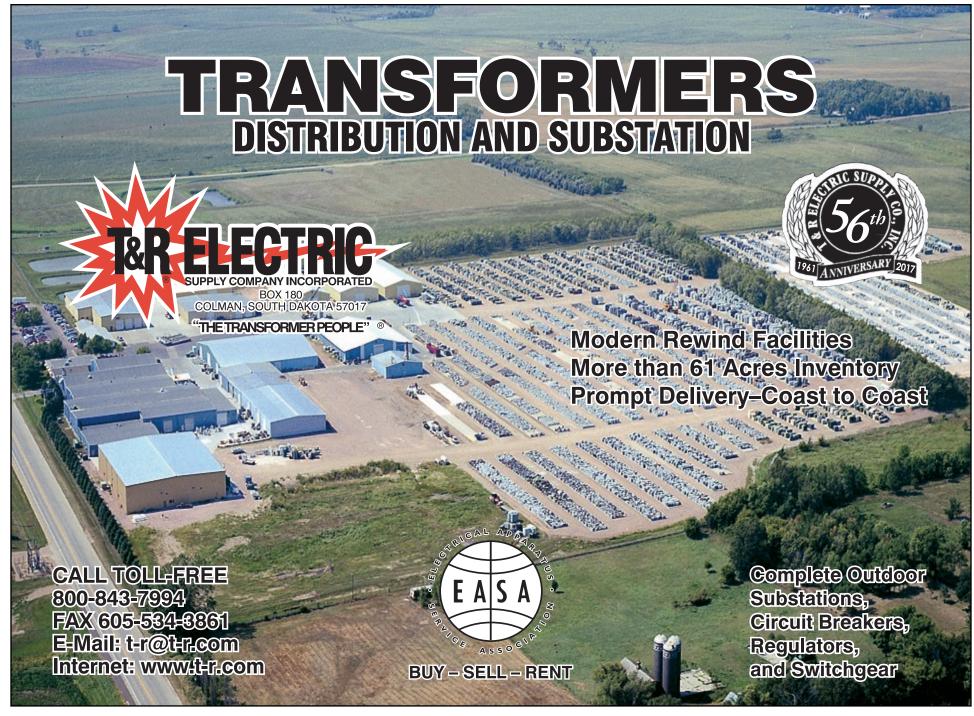
stances that could play a role in the availability and cost of materials used in our industry," says Chad. "Potential tariffs; Build America, Buy America (BABA); and mother nature could still affect the pricing and timing of deliveries. If inflation and energy costs return to normal ranges, and the cost of power remains steady, I anticipate housing starts to increase again, which would drive demand up. Data centers, AI, and the management of energy supply will all play an increasingly important role in material supply. Many of these industries don't care about the costs of cable, for example, and will eat into production capacity, causing lead times to go up again."

"We haven't been in situations where we have been shorthanded or short supplied. We have stayed reliable throughout this time," says Pete. "One of the things I've always strived for is to stay 100 percent reliable, it is number one for us. Having the power on and having no power outages is the most important thing. Troy does an excellent job of finding a good product, good lead times, and cost-effective materials to keep [Chaska] on track."

"SPU is planning in advance to ensure we have enough time to secure all the materials needed for our projects," says Greg. "To stay on top of supply needs, SPU has set up quarterly meetings to review our upcoming project material requirements. Also, one of SPU's vendors provides SPU with a monthly supply chain update, giving SPU valuable insights into the items we regularly use and purchase... we have been very fortunate with the pre-established relationships we have with our existing vendors."

Tom from ERMU summed up the new normal this way: "Plan. Plan the best you can. Stay in touch with your city, county, and state agencies. Make them aware of any issues you foresee in material. Ask them to keep in touch with what they're planning, be it a development, road move, or commercial business coming in. Communication is the key!"

Living through a once-a-century pandemic was an unwelcome growth experience for all of us. Providing life-saving utility service and equipment when supplies were hard to come by took the importance of getting things right during that experience to another level. Communities are lucky to have professionals like Minnesota's municipal utility personnel keeping things going when nothing is sure or familiar.



Mark Christie becomes chair of the Federal Energy Regulatory Commission

On January 20, President Donald Trump selected Mark Christie to become chair of the Federal Energy Regulatory Commission (FERC), taking over from previous chair Willie Phillips.

In his new role, Christie emphasized three priorities.

The first is to protect consumers from excessive power costs. The second is to address the reliability crisis caused by retirements of dispatchable power. The third is to help the states and utility regulators to work together to address reliability and affordability matters.

Christie has served as one of five commissioners on the panel since January of 2021. Previously, he was the chair of the Virginia State Corporation Commission, which regulates utilities, insurance, and banking in the Commonwealth of Virginia.

Vertical solar panels offer flexibility, versatility, and high performance

With the emergence of bifacial solar panels (panels that can produce electricity when either side is illuminated), vertical solar panels are gaining increased favor.

These panels help mitigate the problem of covering prime real estate with solar panels. Teamed up with horizontal solar panels, they can supplement the solar generation mix by collecting energy more effectively at sunrise and sunset than horizontal panels.

An August 2024 research study in England found that a vertically mounted bifacial photovoltaic system (VBPV) out-



performed the output of both a single-sided vertically mounted solar system and a horizontally or slightly tilted single sided solar installation.

These findings mean that ver-

tical solar might be the wave of the future. Acting as windbreaks or barriers makes the panels useful beyond their primary purpose and improves the continued use of land for other purposes.

Inflation Reduction Act funds final Energy Infrastructure Reinvestment loans of the Biden Administration

On January 16, the Biden Administration announced \$22.4 billion in conditional loans that were made possible through the Energy Infrastructure Reinvestment program, funded by the Inflation Reduction Act of 2022.

Some of the projects to be funded under this round of loans include \$14 billion for building clean power, batteries, and improved pipelines in Michigan, \$3 billion to build clean energy and storage in Iowa and Wisconsin, and \$6 billion to lower the cost of transmission projects in New Jersey.

The fate of this program and its funding objectives are still to be determined under the Trump Administration.

New AI initiative will build data centers, electricity generation needed to run them



On January 21, President Donald Trump and the leaders of tech firms OpenAI, Oracle, and Soft-Bank, announced a new joint venture called "The Stargate Project," which will build artificial intelligence (AI) infrastructure in the United States.

The companies plan to spend \$500 billion on Stargate, which will construct data centers and power generation to support

their operations throughout the country. As of January 2025, the companies had \$100 billion in immediately available funding, An additional \$400 billion in investment is expected over the next four years. The planners estimate Stargate will create about 100,000 jobs.

The first project to be undertaken by Stargate will be a new data center located in Abilene, Texas.

European wind power primed to pass coal's electricity output in 2025

According to research from the energy think tank Ember, European wind generation has pulled within four percent of coal generation in 2024. European wind farms produced 616 terawatt hours (TWh) of

power in 2024, with coal plants producing 641 TWh.

Extrapolating from a seven percent decrease in coal generation and three percent increase in wind generation in 2024, that

makes it very likely wind will overtake coal in Europe in 2025. One of the biggest obstacles to this being achieved is lower wind speeds on the European Continent, which could cut wind output and keep coal on top.

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Empowering the Next Generation

Continued from page 1



widely available to a variety of utility jobs, the goal is to encourage people to consider their future in the utilities industry. This will include emerging roles in renewable energy, smart grid technology, and cybersecurity.

The launch of the MMUA Utility Workforce Scholarship comes at a pivotal time for the utility sector, which faces a growing workforce shortage due to retirements and a limited pipeline of new talent entering the field. According to industry trends, a significant portion of the workforce is nearing retirement, and younger generations are often unaware of the diverse and rewarding careers the utility sector offers. The scholarship program is just one of several workforce development initiatives MMUA is considering as we address these challenges.

Initially, MMUA will offer five \$1000 scholarships to be awarded to learners who are enrolled in utility related career programs. Each candidate will complete an application, answer two open-ended questions about their interest in working in the utility sector, and provide two letters of recommendation from a mentor, employer, or teacher. To reach more potential workers, the scholarship is open to all Minnesotans.

MMUA's intention is to expand the program in the coming years. The goal is to raise additional funds for renewable four-year scholarships in other utility related programs that require a four-year degree as well.

The MMUA Utility Workforce Scholarship is a valuable investment in both the municipal utility sector and the communities they serve. It will help to develop a skilled, diverse workforce, drive innovation, and foster stronger community relations while addressing industry challenges.

Look for more information on the MMUA website regarding the application process in early March.

A sinkhole and a garbage truck cause downtown Omaha to lose power for several hours

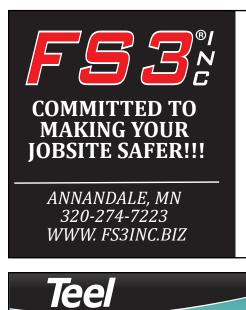


On the morning of January 2, a garbage truck in Omaha fell into a 10-foot-deep sinkhole in an alley in the downtown district, trapping it for about four hours.

First responders arrived on the scene and turned off utilities

that had become exposed by the sinkhole. Electricity and gas services were interrupted for several hours as the truck was removed.

City Engineer Austin Rowser said that the city had put up vehicle barricades because of concerns about the alleyway. The driver, who works for Waste Management of Nebraska, said that he saw caution signs on the roadway but did not move any barriers to enter the alley. His story was backed up by his employer. Investigation of the driver's actions (and the cause of the sinkhole) is ongoing.



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Ventura County, California supervisors vote to consider municipal utility district

At a January 14 Board of Supervisors meeting, Ventura County Supervisor Jeff Gorell said the county should explore the possibility of creating a nonprofit municipal utility district. Gorell noted the county's current electricity provider, SoCal Edison, is driven by corporate profits and has not maintained the county's electrical system.

The board unanimously voted to direct county staff to explore the feasibility of implementation of a municipal utility

One of the main points of concern for the supervisors was what they see as underinvestment in SoCal Edison infrastructure, which has led to a spate of "Public Safety Power Shutoffs" during recent wildfires in the area. Gorell and others argued that if circuits had been upgraded in the county, SoCal Edison wouldn't have to shut off the power to prevent fires and the resultant lawsuits.

SoCal Edison and a member of the Ventura County Taxpayers Association opposed the vote to consider.

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Medical dialysis techniques unlock new method for purifying high-salinity wastewater

In an article published in the journal *Nature Water*, researchers from Rice University and the Guangdong University of Technology in China have discovered that by applying dialysis technology from the medical field to wastewater, salts can more effectively be removed from wastewaters than with previous technologies.

In medical dialysis, waste products are filtered from blood, with purified blood returned to the body. In the team's experiments, they created a dialysis-like setup where salty wastewater passed



on one side of a membrane, with freshwater flowing on the other side. Using minimal pressure and little fresh water, the system was able to effectively pull salt from the solution. Not only did it clean up the waste stream efficiently,

but the process was also able to collect the salt for other uses.

The researchers believe this new innovation could be applied across industries and settings where high salinity is a problem in wastewater.

New York State starts administering low-income broadband plans

On January 15, a New York State law first passed in 2021 took effect.

The law, which requires internet providers to provide \$15–20 a month internet service to low-income New Yorkers, was blocked by a district court judge in 2021. It was eventually upheld by the appeals court in 2024 and came into effect after the Supreme Court declined to hear any further appeals.

The price of the service must



include all recurring taxes, fees, and rental fees for equipment. Price increases max out at 2 percent per year. Broadband providers who serve fewer than 20,000 households are exempt from the low-income broadband law.

Annual Legislative Conference

Continued from page 1

the DoubleTree's grand atrium. It was an excellent environment for informal chats and relationship building with all those in attendance.

Day two kicked off with MMUA Executive Director Karleen providing an MMUA activity update. Then, in a round-robin discussion, attendees shared the feedback they received from legislators during their hill visits.

Keith Dennis, Executive
Director of the Beneficial Electrification League, was the first
guest speaker of the morning.
He gave the group food for
thought about both the historical
context and today's big-picture
view of what it means to bring
electricity to people.

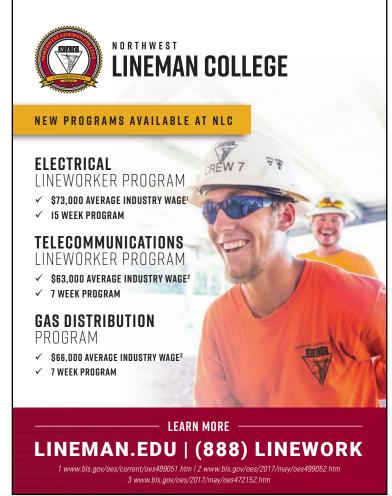
Next up was Minnesota's top administrator on energy issues, Dr. Pete Wyckoff, Deputy Commissioner of Energy Resources. Wyckoff told the audience about his department's progress on rolling out electric infrastructure funding and home rebate programs. He also reported that success has been seen in recent weeks regarding direct pay tax incentive payments. Dr. Pete was joined by Assistant Commissioners Sydnie Lieb and Lissa Pawlisch.

Capping off the conference, Tessa Haagenson from Connexus Energy explained the role and activities of the recently created Minnesota Climate Innovation Finance Authority (MnCIFA) from her perspective as the consumer-owned utility representative on the MnCIFA board. You may have heard MnCIFA referred to in other contexts as the state's new "green bank."

MMUA looks forward to seeing even more members at the 2026 Legislative Conference, the date for which will be announced after the legislature determines when they will convene in 2026.









Wisconsin municipal utility experiences public outcry over new transmission lines

An effort by Plymouth Utilities, whose approximately 4,740 meters are located about 15 miles west of Sheboygan, Wisconsin, to bring improved power to parts of its territory has resulted in protests as local citizens argue against the new transmission lines.

A group called Neighbors-4Neighbors formed about a year ago to oppose the new lines, which will cross about 50 local properties.

On December 12, power company ATC received approval from the Public Service Commission of Wisconsin to run the power lines. Even though the project has been approved,



citizens have been protesting near Plymouth Utilities, including at a rally on January 9, to argue against the plan. The protestors plan to continue to advocate for their position into the future.

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On the heels of wildfires, **California Legislative Analyst Office finds state's electricity rates** are the second highest in the nation

A January 7 report from the California Legislative Analyst's Office found California has the second highest electricity rates in the country, behind only Hawaii.

The report said California's electricity rates are close to double the prices in the rest of the nation.

The causes of these high rates include wildfire-related costs, California's transition to renewable energy, and differences between utility operational structures. According to the report, all of these problems, which are largely intractable, will force California's leaders to make hard decisions in order to rein in costs.

Another problem facing California is that most of the state receives its power from investor-owned utilities. Large publicly owned utilities are only present in Sacramento and parts of Los Angeles, although they do provide power to about one-quarter of the state's people. A larger presence of municipal utilities may help Californians rein in power costs in the future.

The California wildfires of January 2025 will undoubtably



lead to even higher costs because utilities are inevitably required to deal with lawsuits and because they work to improve their power infrastructure. The report described the conundrum of rising rates discouraging the state from continuing its important march toward renewables, even as a changing climate makes things harder for people in hotter parts of the state.

One solution put forward by the report is to take another look at the authority of the California Public Utilities Commission to recalibrate rates and the disparities in what different rate payers or service territories are charged. Whatever the slate of solutions put forward by California lawmakers, it is clear that fixing the state's high electricity rates will be a long-term challenge.

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Legislative Conference



Nearly 60 attendees were on hand to support MMUA's legislative efforts.



Opening keynote speaker Blois Olson, a well-known political analyst and publisher in Minnesota, gets ready for his address on "The impact of the 2024 elections and tips on how to be an effective advocate in today's politics"



Sen. Nick Frentz, Sen. Jason Rarick, and Rep. Chris Swedzinski discussed energy policy and the legislative session.



Roger Warehime, General Manager of Owatonna Public Utilities and the chair of MMUA's Government Relations Advisory Group, addresses the audience.



Keith Dennis, President of the Beneficial Electrification League, discussed the nuances of electrification that provide net benefits for consumers, communities, and the environment when compared to alternative power sources



MMUA's Board of Directors met at the conclusion of the Legislative Conference to review preliminary data from the recent member survey.

Cyber and Fiscal Security Threats and Preparation Workshop teaches participants how to better prepare for utility threats

A group of technical and subjectmatter experts met at MMUA headquarters in St. Louis Park on January 21 to guide participants through the ever-changing threat landscape of cyber and physical attacks.

The event was oriented around directly applicable learning that could help in everyday utility life.

The first speaker was Matt Whiting from the American Public Power Association (APPA). His background lies in security and physical security work, making him ideal to present on the current threat landscape. He noted there has been a significant increase in ransomware (malware that keeps you from accessing your device and files) attacks over the past few years, with a lot of foreign adversaries present in this space.

He noted the numerous reasons bad actors commit these crimes, including financial gain, to hurt enemy countries, political activism, and "just because." Matt stated that awareness of ongoing cyber and physical crime is particularly important, and that is where APPA can help. APPA offers listservs to public power utilities that identify current threats and how to prevent them. APPA also has a cybersecurity defense community that allows members to advise APPA on cybersecurity. The organization is also working on cybercrime mutual aid for its members.

The next group of speakers discussed cyber and physical terrorism that is occurring in the United States. Carter Oster from the Minnesota Fusion Center discussed the role of the Center in the current environ-



Chris Watkins, Energy Security Advisor with the Minnesota Department of Commerce, discussed emerging threats to utility systems.

ment. The Fusion Center came about because post-9/11, information sharing was not as good as it could be. Fusion Centers were established across the country, which focus on items such as border issues, regional crime, and terrorism. Minnesota's Fusion Center works on all threats, making it a unique entity. The Minnesota Fusion Center is housed with the Minnesota Bureau of Criminal Apprehension (BCA) and serves as a way for law enforcement, government, public, and private entities to work together to fight crime. Unsurprisingly, drones and artificial intelligence are the "trendiest" threats posing problems for physical and cybersecurity, respectively.

Chris Watkins from the Minnesota Department of Commerce talked about his department's role in fighting crime. The Division of Energy Resources works on planning, preparedness, and response around the state's energy resources, as well as

executing statutory and executive directives around reliability and security issues. With this portfolio, the Division works to understand what it can do and how state government can help to better protect energy resources from cyber and physical crimes. FBI Special Agent Arthur Carlson also spoke about his role in working on these crimes, as well as liaising with the Minnesota Fusion Center.

In the afternoon, the group made its way through a tabletop exercise focusing on a cyber incident at a hometown utility/city. The progress of the crime and its unfolding ramifications for the utility made participants think about things such as:

- When would the events start to be identified as a cybercrime?
- When/ if/ how would utility/ city employees respond?

Attendees discussed the ways in which their utilities/cities



The group works through the tabletop exercise: when do you get the authorities involved?

have advanced in this area, including holding phishing training so that employees don't send money or information to hackers. If phishing is seen, it is reported to their internal information technology teams.

As the tabletop progressed, participants saw a "screen of death" indicating their systems had been hacked, and the criminal group was requesting a ransom to regain the files. At this stage of the event, attendees discussed their continuity plans, communication plans, and who needs to know what.

- Who would need to be in the room at the utility/city?
 Who would be the key staff to communicate/decide?
- How do you inform customers, vendors, or insurance providers?
- What should be shared with other utilities/cities? How can the threat be contained?

Communication was viewed as key with participants, including informing law enforcement. Even with the Minnesota Fusion Center and other assets, it is important to report attempted or successful utility attacks to local, state, and federal partners. If they are aware of an event as it is unfolding, they can be more successful in tracking down the perpetrators.

The event revealed that many of Minnesota's municipal utilities and cities have already implemented many processes and plans to prevent and mitigate cyber and physical risks. By working together and communicating effectively, utilities and cities can keep these threats at bay.

Wind developer completes financing for offshore wind farm to serve New York City

State-owned Norwegian energy company Equinor announced on January 2 that it had secured a financing package of more than \$3 billion for the development of the offshore wind project Empire Wind 1.

The project, which lies 15–30 miles off the southeast coast of Long Island, will have a contracted capacity of 810 megawatts (MW) when it is completed.

Empire Wind 1 will be the first American offshore wind farm to connect into New York City's power grid, with its 54 turbines expected to power about 500,000 homes. Equinor also plans to develop the 1200 MW Empire Wind 2 wind farm nearby.



If all goes according to plan, Empire Wind 1 will start pro-

ducing power in late 2026 and reach full power in 2027.

Study identifies new source of PFAS contamination in wastewater plants

A study published on January 6 in the *Proceedings of the National Academy of Sciences* has found that pharmaceutical waste products from consumer prescription drugs, including many that include per- and polyfluoroalkyl substances (PFAS), are ending up in our nation's wastewater treatment plants.

These chemicals, like most PFAS, are largely untreated by today's wastewater processes and are reentering the drinking water supply at a high rate. The presence of PFAS in prescription drugs give them more resiliency, but that resiliency becomes a negative thing when these



"forever" chemicals enter the environment.

The researchers noted that this finding shows how little is known about the thousands of types of PFAS that exist, as well as the likelihood that even more everyday products are leading to PFAS contamination.

What's happening in St. Paul?

By Kent Sulem

The 2025 legislature was gaveled in at noon, Tuesday, January 14.

At least half of it was. Despite a 33-33 tie brought about by the death of Senator Kari Dziedzic shortly before the start of the session, Senate leaders came together and passed a leadership agreement that called for a shared presidency and co-chairs for every committee containing an equal number of senators from each party. This arrangement allowed the Senate to introduce, hear, and move bills. Although the committees were meeting, there was no flurry of action. In fact, the Senate Energy Committee only heard a small number of bills and tabled two of them, one of which provides for the full repeal of the nuclear moratorium.

The Senate leadership agreement was set to expire once the 34th senator from either party was sworn in. Doron Clark (DFL-Minneapolis) won the special election at the end of January with nearly 91 percent of the vote and was sworn in on February 3. At that time, the body reorganized under DFL control. Sen. Bobby Joe Champion (DFL-Minneapolis) was elected president, and the Senate committee chairs are now DFLers, with Republicans once again becoming ranking minority members.

On the House side, litigation reigned until a power sharing

agreement was finally reached on February 6. The body was tied 67-67 at the end of election night and the presumptive leaders worked hard to find a leadership agreement. In fact, much of what the Senate used was taken from House efforts. Then, the court filings and rulings took over.

First, a district court judge ruled that the winner of District 40B had not lived in the district long enough to qualify to be on the ballot and voided the election. That candidate did not appeal the judge's ruling and thus the House membership fell to a 67-66 Republican majority. The House Republicans then withdrew from negotiating a leadership sharing agreement because they now had a majority of one.

The House DFL objected and said the majority had no authority to act because it lacked a quorum of 68 out of the 134-member full body. Secretary of State Steve Simon agreed, and he thus adjourned the opening meeting for lack of a quorum when all 66 DFL members of the House boycotted the session. House Republicans then attempted to act despite the Secretary's ruling and elected their leadership, appointed committee assignments, and began introducing, hearing, and moving bills.

The DFL caucus and the Secretary of State filed separate suits in the Minnesota Supreme Court seeking to stop House Republicans from taking official actions based on the argument that a quorum of the House is 68 out of 134. House Republicans countered that a quorum should only have to be 67 out of 133 because the body was temporarily reduced in size due to the vacant District 40B seat. They also argued the Secretary of State lacks the authority to tell a legislative body how it has to organize.

In yet another separate action filed by House Republicans, it was argued that the Governor had jumped the gun by calling for the 40B vacancy to be filled by special election on January 28. Republicans held that state statutes provide a 22-day waiting period after the legislature convenes before the governor can schedule a special election—the need for which arose out of a successful ballot contest—and so the proposed January 22 date for the special election was too soon.

The parties ended up splitting victories. The Supreme Court agreed with House Republicans that the Governor had prematurely set the special election in District 40B and ordered that it be voided. Hence, February 5 was the first day Governor Walz was allowed to call for an election, and he did so; that contest will now be held March 11. However, the Court found the DFL was correct in determining a quorum required 68 votes and that this did not change even if there was a temporary reduction in the actual number of elected members. This voided all actions taken by the 67-vote House Republican majority since January 14. The effect of the ruling was that the House had not yet been officially organized, no committees existed, nor did any bills exist. The activity suggesting otherwise was all removed from the House's website.

Despite their victory in court, the DFL members continued to boycott the House. Why? Because without a power-sharing agreement, if even a single DFLer attended a floor session where all 67 Republicans were also in attendance, a quorum would have been reached and the Republicans could have then used their one-seat majority to appoint their leadership regime once again, set committee structures, and otherwise take control of what is likely to be a split chamber. Of greater concern, however, was that the Republicans' temporary advantage would empower them to refuse to seat Rep. Brad Tabke (from the Shakopee area) because they still question the validity of his election due to irregularities related to missing absentee ballots. A district court found in favor of Rep. Tabke after enough voters swore under oath that their ballots were among the missing and that they had voted for Rep. Tabke. The court held it was thus mathematically impossible for his challenger to flip the election. The challenger opted not to appeal the district court's ruling, but each body of

the legislature has the final say on whether a member is to be seated or not.

Finally, on February 6, both parties held press conferences to announce that they had reached a power-sharing agreement and that the refusal to grant quorum was over. At 3:30 pm, the chamber was filled with the 133 members currently elected, a quorum was recognized, and procedural motions were made to officially organize the Chamber pursuant to the terms of the agreement, The power-sharing agreement provides for the Republican leader Lisa Demuth (R-Cold Spring) to be the Speaker of the House for the 2025–26 biennium while former Speaker Melissa Hortman (DFL-Brooklyn Park) will be referred to as the Speaker Emeritus. During the time Republicans hold a oneseat majority due to the District 40B vacancy, Republicans will chair all committees and hold a majority in those committees.

Following the March 11 special election, it is expected that a 67-67 tie will exist in the House. Assuming that occurs, all but one committee, including conference committees, will have an equal number of members from each party, and the committees will be co-chaired. The exception is a new committee with jurisdiction over fraud-related issues. This committee will be chaired by a Republican and will have a 5-3 Republican majority.

 $Continued\ on\ page\ 13$



What's happening in St. Paul?

Continued from page 12

In the agreement, all outstanding lawsuits were dropped, and Rep. Tabke was seated as a member of the House. Although the Republican Party had said it would take action to recall all the absent DFLers, actions regarding possible recall elections are not addressed in the agreement because such actions were brought by the Republican Party and not the Republican Caucus. Thus, this matter could not be resolved by the power-sharing agreement.

Leadership has reached one other agreement between the House and Senate so far this session. The members set an

Easter/Passover Break, which will start at noon on April 11 and last until noon on April 21. With a mandatory adjournment work time to pass a budget as required by state law. This abbreviated timeline and the general tensions hanging over from the first weeks of session

date of May 19, this leaves little doesn't bode well for the passage of very many bills this year.

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Wyoming coal plants reset retirement dates with new integrated resource plan

In early January, Rocky Mountain Power, which is based in Salt Lake City, Utah, announced a new integrated resource plan (IRP) for its coal-burning power plants in the State of Wyoming.

Given the need for baseload power, the new IRP has modified the retirement dates of several of its coal plants.

Some plants are converting to natural gas instead of heading to a planned closure. For example, the Dave Johnston units 1 and 2 in Glenrock, Wyoming are making a 2029 conversion to natural gas instead of closing completely in 2028. Others, like units 3 and 4 at the Jim Bridger plant in Rock Springs, had been scheduled to close as a coal operation in 2039, but now have no retirement date.



On a larger scale, the Wyoming Legislature passed a law in 2020 requiring coal plants to add carbon capture to their facilities by 2030. This has now been changed to 2033. The everchanging balancing act between baseload power, carbon controls, and emerging renewables will likely bring more adjustments to these resource plans in the next few years.

Decorah, Iowa seeks regulatory oversight of IOU's communications in lead-up to municipal referendum

The City of Decorah, Iowa, is heading toward a March 4 referendum vote to decide whether to incorporate a municipal electric utility.

As a result, the City has petitioned the Iowa Utilities Commission (IUC) to provide regulatory oversight of the public communications of Decorah's incumbent power provider, Interstate Power and Light Company (IPL).

The filing asks that the IUC intercede so that IPL's communications regarding the municipalization vote are fair and transparent. Decorah's concerns go back to a previous 2018 referendum on municipalization, which failed by only three votes. IPL

made statements at the time that were viewed by Decorah as swinging the election against municipalization.

This time, city leaders in Decorah are trying to head off the possibility of incorrect, outdated, or misleading information being used by IPL to swing the door shut again against a municipal electric utility.

World's largest pumped storage plant begins operation in China



On December 31, the Fenging **Pumped Storage Power Station** in Hebei Province, China, commenced operation of its final unit.

The power station is the world's largest pumped storage facility of its kind, and it took \$2.6 billion and 11 years to build.

Pumped storage hydropower is a system that uses two water reservoirs at different levels to generate power when needed by pumping water to the upper reservoir to "recharge" the giant water storage reservoir.

The plant features an upper reservoir of over 45 million cubic meters, and a lower reservoir of over 71 million cubic meters.

The plant also has 12 reversible pump-turbine units that each have a capacity of 300 megawatts. They can generate electricity or pump water into the upper reservoir for generation in the future.

China now has 40.56 GW of operational pumped storage capacity as of the end of 2024.

S&P Global issues 2025 public power outlook

S&P Global, a financial information and analytics company, recently released its *US Not-For-Profit Public Power, Electric Cooperative, And Gas Utilities* 2025 Outlook report.

The report listed current and upcoming challenges for the sector, which are likely to continue over the next several years.

One of the biggest challenges S&P sees for the coming year was the continued presence of inflation on the American scene. Inflation, while decreasing, is still causing retail electricity rates to rise faster than the consumer price index (CPI). This is concerning because it makes it harder for public power utilities to raise rates for their customers. Continued inflation also makes it harder to do the other things related to running a business, such as paying employees

and buying equipment.

Another issue facing the sector is regulatory uncertainty. During the Biden Administration, many utilities used the clean energy funding made available by the Infrastructure Investment and Jobs Act. With the election of President Donald Trump, federal requirements may return to earlier emissions standards but also provide less funding for clean energy, even while state or local mandates remain in place.

As recently emphasized at MMUA's Cyber and Fiscal Security Threats and Preparation meeting (see page 12), cyber and physical security threats are an ongoing problem for the industry. Foreign and domestic actors are happy to exploit physical or cyber security loopholes to impact the domestic electric utility industry.

The size of utilities is another area that S&P is watching.

With larger investments to be made, smaller investor-owned utilities may struggle to allocate costs and keep their profit margins high. Another concern is resource adequacy. If electric supplies are not reliable, that can make customers less likely to pay higher prices for retail electricity.

If retail electricity prices stabilize vis-a-vis inflation, many of the issues that S&P is watching are likely to sort themselves out. However, electricity rate inflation has been at 7.7 percent during the past 35 months ending November 30, 2024. That compares unfavorably to a 5.1 percent rate of inflation overall. S&P indicates that stability in both governance and markets will give public power the best tools for addressing these challenges.

Nuclear operator Constellation secures more than \$1 billion in clean power contracts from the federal government

The General Services Administration (GSA), a government agency that helps manage and support other federal government agencies, has entered into a power purchase contract with nuclear operator Constellation valued at more than \$1 billion.

The deal will supply power from Constellation's fleet of 21 nuclear power plants to more than 13 government agencies through the GSA over 10 years.

The purchase is the biggest energy transaction in the history of GSA. As with many other customers in the last few years, the government sees the purchase as providing clean energy for its operations at an affordable price.



FCC net neutrality rules struck down by US Court of Appeals



On January 2, the US Court of Appeals for the Sixth Circuit in Cincinnati struck down the Federal Communications Commission's (FCC) net neutrality rules.

Net neutrality focuses on providing equal online access to all customers, without steering their browsing by throttling their speeds based on their provider or the websites they use. The court ruled the FCC did not have the authority to reinstate the rules by itself.

The FCC had previously re-

instated net neutrality rules in 2024 when it classified broadband as a public utility. Public utility rules allow for more government regulation of the services. The ruling was largely an aftereffect from the Supreme Court's dismantling of the Chevron defense, which allowed more administrative power for government agencies.

Now, the next best chance for the reinstatement of net neutrality lies with the US Congress. Otherwise, the longtime effort to provide net neutrality on broadband networks may be ending.





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The United Kingdom reached 58 percent carbon-free electricity generation in 2024

Data gathered by Carbon Brief, a UK based website focusing on energy and climate, has found the UK reached 58 percent carbon-free power generation in 2024, with 45 percent coming from renewables and 13 percent coming from nuclear power.

Since the phaseout of coal in the UK in September of 2024, the nation has depended on other fossil fuels for a portion of its energy mix. Gas-fired power led all generation resources by providing 28 percent of the UK's electricity in 2024.

The UK government is aiming to reach zero-carbon electricity generation by 2030. While these strong numbers are moving the country in the right direction, the UK still has a few hurdles to cross to meet this ambitious target. The UK government's plan includes significantly expanding the country's grid and speeding up the connection process, among other strategies.

Ukraine stops flow of Russian natural gas through pipeline upon expiration of contract

On January 1, Ukraine stopped the flow of Russian natural gas through pipelines crossing the country.

Pipeline agreements, which had allowed gas from Russia to reach several European countries, were not extended by Ukraine.

In a statement, Ukrainian Energy Minister Herman Galushchenko said, "We stopped the transit of Russian gas. This is a historic event. Russia is losing markets, it will suffer financial losses."

The Russian gas company



Gazprom acknowledged that the pipelines has been closed to Russian gas. The previous agreement between Ukraine and Russia had allowed 40 billion cubic meters of gas to travel through Ukraine annually.









Tact, progress, and being nice

Continued from page 3

will inevitably occur if we join team A or agree that team B is full of bad people who want to do bad things. In my experience, an extremely high percentage of people motivated to public service just want to make things better. Some believe that team A's vision is the preferred path, and some believe that team B's approach is better.

As municipal utilities, we must educate, elucidate, and elevate the discussion to get the best results for our utilities today while keeping the foundation of support firm for tomorrow. We cannot control the vicissitudes of politics, but we don't have to. We just have to tell our story well and ride the waves as control swings from team A to team B and back again.

I have been described at times as a "cockeyed realist." Generally, I am convinced that things will always turn out okay in the long run, that progress will occur, and that through the heat of difficulties, humans will forge a better way forward. I also believe things will often be messy, and casualties of body and spirit will occur on the journey.

For MMUA and its municipal members, it's wisest to move the ball forward while being careful not to become collateral damage in the larger political machinations of our time. The French ethicist Joseph Joubert was right when he said of situations like these, "The aim of an argument ... should not be victory, but progress."

In these times, "victory" may be fleeting anyway. Behaving tactfully, refusing to disparage anyone, and being known as unfailingly effective advocates for municipal utilities in front of all comers is the real win. It's also a nice way to show up in the world. Your mom will be proud.

Jimmy Carter's diverse energy legacy

Former President Jimmy Carter's death on December 29, 2024, at the age of 100 brought about much discussion of his legacy as president and post-presidential contributions including his work to fight disease, seek peace in the Middle East, support democracies around the world, and build houses through Habitat for Humanity.

One area that has been largely overlooked is how he grappled with and influenced American energy policy during his time in office. His presidency was brought to an end partially due to the effects of the 1979 oil crisis and resulting inflation, which led to a doubling of the price of crude oil in a year. His inability to deal with this crisis, which affected Americans' everyday lives at the time, stands in stark contrast to his energy achievements that resonate beyond his presidency.

One of Carter's most significant accomplishments was the creation of the Department of Energy (DOE) in 1977, which was brought about through the Department of Energy Organization Act. The new DOE brought together many agencies that had existed previously, including the Hoover-era Federal Power Commission and the 1974 Federal Energy Administration. This effort sought to promote energy efficiency, conservation, and research at a time when America had already begun to feel the pinch from energy embargoes earlier in the decade.

Carter then proceeded to shepherd an energy reform bill through Congress, which he viewed as an achievement of great importance. The 1978 National Energy Act helped to deregulate the natural gas market and encouraged energy conservation and renewable energy. It ultimately boosted coal and oil as well.

The 1980 Energy Security Act put America on its first steps toward renewables by emphasizing the national security implications of being dependent on foreign energy sources. The Act consisted of six parts, including efforts around synthetic fuels, biomass, renewable energy, solar energy, geothermal energy, and ocean thermal energy.

Upon signing the bill, Carter remarked, "This is a proud day for America. The keystone of a national energy policy is finally being put into place."

Carter attempted to make energy use personal to Americans, by emphasizing his own personal choice to "turn down the thermostat" at the White House. He earmarked \$1 billion in funds to work on renewable energy with the Tennessee Valley Authority and installed 32 solar panels on the White House roof to emphasize domestic energy production. Today, some of the surviving panels are on display at the National Museum of American History and at the Carter Center.

The 1979 oil crisis badly damaged Carter's aspirations for a

second term, as the government considered gasoline rationing, and long lines were seen at service stations. Carter's "Crisis of Confidence" speech was poorly received by the American people, as he seemed to point toward confidence and American unity as the solutions for the energy crisis, while most Americans sought more tangible answers.

Carter's time in office and his popularity were eroded by his failure to adequately address American energy issues as they unfolded. Paradoxically, his work also set in motion the development of America's presence as

an energy powerhouse today. Everything from fracking and biomass to solar power and gas deregulation has its roots in the things Carter worked with Congress to enact.

The creation of federally supported energy research and development has had far reaching impacts on the American economy and American life. While Carter was largely viewed as an "energy failure" at the time, his work with Congress seems strikingly prescient now as we continue to seek cheap, reliable domestic energy some four decades after he left office.





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 $\textbf{Austin Utilities} \ \mathrm{repaired} \ a \ \mathrm{water}$ main break on January 26. The water was turned off and repairs were completed in about two hours.

On January 9, Paul Bunyan Communications announced that it had completed its all-fiber optic network to Buhl.



On January 21, the Blue Earth City Council had its last meeting in the building that has housed Blue Earth City Hall for many years. City Hall staff have already moved into its new offices, which is the remodeled former Wells Fargo Bank. It was also announced at the meeting that Faribault County has purchased the former city hall building.

Food processors and manufacturers in Caledonia, Detroit Lakes, Pierz, and Rushford are among the grantees of a federal program through the United States Department of Agriculture designed to build resiliency in food supply chains and strengthen local and regional food systems. The total grant amount in Minnesota is \$9.5 million.



The Ely Utilities Commission

offered to thaw private waterlines for local residents as time was available. The minimum charge for the service is \$100, with each additional hour or portion of an hour assessed at another \$100.



Cold weather on January 19 caused some parts of **Grand Marais** to experience power outages due to excessive load on the system.



Owatonna Public Utilities hosted a Promoter Summit on January 21, which was put on by the Owatonna Area Chamber of Commerce and Tourism. The goal of the summit is to get local citizens talking about the great reasons for visiting Owatonna. The summit offered a recap of local tourism from last year,



as well as looking at 2025's activities.

On January 21, Spring Grove welcomed new mayor Bryan Wilhelmson and new council member Morgan Buckland at the city council's first meeting of the year.



On December 28, a vehicle drove through a fence in Wells where the Street Department has its shop. Damage occurred to numerous pieces of city property,

including a utility trailer owned by Wells Public Utilities. Fortunately, the driver's insurance company will cover the damage.

Willmar Municipal Utilities 🌣

On January 13, new Willmar **Municipal Utilities** General Manager Jeron Smith was introduced at the Willmar City Council meeting.



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In early January, Poland took a step toward building the country's first nuclear power plant by approving funding of up to \$14.7 billion for the project.

Indonesia's National Energy Council has proposed 29 sites across the country for the possible development of nuclear power plants.

On January 12, utility workers in Washington, North Carolina, spent six hours replacing a broken transmission pole that had caught fire and broken in half. Crews worked to keep the line active while they replaced the pole. City officials commended the utility team for a job well done.



The City of St. Petersburg, Florida has spent \$600,000 to buy an AquaFence, a flood barrier that will protect a critical city lift station from future flooding. The city bought the AquaFence because it had to take two sewer treatment plants offline before Hurricane Milton in October 2024 and wanted to create more readiness for the future.

Chinese scientists have announced they plan to build a one-kilometer solar power station that will beam solar energy back to Earth via microwaves. The scientists estimate that the energy collected in one year would be equivalent to the total amount of oil that can be extracted from the Earth.

A report issued on January 15 by the Lousiana Public Service Commission noted Louisiana's residents pay much higher power bills than the national average and have one of the least reliable power grids in the country.

On January 15, Alberta's Minister of Energy and Minerals Brian Jean lifted a ban on coal exploration in the Canadian Rockies.

On January 20, Indonesia's energy minister said that the country would look to more

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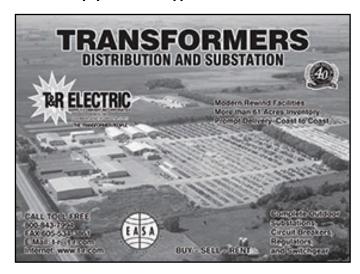


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private investment to fund the country's planned 71-gigawatt electricity expansion over the next 10 years.

The Wall Street Journal reported on January 21 that major oil companies are considering investments in the electricity industry due to the growth of artificial intelligence and the coming growth in electricity demand.

Several electric utilities are asking the federal government to pass the "Fix Our Forests Act," which would allow utilities to perform vegetation management on federal lands in an effort to prevent wildfires. On January 23, a version of the bill passed in the US House by a vote of 279–141.

The State of Massachusetts reported on January 24 that wastewater discharges and combined sewer overflows are increasingly impacting shellfish harvesting across the state.

The United States Energy Information Administration reported on January 24 that new solar plants are expected to support most US electrical generation growth over the next two years.

Fortune reported on January 27 that utilities are "crying foul" because tech giants want to plug their data centers directly into power plants, bypassing the grid and thus evading costs for its maintenance.

Leaders from more than half of Africa's countries gathered in Dar es Salaam, Tanzania in late January to work toward a massive expansion of Africa's electrical infrastructure. The World Bank and African Development Bank have pledged at least \$35 billion to expand electricity service across the continent. Approximately half of the money will go toward the building of solar-powered minigrids that will each serve a single community.



On January 28, Madison Gas and Electric announced that its Fitchburg solar project had begun operation. The 6-megawatt installation generates enough electricity to provide power to about 1,400 homes. The facility is located in Fitchburg, Wisconsin, which is just south of the City of Madison.

President Trump issues executive orders on energy

On January 20, 2025, President Trump signed several executive orders (EOs) relating directly or indirectly to American energy.

The first EO, Declaring a National Energy Emergency, declared an emergency under the aegis of the National Emergencies Act and called on federal agencies to use emergency powers to acquire and use domestic energy resources. Trump issued the EO saying the US energy supply is inadequate and needs to be enlarged.

A second EO, called Unleashing American Energy, requires agencies to analyze and address existing regulations that are a barrier to domestic energy production. Clean energy was excluded from the text of the EO. The EO, however, seeks to undo several EOs issued by President Biden, and freezes funding for the Inflation Reduction Act (IRA).

A separate memorandum ordered the cessation of offshore wind leasing in all areas within the Offshore Continental Shelf (OCS). The order temporarily prevents consideration of new or renewed wind leasing within the OCS. However, the order will not have any effect on existing offshore wind leases. Trump's order also put into place a temporary cessation and review of federal wind leasing and permitting practices for onshore and offshore wind. The text of the order noted the Administration

is concerned with environmental reviews done in previous years and wants an assessment of this process.

A third EO, Putting America First in International Environmental Agreements, withdraws the US from the Paris Climate Accords. A fourth EO, Unleashing Alaska's Extraordinary Resource Potential, is designed to use Alaska's energy resources to their full potential, irrespective of previous regulations and environmental laws.

Perhaps the most confusing EO was never an actual EO but instead was a memo from the Office of Management and Budget (OMB) issued Monday, January 27. In it, federal agencies were told that they

had to identify and review all assistance programs and supporting activities for consistency with the issued EOs, and that spending was to be temporarily halted while this review was performed. This was widely interpreted as a freezing of all federal expenditures, even though some programs were allegedly meant to be exempt from the pause. Some users even found themselves locked out of the computer programs used to transfer federal funds to the intended recipients. The chaos and uncertainty created by this memo resulted in its recission, but efforts to clarify what was intended to be covered only created more confusion.

On Tuesday, January 28, the

first federal judge issued a stay on the effort to freeze expenditures, and at least one other court has since also enjoined such efforts. The initial argument made by opponents of the freeze is that, at least in its perceived scope, great harm will be done to people dependent on programs funded with federal dollars. The second argument is that the President cannot unilaterally refuse to expend funds appropriated by Congress. This argument is based on both a federal law and the separation of powers doctrine.

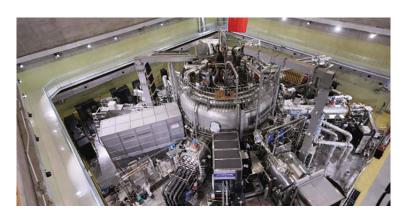
MMUA will track both current and future litigation over the use of EOs, as well as the impact they may have on municipal utilities.

Chinese fusion reactor reaches new record, maintaining reaction for 18 minutes

On January 20, the Experimental Advanced Superconducting Tokamak (EAST) nuclear fusion reactor in Hefei, China, maintained a plasma operation for 1,066 seconds—nearly 18 minutes.

By doing so, the reactor broke its own 2023 world record of 403 seconds, or almost seven minutes.

An operation time of 1,000 seconds is acknowledged by the scientific community as a significant step forward in fusion research. This step takes the world closer to commercial



fusion, even though operation for prolonged periods of time has not yet occurred.

EAST has been in operation since 2006. Since that time has

served as a test bed for Chinese and international researchers conducting experiments in the field of nuclear fusion.

Floating nuclear power plants in design for American ports

On January 29, the company CORE POWER enlisted the firm Glosten to help finalize a new floating nuclear power plant (FNPP) design that would help power seaports across the United States.

CORE POWER is a maritime and technology innovation company creating markets for maritime-related nuclear energy, while Glosten is a naval architecture and marine engineering firm.

CORE POWER'S FNPP idea includes a barge-located nuclear power plant that will

integrate with the electrical grid. The plant will provide power to ships, port equipment, and vehicles. Each FNPP can generate 175 Gigawatt-hours of carbon-free power per year.

The company engaged with Glosten to create the operational concept, which describes how the FNPPs will function in ports where they are placed. Glosten will also develop the floating facility for the reactor.

According to CORE POWER'S CEO, the plants could eventually be mass-produced and put together in shipyards.

Upcoming events

Substation School

March 11-13 Elk River

MMUA is pleased to partner with Minnesota Rural Electric Association (MREA) on the 2025 Substation School. Having the best distribution system in the world won't matter if your substation isn't operating properly. Recognizing that, MMUA presents a Substation School annually. This school offers instruction on a variety of important topics that can benefit anyone working in/on your substations. In addition to expert-led classroom instruction, attendees will be able to tour a substation and a solar field with battery storage. Check out the events page on the MMUA website for additional details.

Electrical Skill Training for Water/Wastewater Operators

March 19-20 MMUA Training Center

If you work in the water/wastewater department, you don't want to miss this once-a-year opportunity for training to further develop your skills and increase your competency. Understanding what electrical work can and cannot be done by non-electrician personnel can present a challenge. Recognizing your limitations and honing your skills is the key to ensuring everyone's safety. Check out the events page on the MMUA website for additional details

Generation School

April 15–17 Glencoe

This school offers hands-on training on Fairbanks Morse, Cooper/Enterprise, and Caterpillar engine sets. The training is appropriate for well-seasoned operators or for those just starting in the power plant. Check out the events page on the MMUA website for additional details.

For more information, see the Events Calendar at www.mmua.org or call MMUA at 763-551-1230.