

Willmar Municipal Utilities modernizing for the future

Willmar Municipal Utilities (WMU) is planning for the future with a heavily modernized water treatment plant on the way, refurbished wind turbines, a brand-new transmission upgrade, and much more.

MMUA spoke to Alan Neer, John Harren, Kevin Marti, Jeron Smith, Ed Zurn, and Janell Johnson to learn about all the things that WMU has been up to.

Water system upgrades on the horizon. The process of planning for the modernizing and expansion of the Northeast Water Treatment Plant has been a long one. "In 2014, we had a pilot plant to determine what kind of process we were going to use for the retrofitted plant," says Alan Neer, Water System Supervisor at WMU. "We wanted to stay simple but also take care of things water-quality wise."

To do this, they ran the plant for several years and collected data. At the same time, the usable capacity of the plant began to move upward from 80 percent toward 90 percent during peak



WMU's wind turbine spins against a beautiful blue sky.

summer months. "That's when you reach crunch time," Alan remarks.

Based on the data, Willmar's modernization and expansion of its water plant will focus on water quality and gaining capacity. When improvements are complete, an increase of 25 percent will be attained as the plant goes from 2,000 gallons per minute (GPM) to 2,500 GPM. "Water quality-wise, we are trying to convert to a biological water quality unit; this will help with iron and manganese removal. It will also help control our chlorine," says Alan.

Water quality improvements will be important at the new

Continued on page 4

Virtual Legislative Conference shares important information to strengthen municipal utilities

A multiday snow, ice, and rain event surrounding the days of the planned MMUA Legislative Conference on March 26–27 saw MMUA, with the advice of the Government Relations Advisory Group, cancel the in-person conference.

The change was announced

and suggested messaging for MMUA members who would be contacting their legislative representatives. The key messages included:

-Hometown utilities are reliable, affordable, and sustainable. Municipal utilities provide excellent services responsibly and reliably,

MMUA fights for favorable carbon-free by 2040 rules

By Kent Sulem

On Thursday, March 14, 2024, the MMUA government relations team attended the latest Minnesota Public Utilities Commission (MPUC) hearing on Docket 23-151.

This is the docket being used to determine how the 2023 legislation modifying the renewable energy standards and imposing a new carbon-free by recognized as a registered agency in the Secretary of State's records. Minnesota Power and a joint association of environmental groups opposed recognizing NEMMPA as a power agency for the purposes of the 2023 legislation.

As a power agency, NEMMPA would be included in the definition of an electric utility under the 2023 legislation. However, Periodicals Postage PAID at Twin Cities, MN



7 Municipal broadband on the upswing



10 Substation School

March 22.

The storm arrived as advertised, dumping several inches of snow on much of the state over multiple days. Given the circumstances, MMUA shifted to a two-day virtual Legislative Conference with speakers and information on March 26 and 27. Some 45 people (including MMUA staff) attended day one of the conference and 46 people attended on day two.

MMUA's Legislative Priorities

Day one covered information on MMUA's legislative priorities

directly to their communities.

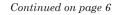
-We are Main Street not Wall Street. The municipal utility model keeps profits within the community.

-Municipal utilities are different than IOUs and cooperatives. While we share many objectives with our counterparts, municipal utilities have different needs and capabilities than other utility companies—one size does not fit all.

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2040 standard will be interpreted and enforced. The hearing focused on the role joint power agencies will play in the process, and whether the Northeast Minnesota Municipal Power Agency (NEMMPA) should be recognized as a power agency because they do not directly sell power to their members. Director of Government

Relations and Senior Counsel Kent Sulem testified in support of recognizing NEMMPA based on a clear reading of the statutes and the fact that NEMMPA is



they would have no electric sales to report. MMUA pointed out the sales would be reported by the wholesale provider, Minnesota Power, in all but two cases, and that any attempt to require action by those two would technically require legislative action and not an order from the MPUC.

Following all testimony and commissioner deliberations, a motion was made in favor of MMUA's position. The commissioners expressed concern about the gap created by the drafting



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American solar capacity projected to grow 38 percent in 2024





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Interconnection Corner–Uniform Contract

Part 3 of a series

By Bill Black

A utility and a customer lock in their respective rights and obligations regarding interconnected renewable generating or energy storage facilities using the statewide uniform contract for cogeneration and small power production.

The uniform contract template was established as part of rules enacted by the Minnesota Public Utilities Commission (MPUC) and is used for interconnecting facilities of less than 40 kilowatts capacity. MMUA and MREA developed model rules and a contract form consistent with the MPUC's version for adoption by the governing bodies of municipal and cooperative utilities. Utilities must provide the contract form within five business days following approval of a customer's interconnection application.

Utilities should read through the contract with the customer to fill in blanks and ensure understanding. The customer must select a compensation rate for excess generation. This is almost always the average retail utility energy rate, calculated annually by the utility under the state's formula. The parties must also indicate how the customer will pay for the interconnection costs of the utility, if any, and write in additional information.

The uniform contract must be signed by the customer, not a

developer or installer. It should be signed and returned to the utility no later than five days before scheduled testing and inspection. The utility should sign and send the customer a final copy. If the facility becomes the property of a new owner, the utility and new customer must execute a new contract.

MMUA can answer most questions member utilities may have about the contract's terms, although city attorneys should become familiar with them.

The uniform contract template can be found in most municipal utilities' rules governing interconnection and in the M-MIP. See the full M-MIP at mmua.org.

Three western Minnesota counties unite to form West Central Regional Water District

these counties.

Significant funding has been

provided to start the process,

with the region's federal dele-

gation getting \$3.5 million in

funding, state representatives

bonding funds, and Polk County

aiming to get \$9.5 million in

On March 22, Clay, Norman, and Polk Counties began the judicial process of creating the new West Central Regional Water District in Clay County Court.

This is the first step in creating a district that will provide safe and clean drinking water to the residents of the three counties.

Clay, Norman, and Polk counties currently exceed the Environmental Protection Agency's maximum contaminant level of 10 micrograms per liter for arsenic in private wells. The new water district will provide water that is clean, safe, and sustainable to residents of



investing nearly \$600,000 in the effort.

Now that papers have been filed, the district will start the formation process to establish the organization, while receiving help and input from legislators and citizens.

Shelly Dau joins MMUA

Shelly Dau has joined MMUA as its new Organizational Development and Human Resources Manager.

In this role, she will develop new employee training programs



Manager at Sightpath Medical, Shelly was primarily responsible for managing the employee benefit program and the leadership/ employee development efforts. Shelly is excited about bringing these skills to MMUA and working with its members. Shelly has been married to her husband, Ned, for 33 years and has two children, Maggie, 27, and Alex, 25. She also has a 9-year-old Hungarian Vizsla named Nora. In her free time, Shelly enjoys cooking, gardening, walking, and cheering on the Iowa Hawkeyes and Minnesota Vikings. She is excited to help MMUA's employees learn and grow so they can reach their full potential and achieve their goals. Shelly is also looking forward to working with and serving MMUA's members. Welcome to MMUA, Shelly!

Brad Levasseur, blevasseur@mmua.org

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that will be made available to members, provide guidance for member utilities on human resource topics, help to manage organizational change, and carry out routine human resources functions at MMUA.

Shelly is a native of Sibley, Iowa, a municipal utility town in the northwest part of the state. She is a graduate of Briar Cliff University in Sioux City, Iowa, where she double majored in business and psychology. She had roles at Citibank and the Principal Financial Group before returning to Drake University in Des Moines, Iowa, where

she earned a master's degree in human resources.

While earning her master's degree, Shelly continued to work at the Principal until she accepted a new role at Minnesota Life (now Securian) in St. Paul, Minnesota. Shelly then spent several years owning and operating her own interior design business. In her most recent role as an Employee Development

Lack of appreciation: overcoming the sting

The greatest humiliation in life is to work hard on something from which you expect great appreciation, and then fail to get it. —E.W. Howe

There is a lot of irony in that

quote. Edgar Watson Howe was a prolific writer of books and an American publisher of periodicals. While mostly forgotten today, in the late 19th and early 20th centuries, you couldn't have missed him. He was a big deal.

Howe once had his magazine singled out as the best among 25,000 others, and he was a popular columnist. Yet his novels were panned by critics. He wrote a lot of things nobody read, leading to his comment about feeling humiliated. I can only hope that being dead for the past 85 years has helped with that.

But what about people who are alive that feel unappreciated? I don't care how tough you are, it burns when you give your best energies to something and come

away feeling unnoticed or disrespected for your trouble. This is ironic, too, for those of

us in the municipal utility world, considering all the planned gratitude coming our way in April. National Lineworker Appreciation Day is on the 18th, and the entire week of April 21–27 recognizes volunteers and administrative professionals. April 28 is both Workers Memorial Day and National Superhero Day which, to me, means it is a day to celebrate everyone who works in a municipal utility.

Unfortunately, when you're feeling a lack of appreciation, these things are rarely solved by one morning's doughnuts or a nice certificate.

Not feeling appreciated is a uniquely human experience. I never met a cow in the barnyard that got its feelings hurt because milk drinkers aren't properly grateful. I doubt you would find a lion on safari that lost its temper because being king of the jungle is a thankless job.

On the other hand, we homo sapiens experience a lack of regard for our efforts with varying degrees of negative emotion. When others—peers, a boss, contract negotiators, or a group of ratepayers—seem to do more Generally speaking, we are most upset when:

- Our investment in the relationship or situation is high,
- Our efforts are intense; they are the "best of us," and
- Our exertions are met with passive lack of notice over time, or we receive active maybe even off-base—criticism.

In short, the more you care about the people and the situation, the more deeply you care about whether you are appreciated.

I've been dissed—now what? No

matter how emotionally mature or tough-minded you are, if you feel disrespected or hurt by a lack of appreciation, you're going to react.

What that reaction looks like depends on whether it is a onetime missed opportunity or a long pattern of appreciation deficits.

Some folks walk away. Others try harder to shine. Some become "control freaks," imagining if they can just get things arranged as they wish, their sought-after appreciation will be forthcoming. Others blow a fuse, get resentful or critical, and become hard to be around.

Over time, some individuals and teams figure they won't get noticed or treated fairly anyway, so they reduce their efforts and only work as hard as necessary to get by. Others stir the pot, spreading discontentment to others. A few act up and test the system, substituting negative attention or a "bleep it" attitude for the positive experience of being appreciated.

Nobody wins when that happens.

These dynamics tend to produce bad outcomes – both for the person or team feeling unappreciated, and for those affected by that behavior. So here are some things to try if you are feeling unappreciated.

1. *Evaluate your expectations.* Wanting appreciation is normal; expecting it to come in the exact form and frequency you prefer may set you up for disappointment. This is true at work and everywhere else in life.

Back when I did marriage counseling, I saw it a lot. A couple would come on the brink of divorce because at the end of wanted to change oil in the cars. They both felt unappreciated, and there was a mismatch in expectations about what appreciation even looks like.

This can happen on the job too. A worker or team can feel they aren't getting appreciation because it isn't coming in the form they want it. The rest of this article touches on what to do about that.

The one thing the ideas to come can't do anything about is the lack of appreciation or unfair rap utility leaders sometimes get. At least some of that is inherent in what a leader signs up for.

Recently, Grand Rapids Public Utilities experienced difficult days because cases of Legionnaire's disease seemed to be tied to the municipal water system. While the truth turns out to be far more nuanced (come to the Summer Conference to learn more), for weeks utility leaders and local commissioners were in the hot seat. Appreciation for their years of hard work was in short supply. Instead, there were long hours, hard questions, and not a chorus of kum ba yah to be heard. It was rough on those in charge, but they knew it came with the territory.

2. Check your perceptions and do some research. Is your work as good as you think it is? Are you the only person or team not being recognized, or is the lack of appreciation common in your workplace or community?

Sometimes individuals are doing good work, but they are not a good fit for the culture they are in. Karen Dillon, author of *HBR Guide to Office Politics* suggests a strategy for dealing with these sorts of disconnects at work.

When you're feeling unappreciated, she says you should, "Ask yourself, "Was my work extraordinary? Was it over and above what my peers typically do?" And importantly, "If I had to ask for credit for it [in this workplace], would I sound like a jerk?" If you're unsure, she suggests seeking feedback from a respected peer.

If you find out most other people wouldn't expect the type or amount of appreciation you want, this may not be the right utility or community for you. If

From My Desk to Yours

Karleen Kos MMUA CEO

you find out things are pretty much the same for people in your job at other utilities too, you have a decision to make: change yourself or change your career. However, if you learn that everyone else you poll would like more appreciation too, then it's a cultural issue that will take time to change with some of the steps below.

3. Come to terms with unfairness. We work in the service of our ratepayers and our coworkers. Sometimes they don't understand our work; sometimes they are not grateful. Sometimes they believe things that are not true, and they blame us for things outside our control. The more visible your position, the more likely this is to happen.

You cannot eliminate unfairness, but you can neutralize it. Its superpower is making you feel picked on, angry, unappreciated, and stuck in the middle of an injustice.

That power evaporates considerably when you see the unfairness isn't personal. Like the big, green, fiery-head version of the Wizard of Oz is reduced to a little man behind a curtain, knowing the unfairness is not about you can right-size the situation. You still won't like some of the things angry ratepayers and temperamental people say. Labor negotiations are still going to be fraught with challenges. But if you can let the air out of the unfairness tires by not personalizing it, you have a better chance of finding a workable solution and going forward positively.

4. *Communicate*. People express themselves differently. In the marriage scenario I mentioned earlier, one of the partners thought appreciation had to come in the form of time togeth-



the oil—was a great way to say, "I am giving back to you." Neither of them was good at listening or learning to interpret cues from the other.

These things happen at work too. A supervisor can "appreciate" someone by giving them another important assignment. To them, the trust that goes with the new project is evidence of gratitude and respect. The worker, still waiting for a kind word about the last effort, may experience the new assignment as evidence they are being used rather than appreciated.

Personality styles and generational differences can compound this. The knowledgeable but crusty Boomer with an "assume I appreciate you unless I tell you otherwise" approach and the enterprising Millennial with new ideas and a desire for frequent feedback may each feel unappreciated by the other.

Nobody is 100 percent right in these matters, and no one is 100 percent wrong. The key is recognizing a mismatch and figuring out what to do differently rather than getting more resentful and toxic.

You can try to sit down and talk about it. You can keep it simple and just get out of your own way by letting go of what THEY aren't doing right and decide what YOU are going to do differently to communicate about how things are going. You can involve a third party, such as a peer, someone in human resources, someone from the union, or—in the case of labor negotiations—a formal mediator.

No matter what, DO SOME-THING. You can act your way into a better path forward, you cannot get anywhere waiting for the other person or group to change.

criticizing than noticing accomplishments, we don't like it.

them to find ways to reduce costs.

a hard week, one person wanted a date night and the other

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er. The other thought doing a task for the other—changing



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5. Be the change you want to see. Gandhi is often credited with this simple idea. It may sound corny, but it is very potent wisdom. When humans turn their attention away from the appreciation they are not getting—whether that is at work, a volunteer gig, or their families—and instead focus on giving it, amazing things happen.

Notice what other people are doing well. Call it out. Say "thank you" both privately and

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Willmar Municipal Utilities

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plant. "We have excess ammonia at the [current] plant, and that affects how much chlorine is leaving the plant. With these pieces, we are hoping to get a higher-quality product out into distribution."

What about supply chain issues and their impact on improvements at the new plant? With that too, it has been a story of patience and staying diligent. Supply chain snags have affected the project throughout the process.

"Steel was involved in just about everything at first, including piping and structure," says Alan.

General Manager John Harren adds, "[At this point], we are expecting our electrical components and control panels will not arrive until August of 2024. We had hoped for completion right around now, but we will have to wait until 2025 for the opening of the new plant."

Willmar's wind generation is back online. The utility's two wind turbines are cranking again after 2023 brought some bumps in the road. "We had several problems last year, and so we had breakers out on both units. We were able to find a company that could rebuild our breakers and get them going. We also had problems with electronic components and leaks that destroyed our production last year," says Kevin Marti, Supervisor of Facilities and Maintenance at WMU.

With a 20-year lifespan on the then 14-year-old turbines, this comes with the territory. The refurbishment has paid off in spades, however, as the turbines have operated strongly throughout 2024. As with other things, as long as parts can be found and no major components fail, the wind turbines can keep spinning for many years to come. "You just have to be creative," says Kevin.

Transmission projects in the heartland. Willmar recently finished a big transmission upgrade within the Midcontinent Independent System Operator (MISO). "We just wrapped it up in November of 2023," reports Jeron Smith, Staff Electrical Engineer at WMU. "[It was getting to the point that] if certain pieces of equipment [were to] go out of service for whatever reason, there would be concerns with transmission stability, MISO identified that the transmission system needed to be expanded." Willmar has two sources of transmission into town, with four taps out. "Another upcoming transmission expansion will enhance the reliability of one of the taps leaving Willmar," says Jeron. "That tap currently serves two substations: we plan to install a new breaker station and transmission line to provide more reliable transmission service."



Construction is underway at the Northeast Water Treatment Plant.

vear process of converting all the city's street lighting to light emitting diodes (LEDs). "About 3,600 lights were converted over, if you count all of the types of lights that are in the city," reports Ed Zurn, Line Distribution

Supervisor at WMU. The new lights have not only provided power savings, but more flexibility and improvement to the Willmar cityscape. "Our illumination into the night skies has changed a lot. You used to be able to see



Willmar's decorative downtown LED streetlights have been installed over the past two years

Willmar from far away, and the usage is way down on the lights." Willmar citizens have enjoyed the flexibility of the new street lighting. "Some of the LED lights are programmable, so our residential lights are programmed at midnight to dim down to about 65 percent of the 85 percent normal setting. They give people less usage," says Ed.

The "gift" that keeps giving. Perfluoroalkyl and polyfluoroalkyl

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A new look on the streets. Willmar also recently completed another large project-the seven-



Willmar Municipal Utilities

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The interior of the Northeast Water Treatment Plant during construction.

substances (PFAS) have been in the news frequently lately, and Willmar has been staying ahead of the curve on class-action lawsuits that are emerging around PFAS contamination. At this time, Willmar is not joining the lawsuit, so that it can protect the city's interests down the road.

"We had reviewed our test results from our last testing round, and our southwest well does have some very minor traces of PFAS," Alan reports. "These are in the parts per trillion...the technology has finally reached the point where they can be detected."

Willmar's PFAS contamination seems minor as of now, but emerging technology to detect lower amounts of PFAS could change that assessment in the future. So not joining the class action suits keeps Willmar's options open. "If we joined the class action [now], we would give up any right to attempt to get help in the future...we wanted to protect ourselves for 10–20 years down the road." No one expects that PFAS problems are going away any time soon.

Inside the office, there are changes too. Willmar Municipal Utilities has also been working on a large-scale software conversion over the last two years. "In August 2023, we switched over our accounting, payroll, and project management software," says Janell Johnson, Director of Administration at WMU. "We have [previously] postponed our go-live for utility billing, but on April 1, we are going to go live with that. ... We will be using Tyler Incode 10."

On the accounting side of WMU, the office has moved to fund accounting-based software. "We wanted to move to that," said Janell. "So far, it has been absolutely wonderful!"

A lot of wonderful things have been happening at Willmar Municipal Utilities recently, and it is all because of the power of the community, the people who work there, and the city's dedication to the utility. Well done, Willmar!

Anoka Municipal Utilities reaches out to help the community become healthier, more energy efficient

By Paula Houts, Anoka Municipal Utilities

Anoka Municipal Utilities (AMU) partnered with Clean Energy Resource Teams (CERTs) and ACBC Food Shelf in Anoka on Friday, March 8 for an energy efficiency outreach event.

Residents received a reusable AMU bag with energy-saving items that included LED light bulbs, window insulation kits, low-flow shower heads, outlet gaskets, and an Energy Guide for both renters and homeowners. AMU employees answered questions and handed out applications for energy assistance, weatherization assistance, and conservation improvement programs. They also received a list of phone numbers for residents to call for help with their energy needs, whether the needs are financial or for conservation purposes. It was a great event that AMU hopes to repeat in the near future!



Bags with energy saving items sit ready to go to community members. (Photo courtesy of Paula Houts.)

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Lack of appreciation

Continued from page 3

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back. Don't believe me? Try it for a couple of weeks and see what happens.

In the end, we are all going to experience lack of appreciation sometimes. When we take responsibility for the parts of the problem we can control—our own attitudes and actions—it becomes much easier to gain clarity on what to do in the larger situation. I wish you good hunting on that. In April and always, know for sure that MMUA appreciates every single one of you.

Three Minnesota tribes receive federal clean energy and electrification funds

In mid-March, Minnesota **Senators Amy Klobuchar and Tina Smith announced that \$1.4** million would be going to three Minnesota tribes to assist with making electrification improvements to tribal homes and connecting homes to clean energy.

The Bois Forte Band of Chippewa in northeast Minnesota received \$295,000 in grant funding, the Prairie Island Indian Community near Red Wing received \$500,000 in funding, and the Red Lake Nation north of Bemidji received \$600,000

in funds.

All three tribes expressed an interest in reducing the carbon footprint of their communities, as well as improving the reliability and reach of energy infrastructure.

America's largest solar plant to reuse, recycle solar panel output

America's largest solar plant, located in Dalton, Georgia and owned by Seoul, South Koreabased Qcells, entered into an agreement with solar recycling company Solarcycle in mid-February.

The agreement will see Solarcycle recycle Qcells' decommissioned owned and installed solar panels in the US. The agreement will also help Qcells customers recycle their solar panels.

Solarcycle, which is based in Odessa, Texas, has patented technologies that allow the company to extract 95 percent of



the valuable materials in a solar panel for reuse. The materials can then be reused by Qcells, making the manufacturing process for solar panels less costly and more efficient.

Qcells panels currently compose one-third of rooftop solar panels installed in the US, according to the company.



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Fusion research looks to get a leg up from AI

On February 21, researchers at Princeton University and the **Princeton Plasma Physics Labo**ratory published an article in the journal Nature that said that the team had used an artificial intelligence (AI) controller to correctly forecast instabilities in plasma during fusion reactions.

Fusion energy is the longdreamed-of energy resource that fuses atoms instead of splitting them. Fusion promises limitless power with minimal environmental impacts.

The breakthrough was signif-



icant, because one of the biggest problems in creating fusion energy is the instabilities present in plasma, which can move away from the magnetic fields

that contain plasma. By forecasting plasma instabilities in real time, researchers can make modifications to the reaction and keep it going.

Minnesota's biggest gas utilities to create long-range resource plans

After a decision by the Minnesota Public Utilities Commission (PUC) in February, Minnesota's three largest gas utilities: Xcel Energy, CenterPoint Energy, and Minnesota Energy Resources Corporation, will be required to create integrated resource plans (IRPs) similar to those used by electricity providers.

MMUA fights

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These plans inform utilities on items such as system demand, system growth, and reliability.

The planning will allow utilities and regulators alike to get a better look at the operations and investments of utilities now and into the future, so that they can make changes and not leave gas customers underserved at

one extreme, or on the hook for unneeded investments on the other.

The PUC will hold hearings on the utilities' plans later this year.



ublic carrier and RF m

Department of Commerce, however, indicated a preference to wait on any corrections and clarifications until after all work under the PUC docket is completed so that all desired changes can be dealt with at one time. MMUA will monitor any legislative efforts and will continue to participate in the docket.

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Nominations sought for MMUA awards, board of directors seats

MMUA's Nominations and Awards Committee is accepting nominations for MMUA's 2024 industry awards.

MMUA'S Awards Program

MMUA annually confers awards on members of the municipal utility community, and those who support us, for unique contributions to our industry. The awards include:

- **System Innovation Award** Given to a utility that has demonstrated leadership and innovation in customer service, energy efficiency or renewables, technology, or other areas.
- **Public Service Award**—Given to a state or federal elected or appointed official who has been a strong supporter of MMUA and its members.
- **Distinguished Service Award** Given to individuals who perform outstanding service in support of the association and its goals.
- **Community Service Award** Given to an individual who has performed long and well in support of a municipal utility at the local level.
- **Rising Star Award**—Recognizes a future leader who has demonstrated a dedication



to the goals and principles of municipal utilities through problem solving, creativity, and job knowledge.

Honorary Lifetime Membership—This prestigious award symbolizes a long professional life dedicated not only to the advancement of municipal utilities locally, but also for the betterment of our industry on a statewide basis.

The deadline for 2024 submissions is June 30. The awards will be presented at the MMUA Summer Conference in Fargo-Moorhead on August 20.

Nomination forms for the various awards can be downloaded from the MMUA website beginning in early May. You may submit nominations in multiple categories; all nominations will be considered.

Nominations for the Board of Directors

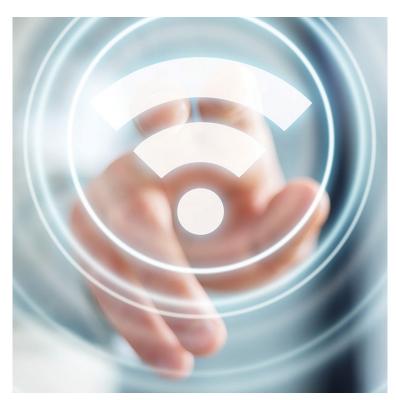
Serving on MMUA's Board of Directors is an honor as well as a responsibility. It is also a great opportunity for professional growth. Multiple seats are open this year for regular members due to the regular rotation process and the addition of one board seat as allowed by the bylaws. In addition, one seat that may only be filled by a mayor, city council member, or municipal utilities commission member will be open for a partial term.

If you represent a regular MMUA member utility, are willing to accept responsibility for governance, and are available to actively participate as a Board member, please contact MMUA CEO Karleen Kos to declare your interest and learn more about the nominations process.

Nomination forms should be submitted to Rita Kelly via email (rkelly@mmua.org) or regular mail (3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447). The deadline for nominations is June 30.

If you have any questions about the nominations process or what service on the board involves, please contact Karleen Kos. She will be happy to discuss the role of the board members and the time commitment involved. Please email her at kkos@mmua.org or call her at 763.746.0701.

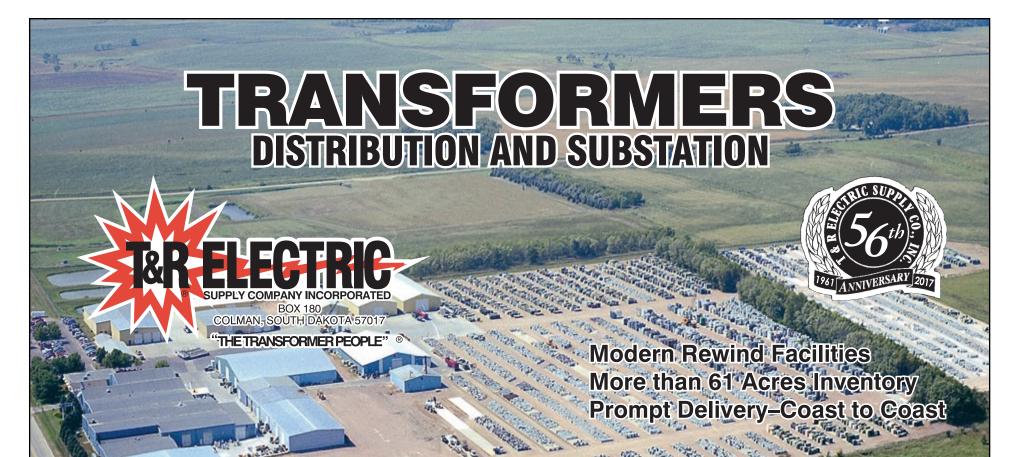
Municipal broadband on the upswing



The creation of municipal broadband in the US is booming, according to research from the Institute for Local Self-Reliance (ILSR), a non-profit that works to use "local power to fight corporate control."

The organization found that at least 47 new municipal broadband networks have come online in the US since January 1, 2021. In addition, continued issues with big telecom and unparalleled federal funding will support the growth of municipal broadband systems well into the future, as many planned systems of various types are already in the pipeline.

At last count, there are approximately 447 municipal broadband networks throughout the country.





7 The Resource, April 2024

United Kingdom proposes electricity pricing based on distance from generation resources

On March 12, the United Kingdom's government proposed a new pricing model for the country.

The model, called zonal electricity pricing, would set pricing partially based on the location of the electricity end user. Customers that are farther away from power plants would pay more than customers who live closer to them.

The United Kingdom currently sets their wholesale electricity prices at the national level. The changes are part of the 2022 Review of Electricity Markets plan that takes a comprehensive

Evaporation energy for the first time translated into usable electrical output

On March 14. scientists from China published research that for the first time demonstrated the ability to harness the power of evaporation to generate enough electricity to power small electronic devices.

The breakthrough came from looking at the classic "drinking bird" toy, a heat engine device that operates on heat transfer. The bird moves up and down and "drinks" water from a cup, moving back and forth due to evaporation and the heat difference between the toy's head and the base.

Since the toy makes mechanical energy by moving up and down, the researchers hypothesized that they could create electrical energy as well. They attached two nanogenerator modules to the bird and were able to use them to power a calculator, liquid crystal displays, and temperature sensors.

The drinking bird concept made more electricity than any other previous evaporation method, creating an output of 100 volts using 100 milliliters of water. The scientists plan to increase the efficiency of their invention so that evaporation can create even more electrical energy in future tests.



look at how electricity markets as changes that could be made. are structured in Britain, as well

Japanese power generation company to conduct first major ammonia co-firing tests

Japanese power company JERA plans to co-fire the Hekinan Thermal Power Station in Hekinan using 20 percent ammonia with coal between March 26 and June 19.2024.

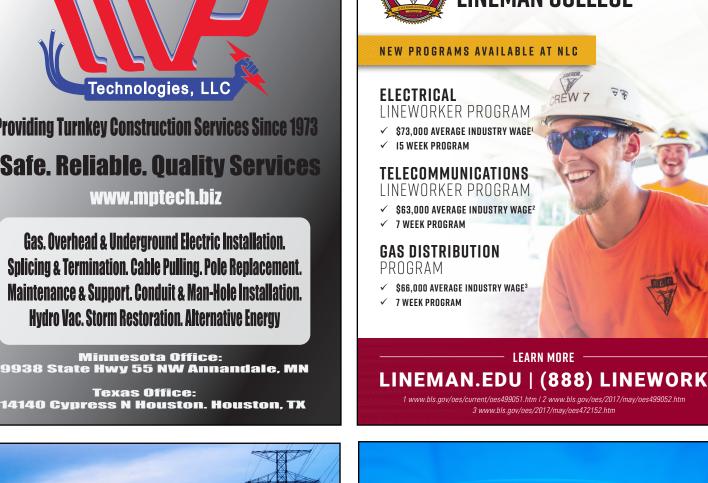
The tests are being done in hopes the percentage of ammonia can be gradually raised, therefore helping to make a significant dent in the decarbonization of coal power plants. A goal of 50 percent co-firing of ammonia is planned for 2028. JERA is setting its sights on

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using hydrogen and ammonia as a fuel for its thermal power stations as it sets its future decarbonization goals. JERA is aiming to reduce carbon emissions by 60 percent or more from 2013 levels by 2035.





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States consider <mark>forbidding IOUs from lobbying with customer funds</mark>

Legislators in 10 states are considering legislation that will prevent investor-owned utilities (IOUs) from using customer funds to pay for their lobbying activities.

The states include Arizona, California, Delaware, Illinois, Maryland, New York, Ohio, Pennsylvania, Utah, and Virginia. Louisiana is examining the issue through regulatory activities. Colorado, Connecticut, and Maine have already enacted bills addressing this issue.

The reasoning behind the bills is that IOUs often use their lobbying apparatuses to promote policies that lead to higher bills for ratepayers and more profits



for the firm. With a ban in place, IOU customers wouldn't be directly paying for activities that raise their bills.

Municipal utility in rural lowa to own state's first utility-scale microgrid

On February 26, the US Department of Energy announced that a federal investment of \$9.5 million would be made to build a microgrid in the City of Montezuma, Iowa.

The project was submitted by researchers at Iowa State University and Montezuma Municipal Light & Power. Montezuma is a city of 1,400 people 70 miles east of Des Moines. Currently, the utility gets 53 percent of its energy from fossil fuels.

The project will reinvigorate Montezuma's municipal electric system with the addition of three megawatts (MW) of renewable energy, including 2.5 MW of new solar panels, and a battery storage system. The project should reduce energy purchases for the utility by 3.5 gigawatt-hours.

The project will be owned by Montezuma Municipal Light & Power and will serve 706 residential homes, 201 commercial buildings, and two industries. Construction is expected to be completed by 2028.





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9 The Resource, April 2024

Analytics

Substation School



 $Jamie\ Sieren\ speaks\ on\ proper\ operation\ and\ maintenance\ of\ substations.$



Dave Krause talks about his personal experiences with the causes and effects of improper maintenance.



Attendees toured the West Shakopee substation.



John Pollock, CEO of Jordan Transformer, led the group through the company's facility. Jordan Transformer remanufactures substation and mobile transformers in Jordan, Minnesota.







The giant tanks hold mineral oil for use in rebuilt transformers.



 $Components\ sit\ on\ a\ truck\ in\ preparation\ for\ being\ remanufactured.$

 $\label{eq:approx} A \ Portuguese-built\ mobile\ substation\ gets\ an\ overhaul\ at\ Jordan\ Transformer.$

FERC recommits to 2023 interconnection rules

On March 21, the Federal Energy Regulatory Commission (FERC) decided to maintain rules regarding interconnection that were first committed to in July of 2023.

The rules moved away from FERC's traditional first-come, first-served interconnection process in favor of a process that studies projects in batches and places more requirements on parties seeking interconnection.

Water groups testify

in Washington on **PFAS**

These include stricter deadlines and fines for missing them.

FERC took another look at the rulemaking after legal action was taken by power companies who did not agree with the rules regarding fines for missing deadlines. FERC said the importance of speeding up the backlogged interconnection process supersedes concerns about the new rules or resultant fines.

New grid storage battery type uses common water plant chemical as electrolyte

Research published in the journal Nature Communications on March 25 by researchers at the Department of Energy's Pacific Northwest National Laboratory (PNNL) described a new iron flow storage battery type that has a long lifespan and significant cycling stability.

It achieved over one thousand consecutive charging cycles while keeping a maximum capacity of 98.7 percent. The battery uses nitrogenous triphosphonate or nitrilotri-methylphosphonic acid (NTMPA) as its electrolyte.

NTMPA is special because it is widely used in water plant operations as a corrosion inhibitor. It is available and not particularly expensive. Another feature of NTMPA that is useful for batteries is its ability to act as



an electrolyte at room temperature with a neutral potential hydrogen (pH) level. This makes the battery easier and safer to operate.

Scientists intend to continue refining the battery's perfor-

mance so it can be deployed in real-world settings. Plans are to scale it up at the Pacific Northwest National Lab Grid Storage Launchpad facility, which will open this year.

On March 20, a coalition of water groups called the Water Coalition Against PFAS testified in front of the US Senate Committee on Environment and Public Works to address discussions that are currently occurring within the US Environmental Protection Agency (EPA) regarding per- and polyfluoroalkyl substances (PFAS).

liability issues

The EPA is considering the reclassification of PFAS as hazardous chemicals under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Water Coalition Against PFAS, which consists of groups such as the American Water Works Association (AWWA), argues this reclassification will put water operators in danger of CERCLA liability.



Since the water operators did not create the PFAS contamination, the group argued that the costs of mitigating PFAS should be paid by polluters, not water utilities. The AWWA has endorsed legislation that will provide utilities protection from PFAS liability.

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New device allows for wireless transmission of electricity through windows

A new gadget called the Power Mole is helping homeowners get small wattages of electricity to outdoor appliances where outdoor power sources do not exist.

The Power Mole allows up to 10 watts of electricity to be sent from an indoor power plug to a small transmitter, which affixes to one side of a window.

The transmitter, which looks like a hockey puck, is wired to an interior plug, and then paired with a similar-looking receiver on the other side of the glass. Through induction, a magnetic field is generated that can pass through the glass to the receiver, which converts the field to usable electricity. The receiver



is then wired to the electrical appliance that is being powered. The 10 watts allow for the powering of items like cameras and outdoor lighting. The device is currently part of a Kickstarter campaign that developers hope will allow the Power Mole to reach commercial production.

Department of Energy announces <mark>\$6 billion for decarbonization efforts</mark>

On March 25, the US Department of Energy announced \$6 billion

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in decarbonization funding that will go toward 33 projects in the US.

The projects chosen are in industries that are high emitters of carbon, making the decarbonization efforts more effective. The industries include chemicals and refining, cement and concrete, iron and steel, aluminum and metals, food and beverage, glass, process heat, and pulp and paper. The funded projects will cut their carbon emissions by an average of 77 percent. This



funding is reported to be the largest investment in industrial

decarbonization in American history. The Resource, April 2024 11

Virtual Legislative Conference

Continued from page 1

MMUA also encouraged members to voice support for ECO Act reform, permitting reform, and for a bonding bill that would thoroughly fund public finance authority (PFA) programs. Members were also encouraged to oppose the then-current language in a bill covering excavation that would have mandated physical white markings.

Day two of the conference shifted to presentations by two of the speakers who had been on tap to deliver remarks at the in-person conference.

Municipal Utilities Action Fund

(MUAF) Bill Black, MMUA's government relations attorney, shared new information about the Municipal Utilities Action Fund (MUAF). Bill noted that most people do not become lobbyists to do fundraising, but that donations for the fund are an important tool for the success of our government relations program. Cooperative utilities in Minnesota raise about 10 times the amount of money that municipal utilities do for their political action fund.

MUAF is important because lobbying today is different than it used to be. Currently, one party controls the legislature. The parties and the seats within the legislature have become more entrenched, and some legislators don't need to raise as much money because their seats are not competitive. However, if a legislator holds a fundraiser, the event provides an important access point to the legislator and his or her staff.

Bill discussed circumstanc-

es that cause legislators to be willing to listen to an interest group's points. This includes:

- -They came to my event or fundraiser
- -These are "my people," meaning they are from my district, or they care about things about which I, too, am very passionate
- -They appreciate me and what I am trying to do in St. Paul
- -They know it is hard to raise money
- -They're not just complainers

Relationships with legislators can really help build momentum for MMUA's priorities, even when we don't ask. Being in the room with our legislators before things happen can be very helpful to influence policy as issues emerge.

Bill noted that MUAF helps MMUA get into the room and build these relationships with legislators. It is a necessity to make things happen. Members should consider donating; this is possible both by check and electronically via a QR code. Bill mentioned MUAF lapel pins are available to donors of any level over \$40.

Referendum Resolution Template

Bill Black shared a document with the group that will allow communities to create more order around the process if the matter of a utility sale is raised. Over the past few years, four municipal utilities in Minnesota have been sold without a referendum occurring. State law requires a vote of two-thirds of the local community voting affirmatively on the sale or closure of a municipal utility, but this has not been enforced.

MMUA believes that if ratepayers knew far enough in advance that a city should hold a referendum, that would give the citizens of municipal cities more power in deciding the fate of a municipal utility.

The model resolution Bill shared is designed so that municipals and towns adopt a locally binding process affirming leaders' commitment to their municipal utilities. It requires a vote of two-thirds of the community's citizens before any sale or closure occurs.

Bill Black and Kent Sulem Continued on page 13

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Minnesota Municipal Utilities Association



Virtual Legislative Conference

Continued from page 12

from MMUA spoke about the "Interacting on the Issues" sessions coming up in the next few months, and how the template and other ideas will be shared with councils and local leaders during these sessions.

Karleen Kos, MMUA's CEO, discussed MMUA's interest in working with local governments and being available to head off these issues before they get started. Karleen noted that the regional meetings create a forum for leaders to come together to mingle and see that MMUA can offer help on a variety of issues. She is also willing to attend any utility's council or commission meeting to discuss whatever issues may be important to the group and how MMUA can help.

Dr. Pete Wyckoff

Dr. Pete Wyckoff, Assistant Commissioner from the Minnesota Department of Commerce Division of Energy, spoke about state and federal support for energy projects. He oversees the programmatic side of the agency

and works with the Governor to bring available federal monies home to Minnesota.

Minnesota has ambitious climate plans with the passage of last year's net zero emissions law. Dr. Wyckoff noted the federal government intends to help with the transition costs involved with moving from the current energy system to a carbon-free energy system. The main vehicles for this are funds provided through the Infrastructure, Investment & Jobs Act (IIJA; later known as the **Bipartisan Infrastructure LAW** or BIL), and the Inflation Reduction Act (IRA). These legislative acts are providing billions of dollars in grant money nationally in the energy area.

The IRA is the biggest climate action law ever passed anywhere in the world. There are 135 programs and tax credits having to do with energy contained within it. The IRA provides clean energy loans in the amount of \$500 billion. There are also \$700 billion to \$1.2 trillion in tax credits that are uncapped. Dr. Wyckoff

stated the credits are available as direct pay payments to local governments and non-profits, like MMUA's membership.

Minnesota's Department of Commerce and the Department of Employment and Economic Development are providing funds for Minnesota entities to staff up and develop grant-writing capacity to help get these federal grants. MMUA has been awarded one of these grants.

Dr. Wyckoff noted the existence of three pools of money totaling \$27 billion for green banks to support the development of green energy and for solar development. At the end of February, billions in loan requests had already been processed in Washington.

Tax credits are the biggest pot of money contained in the IRA; they have historically been used to encourage renewable energy development. Credits for solar and for wind are the largest tax credits available to encourage the development of renewable energy, as well as geothermal, fuel cells, hydropower, biomass,

and many other low-carbon areas.

Federal programs also provide stand-alone tax credits for nuclear, carbon capture, and clean hydrogen. Additional tax credits for transportation include support for the development of electric vehicles (EVs), commercial clean vehicles, and EV chargers. There are also tax credits for domestic manufacturing, including many facilities in Minnesota.

Dr. Wyckoff observed that a municipal utility that constructed a 1-megawatt community solar facility could earn a 70 percent tax credit on the value of the project, which would be directly paid in cash by the Internal Revenue Service. He noted that tax credits tend to be very sticky and don't tend to go away, so there is optimism for the longevity of these credits.

Attendees inquired about the implementation of direct pay tax credits, a popular provision of the new laws for municipal utilities. Wyckoff indicated the process is in development now.

Mark Teklinski

The second speaker on day two was Mark Teklinski, who works for the Midwest Renewable Energy Tracking System (M-RETS). This nonprofit was established in 2008. Minnesota joined several other states to create an organization responsible for tracking renewable energy generation and assisting with compliance verification related to state-level standards and objectives.

M-RETS tracks and creates renewable thermal certificates (RTCs) and renewable electricity certificates (RECs).

Most utilities use the system for compliance, or to offer their customers renewable products. M-RETS doesn't oversee the implementation of renewable energy infrastructure, the Minnesota Public Utilities Commission (PUC) does.

M-RETS facilitates REC markets by issuing a unique, traceable digital certificate (i.e., one REC) for every megawatt hour of verified renewable energy recorded on the platform. Once issued, M-RETS users can choose to transfer (buy/sell), retire, import, or export RECs. M-RETS users can retire certificates either to comply with state mandates or to fulfill their voluntary commitments, ensuring that certificates are not doublecounted. M-RETS can register projects across North America and Canadian provinces and is willing to support imports and exports with any registry in North America.

At this time, M-RETS is the largest REC tracking system in the US. In addition to facilitating the renewable energy tracking system, M-RETS advises regulators regarding use of the M-RETS system and how it can be used or modified to track different programs that are being created around clean energy.

Mark's talk concluded the Legislative Conference for this year. Although it was disappointing to not gather in person, the weather made it clear that it was not safe to do so this year. The virtual conference shared valuable information that will help utilities as they meet with legislators and consider the large amount of federal





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and state funding available to utilities.

MMUA reminds everyone to attend the "Interacting on the Issues" regional meetings in June to learn more about the new laws that have been passed, as well as solutions to strengthen our utilities.

13 The Resource, April 2024

Wireless trade organizations fight FCC digital discrimination rules

On February 27, several trade associations representing the interests of wireless service providers filed suit to bring about judicial review in the case of the Federal Communications Commission's (FCC) digital discrimination order, saying that this rule is not applicable to them and is not legal under FCC's authority.

The group of plaintiffs is mainly composed of wireless contractors who install and maintain wireless broadband infrastructure. They argued that since they do not provide broadband service and do not determine the location or type of broadband access, they should not be held liable under the order.

The digital discrimination rules attempt to prevent broadband providers from providing unequal broadband access or speeds to different geographical areas, sometimes within close proximity of each other. These inequalities have emerged for a variety of reasons over time, and not always with deliberate ill intent.

In Minnesota, the Minneapolis area was in the news in late

Hot air balloon tangles with power lines in

Rochester; three passengers survive crash

2022 when it was revealed that CenturyLink was providing sub-broadband to low-income neighborhoods, while providing higher speeds and more options to wealthier neighborhoods, often at similar price points.

The digital discrimination rules are intended to prevent circumstances like these from occurring.

The move by the contractors is the third legal challenge brought forward on this issue by industry groups. The rule on digital discrimination took effect on March 25, 2024.

American solar capacity projected to grow 38 percent in 2024



A report from the US Energy Information Administration (EIA) in January estimates solar capacity in the electric power sector will continue its strong growth this year, going from 95 gigawatts (GW) at the end of 2023 to 131 GW by the end of 2024, for an increase of 38 percent. Solar power generation is expected to grow 75 percent in the same period.

Meanwhile, coal power generation is expected to drop 18 percent by 2025, and wind power generation is expected to grow about 10 percent. Nuclear, hydropower, and natural gas generation are expected to hold mostly steady over the next year.



RPU crews inspect the affected power lines on the morning of March 21, the day after the hot air balloon crash. (Photo courtesy of Rochester Public Utilities.)

On March 20, a hot air balloon crash in Rochester made national news as the flight hit power lines on Highway 63.

The incident occurred at about 6:50 in the evening.

The accident occurred when wind pushed the balloon into the power lines as the group was attempting to make a landing. The contact caused the basket to separate from the balloon. The occupants fell 20-30 feet.

According to Rochester Public Utilities' (RPU) Tony Benson, the crash caused a breaker on the electrical system to open and close twice. The breaker held the second time. A small brush fire then occurred, which was promptly contained by the Rochester Fire Department.

All three balloonists survived the crash, with two reporting minor injuries. RPU was on hand the following morning to make needed repairs to the power lines in the wake of the crash.

New England transmission line project falls through

In early March, Massachusetts' National Grid utility and Citizens Energy Corporation canceled a transmission line project planned for the New England states of Vermont and New Hampshire.

The transmission line would have run from Canada into New England to bring energy generated by hydropower across the border. The project was also designed to transmit surplus electricity from planned offshore wind farms in the US back to Canada.

Although the 211-mile line was selected for federal funds from the Department of Energy, that was not enough to forestall the cancellation of the line. The two developers did not comment on their reasons for calling off the project.

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Georgia moves forward on power transparency, customer rights

Bills moving through Georgia Legislature committees are aiming to provide more consumer protections and information to citizens about electric bills. House Bill 1406, which unanimously passed out of Georgia's House Energy, Utilities, and Telecommunications Committee, would let customers know what the electric provider's fuel cost was for the resources needed to generate electricity provided to the customer.

Another bill, which proceeded through a Georgia Senate committee, would create a consumer advocate to stand in for the rights of consumers during rate hearings before the Georgia Public Service Commission. These moves reflect a bipartisan interest in having more transparency for consumers and fairer pricing from for-profit utilities.





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Colleges compete for DOE prize to advance geothermal power



Geothermal Collegiate Competition

U.S. DEPARTMENT OF ENERGY

On February 15, the US Department of Energy (DOE) awarded cash prizes in the 2023 Geothermal Collegiate Competition, a competition sponsored by DOE to drive advancements in the geothermal industry and provide students with experience in the field.

The first-place winner on the technical track of the competition was a team from the University of Oklahoma. The group designed a geothermal system sufficient to heat and cool a 40,000 square foot greenhouse owned by the Osage Nation in Pawhuska, Oklahoma.

The first-place winner on the policy track of the competition was a team composed of students from Columbia and Princeton Universities. They worked together to explore the creation of a geothermal system for the community of Elim, Alaska. The team's analysis found a closedloop geothermal system could save community members 2.3 million gallons of fuel oil and 70 million pounds of wood over 30 years, with the cost of the system installation being recovered in 14 years.

Each first-prize winning team received \$10,000 and the opportunity to discuss the project at a community event. Prizes of \$6,000 were also awarded for second-place winners on the technical and policy tracks.

Weird weather in 2023 causes output of American utilityscale renewables to decrease



Information from the US Energy Information Agency (EIA) released February 26 recorded a 0.8 percent year-over-year decrease in generation of utility-scale renewable electricity from 2022 to 2023.

The decrease came from slower wind speeds resulting from

various climatological factors, as well as from droughts that meant hydropower facilities could generate less electricity.

America's 2023 utility-scale renewable generation composed 21.4 percent of all generation in the country. Altogether, this generation produced 893,518 gigawatt-hours of power in 2023.

PUC approves Great River Energy's carbon-free transition plan

On March 7, the Minnesota Public Utilities Commission (PUC) approved a plan by Maple Grovebased Great River Energy (GRE) to make the utility 90 percent carbon-free by 2035.

GRE will make the transition by buying wind power on the market and building solar and energy storage facilities. In the meantime, GRE will buy electricity from the coal-burning Rainbow Energy Center in North Dakota, gradually phas-



ing out the energy it buys until contractual agreements expire in 2031.

GRE sold the former Coal Creek Station facility to Rainbow Energy Center in 2022. GRE also continues to operate its Spiritwood Station coal and natural gas plant in North Dakota.

Minnesota Legislature considers grid-enhancing technologies mandate for larger transmission-owning utilities

A bill before the Minnesota House, HF3704, would require utilities operating in Minnesota that own more than 500 miles of transmission line to identify congestion areas on its grid and examine the areas with grid-enhancing technologies, including power flow control devices, sensors, and analytical tools. Only four utilities in Minnesota would fall under the auspices of the bill: Xcel Energy, Minnesota Power, Otter Tail Power, and Great River Energy.

The bill is being sponsored by sponsored by Rep. Larry Kraft (DFL-St. Louis Park). The legislation has been laid over for possible inclusion in the climate and energy bill.

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Italy to phase out coal for most of country's energy production by end of 2025

On March 6, the Italian Energy Minister Gilberto Pichetto Fratin told parliament that the country would aim to phase out all use of coal for domestic energy production by the end of 2025, except for the island of Sardinia, which will phase out coal by 2026 at the earliest and 2028 at the latest.

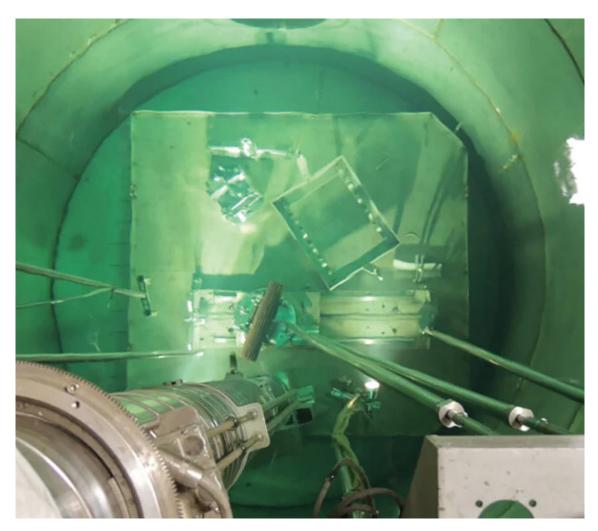


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TerraPower to begin construction of new liquid sodium-cooled nuclear reactor type



TerraPower, a nuclear reactor company based in Bellevue, Washington and backed by Bill Gates, submitted a construction permit application to the US Nuclear Regulatory Commission (NRC) on March 29, 2024.

The permit would allow construction of TerraPower's new sodium-cooled reactor type in Kemmerer, Wyoming.

If the 3,700-page application

is complete, the NRC will begin a full technical review. The NRC will announce an estimated timeline for the process, and the agency's spokesperson says their goal is typically around three years for reaching a decision. Meanwhile, TerraPower is taking measures to ensure it meets its 2030 construction goal by beginning to build everything that is not nuclear-related. Groundbreaking is scheduled for June. The 345-megawatt electrical (Mwe) reactors can be boosted to 500 Mwe for more than five and a half hours when needed. These units are expected to cost about one-half the price of water-cooled reactors. Terra-Power claims the systems "include improved fuel utilization, enhanced safety features and a streamlined plant layout that will require less overall materials to construct."

Xcel acknowledges involvement in Texas wildfire, denies negligence

In a statement released on March 7, officials from Xcel Energy said that as far as the company could determine, its facilities were involved in the ignition of the Smokehouse Creek Fire.

The fire, which has been burning in the Texas Panhandle and in Oklahoma, started February 26 about one mile north of Stinnett, Texas. The fire has burned more than one million acres of land and is the largest wildfire in Texas history.

While acknowledging involvement in the ignition of the fire, Xcel denies the company has



been negligent in maintaining and running its power infrastructure. However, lawsuits are likely in the works against Xcel, just as they have been in other wildfires where power infrastructure may have played a role in starting the fire.

American wastewater testing tips off researchers on presence of dangerous new opioid

Australian scientists analyzing American wastewater samples have found protonitazene, a dangerous opioid three times more deadly than fentanyl, in samples from Illinois and Washington State.

Sampling has not found the opioid anywhere else in the world until now.

The team from the University of Queensland found the opioid

in samples taken between December 2022 and January 2023. The discovery of new synthetic opioids in American wastewater illustrates the dangers posed not only to users of these drugs, but other individuals that could be inadvertently exposed to them. The researchers noted that exposure to even small amounts of protonitazene could produce life-threatening effects.

Biden fills three FERC seats

On February 29, President Biden announced that he would nominate two Democrats and one Republican to the Federal Energy Regulatory Commission (FERC).

The Democratic nominees are Judy Chang, who has worked as a consultant at Boston's Analysis Group and is a former undersecretary of energy in Massa-



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chusetts, and David Rosner. He has worked as a FERC energy industry analyst.

The Republican nominee is Lindsey See, the current solicitor general of West Virginia.

The nominees are expected to be approved on their merits, although election year dynamics may slow the process.

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Much of Southern Minnesota was placed under a red flag warning on March 3 due to "extreme fire risk conditions." The designated counties include Blue Earth, Dodge, Faribault, Fillmore, Freeborn, Houston, Martin, Mower, Olmsted, Steele, Waseca, Watonwan, and Winona.



Around 1,200 students and community members gathered at Alexandria High School for the seventh annual STEAM Expo. Through hands-on activities, people learned about STEAM (Science, Technology, Engineering, Art, and Mathematics). According to the Alexandria Echo Press, "The goal of the event [was] to create enthusiasm for learning through hands-on and interactive activities that demonstrate how much fun STEAM can be — showcasing the elements of STEAM curriculum and connecting learning with real-world application."

Bagley World War II veteran Gene Sandberg celebrated his 100th birthday on February 25. Sandberg served as a Locomotive Mechanic 112 with Company B 726th Railroad Operations in the China-Burma-India theater. He later worked for the Duluth, Mesaba, and Iron Range Railroad as an engineer for 21 years, and then worked as an engineer at Mankato State University and Bemidji State University until he retired in 1987.

Baxter is examining different options to add water resources as the city has needed to pump from all its wells in recent years to keep up with demand. The city is considering drilling new wells and is examining new aquifers to keep up with the call for water.

Utilities Board. The Commission approved the name change in January of 2024.

Senator Amy Klobuchar was in Halstad on April 23 to discuss the West Central Regional Water District. Senator Klobuchar helped secure \$3.5 million in federal funds for the planned district, which will provide quality water to the citizens of west central Minnesota.

New Ulm Public Utilities is inspecting every water service line in the city in preparation for the removal of lead service lines in

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the future. Removal is not mandated but is recommended based on the current understanding of the danger of lead pipes.

On March 26, more than 2,000 people lost power in the southwest part of Rochester. Rochester Public Utilities restored power within an hour, noting the cause of the outage was a fallen tree that hit nearby overhead power lines.

Sioux City, Iowa, is proposing the use of a "Construction Manager At Risk" (CMAR) for the design, planning, and construction of the city's new wastewater treatment plant. In comparison to the usual "design-bid-build" system, the CMAR system is touted for its ability to prevent project

delays and keep costs down.



The Southern Minnesota Municipal Power Agency (SMMPA) and its 17 municipal member utilities were honored by the Environmental Protection Agency with a 2024 Energy Star Partner of the Year award. The award goes to organizations that lead their industry in the production, sale and adoption of energy efficient products, homes, buildings, services, and strategies.



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On Tuesday, March 12, firefighters responded to a power pole that was on fire on the 16000 block of Airport Road in Brainerd. Brainerd Public Utilities shut off power to the pole and fire crews extinguished the fire.

On March 19, the **Cohasset** City Council voted to rename the Cohasset Public Utilities Commission the Cohasset Public

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Large parts of the country of Tajikistan (population 10 million) were left without power on March 1 for about three hours. The outage was ascribed to an unknown technical problem, possibly originating at the Nurek Hydroelectric Power Plant.

Nearby Kyrgyzstan is considering restarting the mining of uranium in the country, as well as looking at building a small modular reactor to provide power for its citizens. Uranium mining was banned in 2019 due to the impacts of decades of pollution caused by uranium mining during the Soviet era.

Reuters reported on March 5 that China and Russia are considering working together to put a nuclear power plant on the moon by 2033-2035. The power plant could provide energy for future lunar settlements.



On March 8, a large fire occurred at a biomass power plant on Kauai in the Hawaiian Islands. The fire was controlled within two hours. The cause of the blaze is being investigated.

On March 12, British Prime Minister Rishi Sunak said the country would build new gasfired power plants in order to maintain baseload power. The country was previously committed to a net-zero grid by 2035.

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On March 15, hail damaged thousands of solar panels at the Fighting Jays Solar Farm southwest of Houston. Hailstones the size of baseballs fell; hailstones of this size are capable of fully breaking the glass on solar panels.

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On March 17, Cuba saw street protests due to electricity shortages in several parts of the country. The blackouts have been caused by maintenance work being done at the Antonio Guiteras thermoelectric plant, the largest power plant in Cuba.



On March 22, Russian drone and missile attacks comprised the largest strike on Ukrainian energy facilities since the war began. An estimated 700,000 people were left without electricity in Kharkiv, Ukraine's second-largest city. The Dnipro hydroelectric plant was also shut down after being damaged by missile strikes; it lost about a third of its generation capacity.



Japanese automaker Nissan plans to cut the manufacturing cost of its electric vehicles (EVs) by one-third by the year 2030 so the company can better compete with Chinese EV manufacturers.

According to The Mercury News, San Francisco Bay-area wastewater treatment facilities would need at least \$11 billion to upgrade their facilities if planned environmental rules take effect. The San Francisco Bay Regional Water Quality Control Board is expected to update these environmental rules in spring of 2024.

On March 27, the California Public Utilities Commission proposed a "flat rate" monthly electric bill of \$24.15 for most residential electricity customers. Customers would also pay a usage rate per unit of electricity, which is expected to be five to seven cents less per kilowatt-hour than current usag rates. The changes in billing are expected to save customers \$28-\$44 compared to the current billing structure.



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Biden administration officials alert operators to possibility of cyberattacks on water and wastewater systems, plan water task force

On March 19, Biden administration officials said in a letter to the nation's governors that reducing risks to water and wastewater systems in their states was of utmost importance in the wake of cyberattacks from foreign actors.

In the letter, Michael Regan, administrator of the Environmental Protection Agency (EPA), and Jake Sullivan, White House National Security Advisor, warned that hackers connected with China and Iran have gone after American drinking water systems recently. The pair pro-



moted the importance of staying up to date on software and changing passwords frequently to avoid cyberattacks.

The EPA and National Security Council are in the early stages of forming what will be called the Water Sector Cybersecurity Task Force to better protect against these events on a national level.

Dairyland Power Cooperative demolishes Genoa Power Plant

On March 19, the old Dairyland Power Cooperative demolished its Genoa Station #3 Power Plant.

The facility was near La Crosse, Wisconsin, on the Mississippi River across from Minnesota.

The coal plant was retired by Dairyland Power Cooperative on June 1, 2021, after beginning operation on July 16, 1969. The plant originally cost \$56 million, which would be more than \$470 million in 2024. Its output was 345 megawatts (MW).

The site was also home to the La Crosse Boiling Water Reactor, which started commercial operation in 1969 as well. This small boiling water reactor nuclear power plant was closed in April 1987 because the small 50 MW plant was no longer economically viable.

Dairyland plans to redevelop the site in the coming years.



Biden administration LNG export pause challenged in court by 16 states

On March 21, 16 states announced that they would be suing the Biden administration over its policy of pausing the issuance of new liquefied natural gas (LNG) export licenses.

The states are requesting an injunction for immediate relief of the export pause, which started on January 26, 2024.

The lawsuit argues the pause is illegal, and the effort will hurt employment in the LNG industry.

The stated goal of the initial pause was to allow the Biden administration to provide more energy security to the US and to better understand the environmental impacts of LNG exportation. The US is the world's



largest exporter of LNG.Kansas, Louisiana, Mississippi,The states involved in the
suit include Alabama, Alaska,
Arkansas, Florida, Georgia,Kansas, Louisiana, Mississippi,
Montana, Nebraska, Oklahoma,
South Carolina, Texas, Utah,
West Virginia, and Wyoming.

Shakopee to revamp fire department

The City of Shakopee is looking to move its fire department forward.

The Shakopee City Council received a "serious, sobering" report from consultants Citygate Associates on February 13 that detailed numerous issues related to management, training, staffing, and safety practices.

Interim Fire Chief Mike Scott had made an evaluation by external experts a condition of his employment when he agreed to serve in July 2023. Citygate spent three months reviewing the department and writing its report.

The City of Shakopee is currently searching for a new permanent fire chief. Meanwhile, interim activities have included addressing training deficits, planning for remodeling of fire stations, "right-sizing" the vehicle fleet, and updating departmental policies.

Upcoming Events

Underground School

May 7–10 MMUA Training Center Marshall, MN

Locating Workshop

May 21-22 MMUA Training Center

Utility Leaders Workshop: Interacting on the Issues

June 6—Hutchinson June 13—Brainerd June 26—Blue Earth June 27—Alexandria

Whether you are a seasoned journeyman looking to stay current or an apprentice just starting out, this school offers something for you. Individuals will rotate through six sessions covering a variety of topics that can enhance safety and improve efficiency. To learn more, visit mmua.org/event/underground-2024. MMUA is pleased to offer this new hands-on technical training opportunity for 2024. Instructors will address electric, gas, and water main locating using real equipment and instruments, ensuring participants receive the most practical information possible. Learn more at mmua.org/event/locating-2024.

Intended audience: utility commissioners, city council members, and utility leaders.

Join the MMUA government relations team and peers from your region to discuss the implications of new laws, explore important utility issues, and network with others committed to protecting, promoting, and strengthening hometown utilities in the coming years. Visit mmua.org/events/calendar for more information.

For more information, see the Events Calendar at www.mmua.org or call MMUA at 763.551.1230.