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## **Blooming Prairie embraces the new and old faces** of the utility world

**Blooming Prairie is a community** of 1,997 residents that is centrally located to much of southern and southeastern Minnesota.

Minnesota Municipal Utilities Association

To the northwest is Owatonna, to the southwest is Albert Lea. Austin lies to the south, and Rochester is not too far away to the northeast. The home of the "Awesome Blossoms," the school's team icon has made many national lists of most unique mascots. As Steven Krell, Plant Operator at Blooming Prairie Public Utilities told me. "It's embarrassing for other schools to say, 'We got beat by the Blossoms'."

Like many cities in the Upper Midwest, Blooming Prairie has one foot in the past, while also moving confidently toward the future. Blooming Prairie Public Utilities embodies this spirit as well, with an historic 1930 power plant, a new water tower on the way, and a 2022 power plant at the city's industrial park.

The 1930 plant/former electric



Blooming Prairie's main public utilities building (1930) houses the #2 generator for BPPU.

office is downtown, and it has seen many visitors over its lifetime. "Until 2015, this was our main office as well as the general

manager's office," says Jerry Mausbach, general manager for Blooming Prairie Public Utilities (BPPU). In 2015, BPPU's main

office moved to the Ambulance Building, a more modern structure that better serves customers and BPPU staff. Now, the old

Continued on page 4

Volume 28, No.10

## **Effective January 1: The Safe and Sick** Time Law

By Kent Sulem

## What is the new mandate?

Found in Articles 12 and 13 of the Minnesota legislature's 2023 Regular Session Laws Chapter 53, the new law requires any employer with at least one employee that works at least 80 hours in a twelve-month period set by the employer, to allow any employee to take paid time off for any of the reasons specified in the statute (see the general list below,) and to allow them to return to his/her position, or one that is comparable, and without being retaliated against. Most municipal entities will likely want to follow a calendar year so that the requirements of the new law align with the city's fiscal year. The new leave requirements become effective on January 1,

#### Which employees are covered by the mandate?

All employees, including part-

time and temporary employees, who work at least 80 hours during the defined 12-month period, are protected by the new leave provision. There are exceptions for independent contractors, employees who work less than a majority of their hours in a calendar year outside of Minnesota and certain construction employees represented by a union.

#### How does the benefit accrue?

Under the new statute, an employee earns 1 hour of sick and safe time for every 30 hours worked. Employees who are considered "exempt employees" under the Fair Labor Standards Act are assumed to work 40 hours per pay period unless their normal work week is less than 40 hours. In that case the leave time accrues based on the normal hours of work. The benefit is accrued from the first day of employment, but an employee

Continued on page 7

## **Low Income Heating and Energy Assistance** (LIHEAP) **Update**

By Bill Black

### **Dollars Flowing**

Despite recent Congressional inactivity on appropriations, on October 24, the U.S. Department of Health and Human Services was able to release \$3.7 billion in initial LIHEAP funding for the new heating season to the 50 states. Minnesota received \$112,469,825, according to Energy Vendor Manager Jonathan Brown from Minnesota's Energy Assistance Program (EAP). EAP administers federal payments to Minnesotans through the Minnesota Department of Commerce. Brown said in an email to utility representatives the amounts equal about 90 percent of last year's total amounts—which is a typical ratio for initial annual disbursements-and that additional funds are contingent upon further action by Congress. Congress often appropriates

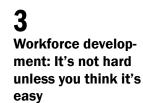


supplemental funds partway through the season.

#### 2023 Program Recap and 2024 Outlook

Last winter, Minnesota dispensed assistance funds to 132,700 households, an increase of 4 percent compared to 127,600 Continued on page 6

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**12 More Colorado energy** co-ops line up to leave **Xcel, Tri-State for** cleaner, cheaper electricity providers



**20** Al use could explode global electricity demand





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MMUA The Resource USPS #009836. ISSN: 1080-3750 is published monthly; except combined July/August, by MMUA at 3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447-5337. Periodicals postage paid at St. Paul, MN. POSTMASTER: Send address changes to MMUA The Resource, 3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447-5337. Annual subscription rates: \$12 per subscription (included in dues), associate members, \$12 (included in dues). 3131 Fernbrook Lane North, Suite 200,

## **Illinois lawmakers** consider lifting nuclear moratorium

On October 24, Illinois lawmakers gathered for the legislature's annual veto session, when the Illinois Legislature takes care of business that needs to be addressed before the coming

One of the topics being considered during this year's six-day

session includes lifting the nuclear moratorium for the

Governor J.B. Pritzker (D) Illinois previously vetoed the lifting of a nuclear moratorium during the legislature's regular session in 2023. He noted the concerns of people who may live near new nuclear facilities and

their health.

The veto session will introduce a new bill that the author, Republican Senator Sue Rezin, hopes will be able to survive a veto from Pritzker by lifting the nuclear moratorium in a way that works for the governor as well as the legislature as a whole.



## **Minnesota PUC Makes Initial**

## Renewable/Carbon-Free Standard **Rulings** Affecting Municipals

By Bill Black

On October 19, the Minnesota **Public Utilities Commission** (Commission) held the first of several planned hearings on how to interpret and implement certain aspects of the 2023 legislative changes to Minnesota's renewable energy standard (RES) and the new 100 percent carbon-free energy by 2040 standard (CFS).

The hearing culminated in the commission approving by a 5-0 vote a series of staff recommendations based on stakeholder comments the Commission requested in an initial public notice this past April.

Among those questions was which additional utilities are subject to the mandates of the RES and the new CFS due to the Legislature including cooperative and municipal utilities that are not members of a generation and transmission cooperative (G&T) or a municipal power agency or power district in the law. The Commission concurred with the Minnesota Department of Commerce (Department) that

Connexus Energy transitioned this year from being a member of the G&T known as Great River Energy (GRE) to being simply a GRE wholesale energy customer. Thus, it is subject to the standards and will need to begin reporting its compliance for energy other than that energy provided by GRE. GRE would need to comply with the mandates for the energy it provides Connexus at wholesale.

The Commission also concurred with the Department that the 23 independent municipal utilities are now technically under the mandate but, as their energy is already subject to the mandates as wholesale sales from Xcel, Ottertail, or directly or indirectly from a G&T, their wholesale suppliers will retire the necessary associated renewable or carbonfree energy credits for those sales, thus constituting compliance with the law.

Complicating an otherwise straightforward proceeding, Minnesota Power (MP) had submitted a late filing after the comment period deadline claiming the Commission should include MP's former wholesale customers Hibbing Public Utilities (HPU) and Brainerd Public Utilities (BPU) under the mandate. MMUA and HPU explained to the Commission that as members of the Northeast Minnesota Municipal Power Agency, the law change does not encapsulate them under the mandate, and they must be seen as free to make their power supply decisions locally. Unfortunately, the Commission refused to interpret the statut as it is literally written and determined it would issue a notice for a separate comment period to help it determine how—not whether—compliance for HPU and BPU will have to be reported going forward.

Commission staff will encapsulate the Commission's decisions in the issues above, as well as some relatively non-controversial findings from the hearing regarding technical issues, in a yet-to-be-issued order that wil l serve as the Commission's official word on these matters.

## **Workforce development:** It's not hard unless you think it's easy



#### It just didn't seem like it would be that hard.

We were supposed to have filtered water dispensing itself on demand at the front of our refrigerator. We did not. A quick diagnosis by another member of the household determined we had a kink in the hose. Change that, I was told, and presto! All would be well.

If only.

In those days there were no YouTube do-it-yourself videos. So, we spent a three-day weekend with the refrigerator pulled out from the wall. A water line draped from the pipes behind it to the kitchen sink across the room, and random parts from Home Depot lay willy-nilly on the floor—each having taken its turn at being "the fix" that would solve the problem.

It ultimately took a trained plumber two hours and \$672 to get things operating smoothly again. As it turned out, the kink in the hose was just the most easily pinpointed malfunction. Several things had gone wrong, each complicating the next.

Getting the water flowing again really wasn't that hard for the trained plumber with a full appreciation of the problem,

possessing all the tools, knowhow, money (mine), and time necessary to make it look easy. It was plenty hard for us, mainly because we thought it would be easy and underestimated what needed to be done.

#### I am reminded of this episode when I think about workforce development for municipal utilities.

We all know the outstate population is changing in Minnesota, lots of Baby Boomers are retiring, and economic trends are pushing labor costs higher. These and a host of other forces are making it harder to find the skilled team members we need today—and what about the future? By some estimates, roughly half our municipal utilities workforce will turn over in the next 10 years or so. That's quite a brain drain, and we need to be ready for it. But how?

Not with easy answers, that's for sure.

I often hear quick diagnoses akin to "just change out the hose and all will be well" when this topic comes up around the state. It is human nature to yearn for that kind of answer and to be frustrated when trying lots of "that'll do the trick" ideas don't

seem to make much difference.

Some of the ideas that are occasionally offered up regarding the workforce challenges we face in municipal utilities include things like raising pay to compete with [the other folks], visiting enough high schools to entice young people into the trades, convincing urban youth to love the rural life, or throwing up our hands saying, "Nobody wants to work anymore." You can probably add to this list.

None of these ideas are necessarily wrong except the "nobody wants to work" concept; that's been popping up since the Middle Ages whenever major forces shift the relationship between worker and employer. The thing is, by themselves, these ideas are like the discarded parts lying on my kitchen floor while the larger problem remained unfixed. They, alone, didn't work—no matter how hard we tried to make them become the "easy" fix.

So, what is the skilled plumber, right tools, enough money equivalent to our municipal utility workforce challenges? Well, the bad news is that nobody really has a clue.

The good news is that MMUA is full of smart people; and working together, we can figure this out, especially if we understand there is no simple "change out the hose and all will be well" answer.

In the end, as my plumber had to address multiple issues with the refrigerator situation. our workforce development solution will probably consist of multiple strategies. It's a good guess these strategies will include some or all of these common workforce development elements:

## From My Desk to **Yours**

**Karleen Kos MMUA CEO** 





## 1. Analysis and workforce planning:

This will include at least two things: (a) identifying municipals' current and future workforce needs in terms of numbers and skill sets, and (b) identifying disparities between the skills possessed and the skills required by employers.

The tasks involved could include identifying positions we'll need to fill, turnover rates, and retirement dates. We will also need to be looking at everyone from journeyman lineworkers to water/wastewater treatment professionals to individuals who are excited to learn how to lead a utility. What do they need to know? What do they need to be able to do? What must we do to help make that happen rather than hoping it happens on its own?

2. Education and training: Investing in and developing training programs of all types to address needs and disparities will be essential. This is an area where MMUA can take a leading role so that each member utility doesn't have to reinvent the wheel. Odds are good we'll need education programs including formal degrees/certificates as well as continuing education to

maintain skills offered both in person and virtually. We'll need to update vocational programs and offer specialized training for existing and future systems. Most likely we will need to expand on the job training—including apprenticeships—to make it easier for interested candidates to choose a municipal career and contribute at their highest level of potential.

#### 3. Career counseling and guidance:

Providing clear pathways for career progression within the various utility disciplines (electric, gas, water, etc.) both inside our individual utilities and within the larger family of municipals is important to many workers. This will mean developing useful means of assessing individuals' skills, aptitudes, and interests to guide them toward suitable career choices. We'll also want to have a collaborative hand in working with career counselors and state agencies to assist individuals in finding municipal utilities employment opportunities that match their skills and aspirations. Once employed, we'll benefit from creating a system that shows workers how they can progress professionally.

**4. Support services:** In order to deepen the pool of viable applicants, odds are good that services will be needed to get them ready. One of the services people will likely need is financial support for training such as scholarships, grants, and loans. Whether municipals find ways to provide these directly or we work with agencies and schools to provide them is a question that will need to be explored. Regardless, we will likely have to take a much more active role in getting people into the trades from which we need workers.

Municipal utilities will also find themselves needing to make adjustments for employee childcare, transportation, and mental health challenges. What that will look like locally in the long run is something that will emerge as things settle down post-pandemic and as the legislature wrestles with funding—possibly mandating—programs to

Continued on page 5

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## **Blooming Prairie**

Continued from page 1

power plant mostly receives visits from Steven Krell, who takes care of the generators, among other things, for BPPU.

BPPU's #2 is the last operating generator on the old power plant floor, although it shares the space with #1. The #2 is an OP (Fairbanks Morse) that entered service in 1945. This 10-cylinder generator provides the community with 1.2 megawatts (MW) of power when it is called upon.

Outside is BPPU's #5, generator, a "Cat in a Box." The #5 entered service in 2005. This 1.8 MW generator would bring the town back to life if a power outage occurred elsewhere in the system.

The area around the old power plant is still busy, however, as Blooming Prairie is doing ground prep for a new water tower and tank adjacent to the old power plant. When complete in 2025, the city's old water tower will be taken down. This work has also been the responsibility of BPPU and Jerry Mausbach, as decisions had to be made about whether to preserve the old water tower or build a new one for the future. In the end, the best choice was to move toward the future with a modern new Continued on page 5



 $Blooming\ Prairie's\ \#2\ generator,\ a\ Fairbanks-Morse,\ first\ came\ online\ in\ 1945$ 



Blooming Prairie's newest generator came online in the fall of 2022. The #7 is a Caterpillar producing 1.8 MW.



Blooming Prairie's #6 generator is a Cat-in-a-Box placed onsite at the industrial park.



The day tank holds fuel pumped from the large outside tank to service the #7 generator at the Blooming Prairie Industrial Power Plant. It holds 235 gallons and is designed to warm the diesel fuel to keep it from gelling.

## General Motors, Honda cancel affordable electric vehicle partnership



In late October, General Motors (GM) and Honda announced their plan to partner on the development of a set of affordable electric vehicles (EVs) would not be going forward.

The original plan was for the two automakers to develop a group of affordable EVs that would be particularly aimed at international markets. The lineup of automobiles, which would have cost less than \$30,000 each, would have been released in 2027.

The companies both noted that continuation of the program would not make business sense. Analysts observed that profit margins on the vehicles were likely too low for GM and Honda to continue the development of the vehicles.

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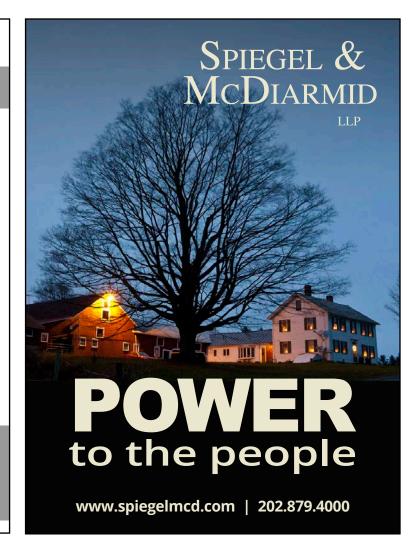
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## **Workforce Development**

 $Continued\ from\ page\ 3$ 

address these real barriers to workforce participation.

For now, the main lesson is this: to attract and retain workers, the days of "It's not the employer's problem; figure it out yourself," are probably in the rearview mirror.

## 5. Workforce diversity and

inclusion: I recently received an email from someone out of state who knows nothing about MMUA other than what he sees on our website. Based on the photos there, the man stated that we must be, "racist, sexist, and overtly subjective and discriminatory." Wow.

While saying something like that out of the gate is not the way to make friends and influence people, it is a fact that neither municipal utilities in Minnesota nor MMUA generally have access to a pool of diverse candidates from which to choose, and it shows. So, another piece of the puzzle will likely need to include both (a) equal opportunity initiatives to make sure our positions are accessible and beneficial to candidates from diverse backgrounds and (b) diversity training to ensure we are fostering inclusive workplaces.

#### 6. Data collection and evaluation:

What gets measured gets done, so the saying goes. If we are serious about workforce development, we will need to establish key performance indicators (also known as KPIs) to measure the effectiveness of our workforce development programs. This will help us

make improvements and place us in a better position to attract federal and state funding for these efforts. Our processes should also include establishing mechanisms for feedback from employers, participants, and educational institutions to continually improve programs.

There are, of course, other tools we could consider, such as policy advocacy and use of new technology, just to name a couple. I am confident the plumber that fixed our refrigerator's water malfunction didn't bring every tool he owned to our house. He brought the ones that he would be most likely to use. If he found he needed something else, he'd have gone and gotten it. We will likely do the same.

I will be hosting roundtable discussions on workforce development at next month's T&O conference. I would love to hear what's real in your communities as far as finding and retaining workers, things you're trying, and things you'd like to see a wider municipal strategy encompass. I'd also like to identify people who are willing to serve on MMUA's Workforce Development Task Force. I've mentioned it before, and we'll be kicking it off early in 2024. So join me at the T&O and bring your ideas. See you there - we'll have plenty of ice-cold filtered water. It's not hard to get unless you think it's easy.

## **Blooming Prairie**

Continued from page 4



Blooming Prairie Public Utilities was founded in 1929.

water tower, a sphere-shaped model that will be part of BPPU's modern utilities infrastructure.

#### **The New Industrial Power Plant**

A series of aging generators leaving service at the downtown power plant got BPPU thinking about the future of power generation for their city. BPPU had hoped to put another new Caterpillar in at the downtown power plant, but emissions concerns prevented that from happening. Noticing the growth at their city's industrial park, the Commission decided to install a generator there in 2008. Having generation in the industrial

park would get power closer to new customers, as well as avoid the aforementioned emissions concerns. The industrial park has many current customers including Cargill, Metal Services, and Tandem.

The #6 generator is also a Caterpillar and also generates 1.8 MW. Originally, the #6 had a short smokestack, but after stack testing was done, an 80-foot-tall stack was installed. The #6 generator sits outside, similarly to the #5 downtown.

Inside the shiny new Industrial Power Plant building is the #7 generator, which is also a Caterpillar generating 1.8 MW.

This engine first came online in the fall of 2022. The building containing the generator has all of the most modern equipment for monitoring and controlling the system.

The generator has intake and outtake ventilation that is serviced by large garage doors on either side of the generator. Both doors have to be open for the generator to begin operating.

The floor at the power plant has a slot for a #8 generator to be installed in the future, if desired. The power plant also has space for storage, a bathroom, and a room for the switchgear that is separated from the generator. At the old plant and the new, BPPU runs all of its generation on diesel

Like most municipal utilities, Blooming Prairie is moving ahead with new plans. BPPU is continuing to work on its 20year pole replacement project, as well as other system upgrades. BPPU is also preparing for a system-wide voltage conversion to 12.5 kilovolts around 2040.

Blooming Prairie has had a long history of being self-reliant with its power production. BPPU employs seven workers in positions including plant operator, foreman, lineman, office manager, secretary, and general manager, who together keep the lights on in Blooming Prairie. Steven Krell says, "If we needed to, we would have more than enough capacity to meet the power needs of Blooming Prairie." BPPU is also a member of Southern Minnesota Municipal Power Agency and provides power to the grid when called upon. BPPU has done this by preserving their past while also moving ahead confidently into the future.

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## **LIHEAP Update**

 $Continued\ from\ page\ 1$ 

in 2021-22. Brown credits a new EAP online application process for much of the increase in customer participation numbers. After the February online process launch, around 50 percent (roughly 23,500) of applications were submitted via the portal, he said. As of October 10 this year, the program had already received 13,000 online applications for the 2023-24 season. Brown said while the portal had some minor technical issues initially, it is stable and proving to be effective. Dollarwise, he said, the program paid an average primary heat benefit of \$500 last season. However, a relatively high fiscal year 2023 funding level made it possible for EAP to increase last year's crisis payment cap from \$600 to \$1,500 and later to \$3,000 and for the program to change the income eligibility threshold from 50 percent to 60 percent of state median income (SMI).

For the current season, EAP expects initial benefits to average \$500-\$550 per household with a primary heat benefit minimum of \$200, a cap of \$1,400, and an income threshold of 50 percent of the SMI. The maximum

crisis benefit is set at \$600. In a change, applicants need only submit documentation of income for one month rather than three months as previously required. In addition, applying may become simpler if planned integration goes through that would automatically cross-reference the database containing wage information held by the Minnesota Department of Employment and Economic Development so many applicants would not have to provide it.

LIHEAP payments are sent directly to households' energy providers through EAP's eHeat payment system. Households can apply during the 2023-24 season through May 31, 2024; however, EAP could move the date up or extend it based on further funding and program usage. EAP gives priority for crisis payments first to applicants who are disconnected and second to applicants with disconnect notices (with future disconnect dates) even if the customer and energy provider have arranged a payment plan.

## **MMUA Safety Team gets trained up on tree** trimming

Several members of the **MMUA Safety Team received** advanced training in tree trimming as they prepared for MMUA's Tree Trimming Workshop in October. MMUA's Keith Byklum and Jake Kuntz shared what they learned.

**MMUA:** What was your prior experience in tree trimming?

**Keith:** Prior to the tree trimming training, I had attended several training sessions, but none that went into depth in regard to the rigging and felling procedures.

**Jake:** I have a 2-year degree in Horticulture with an emphasis on Landscape Design and Nursery Technology. I also have obtained and currently maintain a MN Certified Tree Inspector License. I have about 13 year of experience working with trees that occurred in the course of my duties with landscaping, grounds maintenance, parks departments, and streets departments.

**MMUA:** What did credentials did you earn at the training?

What did you learn?

Jake: My new certificate documents completion of the Chainsaw Training Program as part of the ACRT Arborist Training program. (Editor's note: ACRT stands for Appraisal, Consulting, Research, and Training; the ACRT organization—the first and largest national commercial urban forestry training organization in the U.S.—officially uses only the acronym.) We learned specialty knots used often within the arboriculture field of work, roping and rigging large trees with use of a bucket truck for safe dismantling from the top down, proper pruning techniques as well as proper felling techniques. Lastly, we touched on the dangers and concerns of working on downed trees that are near, over and around power lines.

**Keith:** That's right, all who attended received a certificate of completion for the "Chainsaw Training Program" from ACRT Arborist Training.

MMUA: What was something interesting you found out that you didn't know before?

**Keith:** All aspects of the training were interesting. We went over the different knots used during the rigging process. Several of them I had been taught during line school but had not used or practiced in over 20 years. Setting up and getting to rig, cut, and drop limbs in different situations from the bucket truck was also a great portion of the training. We went over cutting technique as well and got to practice cutting notches to fell a tree in the direction you are intending it to fall. We did chip up the branches we cut and got in a little chipper safety as well. All said, it was good hands-on training.

**Jake:** I was amazed to learn about how we can accurately estimate the height of a tree or even structure by using just a straight stick. We learned we can even use a pencil to estimate the height of an object within 5 feet. A stick used for estimating the height of an object is called a Biltmore Stick and this technique would be used constantly with many municipalities judging safe felling distances to avoid injury or property damage.

## Half of the world past peak power sector fossil fuel emissions; global peak in sight

On October 20, the energy think tank Ember released a report that put forward the conclusion that many of the world's economies are well on the way to replacing fossil fuels in their power sector emissions.

According to the data, 107 of the world's 215 economies are already past peak in electricity generation from fossil fuels, with 78 of those economies already five years past peak.

Ember noted that while certain regions of the world, like North America, Europe, and Oceania are well into moving past peak, almost every region of the world has countries moving beyond peak. The only regions of the world that have not reached peak power sector fossil fuels emissions are Asia and the Middle East, Even these areas have their success stories, with Jordan and the United Arab Emirates in the Middle East already past peak, and Japan and Vietnam past peak in Asia.

In 2023, Ember noted that global fossil fuel emission from the power sector plateaued, and that the trend seems to be saying that global peak has already occurred or is very close.

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## **The Safe and Sick Time Law**

Continued from page 1

does not vest in the program until they have worked 80 hours. Use of vacation time, leave under the new law, official holidays, or other time off when the employee is not performing his/ her duties does not have to be counted as time worked. There is a 48-hour maximum accrual limit per twelve-month period, and an employee may carry over up to 80 hours into the next 12-month period. Accrual stops anytime the employee has 80 hours accrued leave, but starts again as soon as the employee returns to work after having used any part of their accrued sick and safe time. Employees can use their leave as it accrues, and in increments equal to the smallest increment tracked by the employer's payroll system. The largest increment tracked by the employer cannot exceed 4 hours.

#### How does the new law impact existing leave policies of municipalities?

A municipal entity may offer sick and safe time leave at a rate higher than that accrued under the new law, and existing sick leave, vacation leave, or paid time off (PTO) policies may satisfy the new law provided. For that to be true, the amount of time accrued must be at least equal to the rate imposed by statute, the leave can be used for all purposes covered by the new laws, and the municipality is able to account for how much of the existing leave is available for use under the earned sick and safe time mandate so that accrual and use of such leave can be properly reported on earning statements.

Must an employer pay an employee for accrued but unused sick and

#### safe time leave?

Generally, the answer is no, an employer does not have to pay an employee for unused sick and safe leave time, whether at the end of a 12-month period, or when the employee leaves the employer. However, payouts are allowed, if desired, under certain conditions. If the employer desires to pay out unused sick and safe time at the beginning of the subsequent 12-month period, the employer must grant all employees at least as much leave as required to satisfy the statute—48 hours available for immediate use up front. Then the employer pays for accrued but unused leave time from the prior year at the employee's hourly rate of pay.

## Can an employer require notice of intended use of sick and safe

Yes, but only if the employer adopts a written policy setting forth reasonable procedures for an employee to provide notice, and only if the intended use is reasonably foreseeable. Advanced notice cannot be required more than seven days before the intended use.

#### Can an employer require proof of proper use of sick and safe leave?

If the use exceeds three days, an employer can require reasonable documentation of use. Statements from a health care professional, court records,

statements from attorneys, police officers, victim services providers, or even just a written statement from the employee are all types of notices that must be accepted as verification of the various reasons for leave under the new law. Detailed descriptions of the reason for the use cannot be required.

#### What else is required of an employer?

Prior to January 1, 2024, and at the start of employment for each employee hired after that date, the employer must notify each employee in writing of their rights under the earned sick and safe leave policy. Information regarding the new leave must also be included on the employee rights posters. The amount of leave earned, accrued, and used must be on each paycheck statement.

#### What can earned sick and safe leave be used for?

Virtually any physical or mental condition of the employee or a family member, as well as actions that need to be taken to protect the safety of the employee. Such conditions include, but are not limited to, employee's physical or mental illness, the need for medical diagnosis, the need for treatment, the need for preventative care, the need to provide care for a family member with a physical or mental health condition, seeking medical or

psychiatric care for a physical or mental condition caused by domestic abuse, sexual assault, or stalking, the need to temporarily relocate, or any of the other conditions spelled out in Minnesota Statutes 181.9447.

#### Who qualifies as a family member?

A spouse or domestic partner; a child including adopted, foster and stepchildren, and any child for whom the employee is the legal guardian; siblings, including step and foster siblings; parents, whether biological, adoptive, or foster; stepparents or a person who stood in as a parent when the employee was a minor; grandparents and grandchildren, whether biological, adoptive, or foster; and any other person whether related by blood or by close association so as to be equivalent of a family member.

#### Where can more information be found?

Members can find more information and a question and answer section from the League of Minnesota Cities at https:// www.lmc.org/resources/earnedsick-and-safe-time-law-what-cities-need-to-know/.

Also, as the enforcing authority, the Minnesota Department of Labor and Industry has created a website for the new laws at https://www.dli.mn.gov/business/ employment-practices/faqsearned-sick-and-safe-time-esst.

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## Minnesota coalition not included in \$3.5 billion first round of grid resiliency funding

On October 18, the Biden Administration announced the recipients of more than \$3.5 billion in funding to improve the nation's electric grid as part of the federal Grid Resilience and Innovation Partnerships (GRIP) Program.

The list of chosen recipients did not include the joint \$500 million proposal from the Minnesota Department of Commerce, developed in collaboration with the Minnesota Rural Electric Association (MREA), the Minnesota Municipal Utilities Association (MMUA), and 85 consumer-owned utilities. Nearly 300 projects were included in the proposal, all of which would have helped consumer-owned electric utilities implement innovative technologies to enhance the resiliency of the electrical grid in Minnesota and throughout the Upper Midwest region.

Darrick Moe, CEO of MREA, released the following statement

reacting to the news. "Investing in our energy infrastructure is critical as we transition to cleaner sources of energy while maintaining reliability and affordability," Moe said. "I am grateful for the strong coalition organized around getting these innovative projects across the finish line. While I am disappointed in this announcement, we will continue to work together to investigate potential options for these important projects in the future."

Karleen Kos, CEO of MMUA, also responded saying, "No one doubts the importance of updating the grid and maintaining its reliability through the energy transition. I am extremely proud of the creative visioning, planning, and collaborative involvement of the 85 entities represented by our proposal. While this project was not successful, the efforts were not wasted. I look forward to continued work with MREA and

the Department of Commerce to find ways to make these projects a reality in our region."

The \$3.46 billion funding announced October 18 only represents a first round of selections under the broader \$10.5 billion GRIP Program. The U.S. Department of Energy, which manages the GRIP Program, encouraged the coalition to continue to pursue additional rounds of funding in a letter sent regarding the awards. Furthermore, they noted that fewer than 20 percent of applicants received funding in the first round.

A full list of funding recipients can be found online at https://www.energy.gov/gdo/grid-resilience-and-innovation-part-nerships-grip-program-projects. The GRIP program is funded by the bipartisan Infrastructure Investment and Jobs Act which was signed into law in November of 2021.

# China to build world's biggest wind turbine

On October 22, Chinese wind turbine company MingYang Smart Energy announced it would be building a 22 megawatt (MW) offshore wind turbine that will be the world's largest.

The turbine, called the MySE 22MW, will feature a rotor that will be 310 meters (1017 feet) long as well as a height that will surpass the length of the rotors, ensuring the turbine will top out above 1000 feet as well. The blades of this mega-machine will be 459 feet long, with a swept area of the blades equaling 14 NFL football fields.



The turbine is designed for wind speeds between 19 and 22 miles per hour. The turbine is expected to enter production by 2025



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## Colarado Air Quality Commission sets new electric vehicle standards



On October 20, the Colorado Air Quality Commission voted to approve a staff recommendation for a new clean cars standard that would be similar to California's rules.

The adopted rule would mandate the percentage of cars

sold by new car dealers that are electric vehicles (EVs).

According to the new Colorado Clean Cars standard, 51 percent of the inventory on dealer lots will be required to be EVs in 2028, 68 percent in 2030, and 82 percent in 2032.

Although far-reaching, Colo-

rado's rules did not go as far as those in California. Under California's rules, 100 percent of cars sold by new car dealers in 2035 must be EVs.

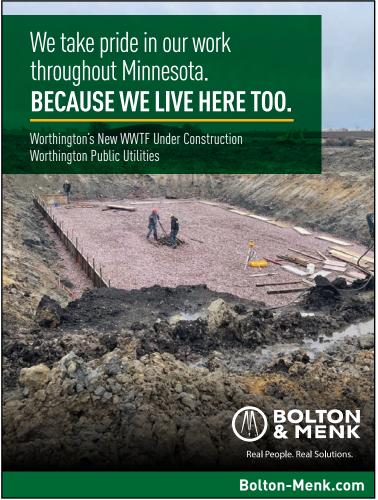
# Xcel RFP calls for 1.2 gigawatts of new Minnesota-based wind power

On October 19, Xcel Energy announced a request for proposal (RFP) for the construction of 1.2 gigawatts of Minnesota-based wind power that will help to replace the capacity exiting the grid as the Sherco Coal Plant in Becker closes in 2030.

The RFP requires the projects to have a nominal alternating current electrical output exceeding 200 megawatts at each location, and that each project reaches commercial operation by December 31, 2027. Eligible projects will be in the State of Minnesota and be in the prox-

imity of the new substation in Lyon County, Minnesota as well as the new transmission line connecting the Lyon County substation to the Sherco generating station.

Bids will be due by December 14, 2023.



# **System** writes a prescription for clean power



Have you ever heard of holistic medicine or healthcare? It is defined as care that simultaneously addresses the physical, mental, emotional, social, and spiritual components of health.

In this spirit, Boston Medical Center Health System (BMC) started a pilot program on October 16 that addresses a key part of well-being: access to affordable and reliable energy. Using a solar array installed on the health system's administrative building, clinicians will be able to prescribe a lower energy bill for up to 80 low-income households. Credits of about \$50 per month representing approximately 30 percent of the

average Boston resident's electricity bill, will be offset through clean energy generated by solar panels on a BMC building.

BMC sees the program as a way to positively impact the health and well-being of residents for whom lower electricity bills might mean a more comfortable indoor environment or more use of medical devices. The pilot will help drive holistic health for those who need it the most.

The program was made possible by the Inflation Reduction Act's Low Income Communities Bonus Credit, which is a tax credit that incentivizes solar projects that send clean energy to low-income households.

# Interstate Power and Light seeks lowa rate increases for its electric and natural gas rates

On October 12, Interstate Power and Light, which is a subsidiary of Alliant Energy of Madison, Wisconsin, submitted a proposal to the Iowa Utilities Board (IUB) that would raise rates for its Iowa customers in October of 2024.

The IUB is being asked for

a 7.7 percent rate increase for electricity service and a 5 percent increase for gas. Interstate Power and Light says that the increases are needed to upgrade aging infrastructure and to create a healthier environment.

The request will be reviewed within 10 months by the IUB.

# Heartland Greenway carbon capture pipeline scrapped

On October 20, Navigator CO2, a developer of carbon management infrastructure, announced that it would be cancelling plans to construct the Heartland Greenway carbon pipeline.

The pipeline had been slated to connect ethanol plants in Iowa, Illinois, Minnesota, Nebraska, and South Dakota to an extensive carbon capture system that would have moved carbon dioxide to sequestration locations in west-central Illinois.

Navigator CO2 noted regulatory and governmental challenges as factors in deciding to cancel the project. A permit that Navigator CO2 applied for in South Dakota was not approved. The new technology of carbon capture pipelines has faced some opposition from landowners, who have concerns about CO2 leaks and appropriate rights-of-way.

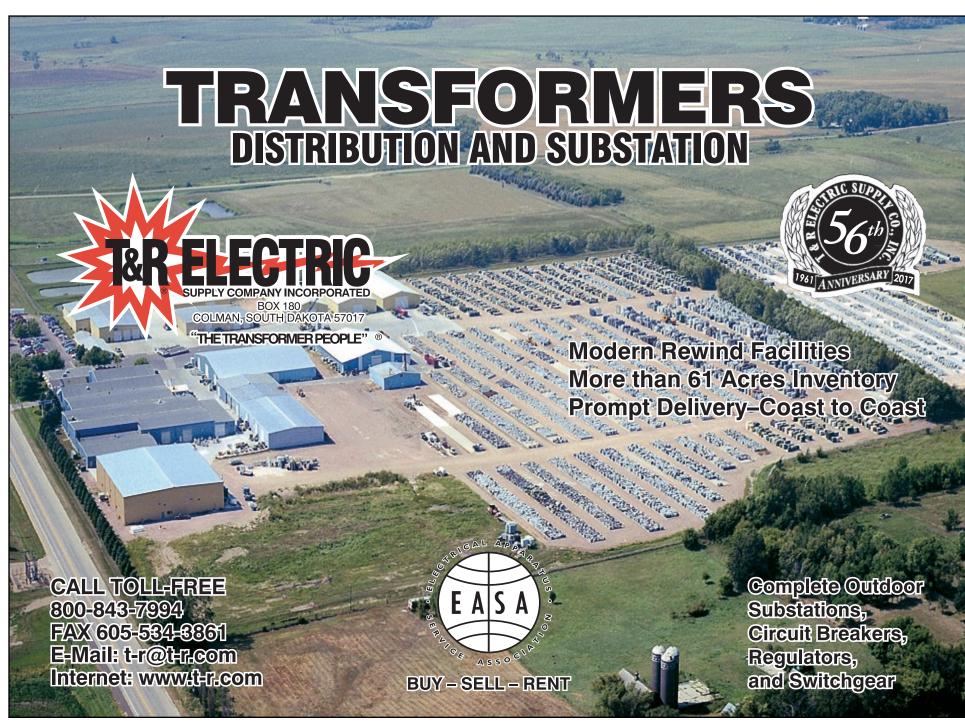
# Supreme Court declines to challenge Minnesota auto emissions standards

In mid-October, the United States Supreme Court chose not to hear a lawsuit brought by the Minnesota Auto Dealers Association (MADA) in opposition to Minnesota's new tailpipe emissions standards.

Earlier this year, MADA brought their suit before the Minnesota Court of Appeals, prompting the appeal to the nation's highest court.

The emissions standards, which are based on California's standards, call for more allelectric and hybrid vehicles to be made available to consumers so that tailpipe emissions are lowered. The rules will take effect on January 1, 2024, for 2025 models.



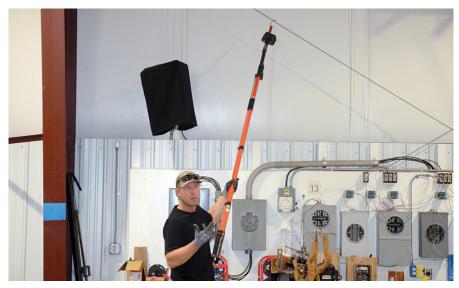


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## **Cross Training School**

### Students met for Cross Training School in Marshall on October 10-12.

The goal of Cross Training School is to provide the non-lineworker employee with basic skills regarding the tools, tasks, and hazards of being a powerline employee.



 $Cody\ Raveling\ instructs\ the\ classroom\ portion\ of\ the\ school.$ 



 $Cody\ shows\ learners\ the\ inner\ working\ of\ an\ electrical\ enclosure.$ 



Attendees learned how to change fuses and work with cutouts.



Attendees learned how to safely operate a bucket truck.

## **Tree Trimming School**

## Learners met at the Brainerd Public Utilities Wastewater Facility from October 17-19 to learn all about tree trimming.

Several MMUA Staff recently completed arborist training (see article on page 6 of  $\it The Resource$ ) and were able to guide attendees through the nuances of felling, pruning, and cutting trees.



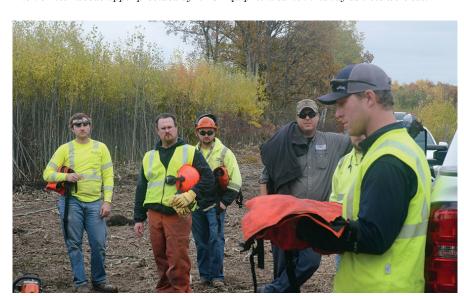
MMUA's Jay Reading gets ready to go to work.



A learner makes a safe cut.



 $The\ Vermeer\ woodchipper\ provided\ by\ RDO\ Equipment\ came\ in\ handy\ as\ trees\ were\ cut.$ 



MMUA's Cody  $Raveling\ talks\ about\ safety\ and\ the\ importance\ of\ wearing\ chaps\ when\ tree\ trimming.$ 

## **New study shows wastewater** can be converted into industrial chemicals using light



A study published in the journal Nature Sustainability on October 16 by scientists from the Chinese **Academy of Sciences and the** Harbin Institute of Technology, also in China, described a new method of creating valuable industrial chemicals.

The technique uses bacteria that are genetically modified to give them the ability of semiconductors to harvest light. In this case, a marine bacterium called Vibrio natriegens was modified to produce the chemical

2,3-butanediol (BDO) from wastewater using light. BDO has many uses including as an antifreeze, and buttery flavors in food can be formed by dehydrogenation of 2,3-BDO.

An analysis of experiments found that producing BDO from wastewater not only saved money, but it also lowered the total carbon footprint. The scientists plan to continue investigating the uses of modified bacteria to turn wastewater into other valuable chemicals and commodities.













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## MMUA, energy partners tour St. Thomas' microgrids lab

**MMUA staff and interested** parties from groups as diverse as **Connexus Energy and the Minne**sota Department of Commerce met at St. Thomas University in St. Paul on October 5 to tour the **Center for Microgrid Research.** 

The Center is dedicated to improving the reliability and resiliency of our electric grid. The Center is also a microgrid, which is a local version of the much larger power grid.

The group was welcomed by Associate Professor of Electrical Engineering Dr. Mahmoud Kabalan. He presented the components of the Center, which include a 13.8 kilovolt feed from Xcel Energy, a dedicated substation for the facility, a 50-kilowatt diesel generator, and a solar array. The Center also has batteries that can provide four hours of discharge.

The Center has a control center for monitoring different components of the microgrid, as well as for watching power infrastructure for weather or vandalism concerns.

Along with the power components, the system requires a variety of computers that can crunch the numbers on the efficiency of generating and storing electricity. An enormous amount of data is fed into supercomputers to make sense of the various questions researchers are exploring.

In addition to generating energy, the Center also engages in experiments for partners and industry to answer real-world questions surrounding different products and to collect data.

The Center has plans to expand, thanks to a joint program with the Army Corps of Engineers. The Army Corps plans to make most military bases microgrids by 2035. The new program will

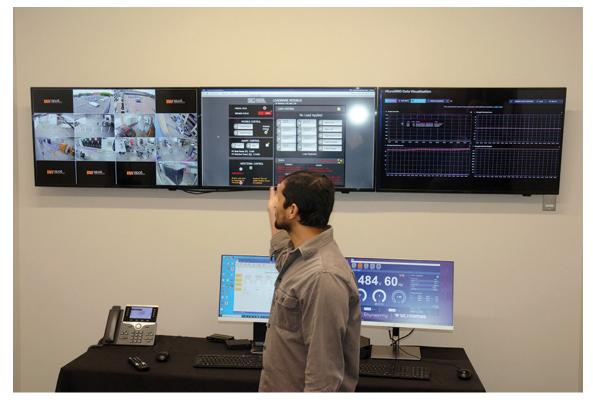
develop, test, and demonstrate microgrid technologies on a wider scale, with 400,000 square feet in five buildings at St. Thomas becoming part of the microgrid. More solar arrays and electric vehicle (EV) charging stations will also become part of the St. Thomas microgrid.

With the expansion, the staff of the Center will grow from three full-time staff and five students to eight full-time staff and 25 students.

Attendees on the tour were interested in St. Thomas' work and discussed partnerships with the Center. Dr. Kabalan noted that he is always interested in giving tours to interested parties and partnering with a variety of groups in order to further the mission of the Center.



Dr. Mahmoud Kablan, Associate Professor and Director of the Center for Microgrid Research, discusses the Center's



An employee shows attendees the Center's control room.

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## **More Colorado energy co-ops line up to leave** Xcel, Tri-State for cleaner,

cheaper electricity providers

From: The Colorado Sun By Mark Jaffe Reprinted with permission

United Power CEO Mark Gabriel has a countdown clock on his desk ticking off the time until his electric cooperative leaves the Tri-State Generation and Transmission Association on May 1, 2024.



Mark Gabriel

Brighton-based United Power, however, isn't the only Colorado co-op counting days.

Seven other rural electrical cooperatives have left, are look ing to leave, or renegotiate contracts with their traditional power suppliers — Tri-State and Xcel Energy — enabling them to venture into a wholesale market filled with merchant power suppliers and brokers.

"The energy transition is now providing lower-cost, local and cleaner power solutions that offer a number of advantages to co-ops," said Seth Feaster, an analyst with the nonprofit Institute for Energy Economics and Financial Analysis. "It allows co-ops to forge their own energy independence."

Traditionally, rural cooperatives bought their electricity from generation and transmission associations, created to serve the co-ops, or an investor-owned utility, like Xcel Energy. Those purchases account for 60% to 70% of the cooperatives' budgets.

"I think that the old world is just fading away," Gabriel said, undermined by cheap wind and solar electricity and technological innovations, such as battery storage. "Those companies that don't march with time, end up just relics on the side of the road."

United Power is striking deals with multiple suppliers for power and storage. "It's important to recognize we really will have a much more balanced portfolio than our current power supplier offers us," Gabriel said.

## Reasons for departing vary, but start with price

While there are some similarities, the co-ops leaving Tri-State and those exiting Xcel Energy each have their own particular reasons.

For the cooperatives departing Xcel Energy — the CORE Electric

Cooperative, Grand Valley Power and the Yampa Valley Electric Association — the focus is on the volatility of Xcel's wholesale prices and questions of management.

CORE, formerly known as the Intermountain Rural Electric Association, is the largest cooperative in Colorado with 175,000 members — customers actually own the co-op — across 11 Front Range counties.

The cooperative has had a longstanding relationship with Xcel Energy, including owning a quarter of the Comanche 3 power plant.

The Sedalia-based cooperative is suing Xcel Energy for breach of contract over the troubled, 750-megawatt, coal-fired power plant in Pueblo, which has suffered more than 700 days of breakdowns since it went online in 2010.

"Taking a share of Comanche 3 was probably the biggest mistake CORE ever made," said Steve Figueroa, the co-op's commercial operations director. The lawsuit is slated to go to trial in Denver District Court in October.

While CORE and Xcel Energy battle it out in court, the cooperative is moving to replace its power supply. "Largely it is the transition from capital intensive resources, like coal plants, to more modular resources," Figueroa said. "It's the promise you don't have to live with the historical mistakes anymore."

In January, CORE signed a 20-year contract with Invergy, a multinational power project developer, to provide electricity, including 400 megawatts of new solar and wind energy and 100 megawatts of battery storage, backed up by 300 MW of existing natural gas resources starting in 2026.

The cooperative also signed a contract for some extra natural gas-fired generation with Onward Energy and is negotiating for additional renewable energy capacity, Figueroa said. CORE is also exploring adding more battery storage.

"When the terms of our deal (with Xcel Energy) are over we don't want to stay with this old business model," Figueroa said.

The other issue the co-ops had with Xcel Energy was the explosive increase in rates due to natural gas prices — first as a result of the 2021 Winter Storm Uri, which shutdown Texas gas wells tripling spot market prices, and then last winter's high prices.

Especially hard hit were Xcel Energy's smaller cooperatives, such as Grand Junction-based Grand Valley Power and the Steamboat Springs-based Yampa Valley Electric Association.

Grand Valley has 19,000 members and Yampa Valley 27,000 members and under

their Xcel Energy contracts the price of natural gas was passed directly to their members — as is to the utility's own residential and commercial customers.

"The philosophical issue for me and the smaller co-ops is that it is managed exclusively by Xcel and we have zero input, but our Grand Valley consumers have to pay for it," said Tom Walch, Grand Valley's CEO.

The high natural gas prices added about 10% to Grand Valley member bills. "It certainly motivated us to look at other options," Walch said.

Yampa Valley saw a 14% increase in its rates in 2023, according to a letter to members from co-op CEO Steve Johnson announcing the plan to leave Xcel Energy. The cooperatives will leave after a five-year transition.

So frustrated were four cooperatives served by Xcel Energy
— CORE, Grand Valley, Yampa
Valley and Glenwood Springs-



based Holy Cross — that they filed a complaint with federal regulators in January contending the utility had mismanaged its Storm Uri gas supplies.

The four were seeking a refund of \$6.9 million in fuel charges, but the Federal Energy Regulatory Commission rejected their request.

"We thought we had a good case, but we were dealing with a situation where it was David versus Goliath," Walch said. "It was Xcel's home court."

"It was the big kid pushing the little kid around," Walch said. "I am not saying Xcel is a bully, it just feels that way sometimes.

But if a bully is taking your lunch money, maybe you find a different route to school. That's what we are doing, taking a different route to school."

#### Guzman is the go-to

"We were disappointed that they chose to go elsewhere but understood the decision that they were making," said Robert Kenney, CEO of Xcel Energy's Colorado subsidiary. "We never want to lose the customer."

While United Power and CORE have the resources to manage their own power portfolios, Grand Valley needed to find a single provider to replace Xcel Continued on page 13



## Colorado energy co-ops

 $Continued\ from\ page\ 12$ 

Energy, Walch said.

The co-op settled on Denverbased Guzman Energy, a wholesale power provider, and signed a 15-year contract with fixed power prices. "What It provides for us is certainty of what our power costs will be and that's something we never had with Xcel," Walch said.

Yampa Valley also chose Guzman and the power wholesaler has already been instrumental in the departure of two co-ops from Tri-State, which serves 42 cooperatives in four western states.

In 2016, the Kit Carson Electric Cooperative, in Taos, New Mexico, was the first to pay an exit fee and leave Tri-State. Guzman financed the \$37.5 million fee and included it as part of a long-term power contract.

Four years later Colorado's Delta-Montrose Electric Association paid a \$136.5 million exit fee to Tri-State, also financed too long and require the co-ops to buy 95% of their electricity from the association, thwarting efforts to develop local projects.

Some cooperatives have also been dissatisfied with Tri-State's reliance on fossil fuels, which accounted for more than half its power in 2022, with coal-fired plants making up about 36% of the electricity.

Guzman contracts offer shorter terms, usually 15 years, fixed prices, and emphasis on clean energy and carve outs for local projects.

The company now has 13 clients — cooperatives, municipalities and tribes — in Colorado and New Mexico. The smallest is the Acoma Pueblo, west of Albuquerque, with 110,000 members.

By guaranteeing the price of power, the company takes on some of the risk for its clients.

"Twenty-four-seven, we have a manned desk that is charged with making sure that our Lee Boughey, a Tri-State spokesman, said in an email.

Under new Colorado laws, Lunt said, Guzman is filing resource adequacy plans and clean heat plans for some of its cooperatives with state energy and public health officials and its rate information is filed with the FERC.

Grand Valley's Walch said his co-op understands the risk of swapping an established power generator for Guzman. "We are committing to some risk and so are they," he said.

United Power, with its larger portfolio, is hedging its risk in multiple ways. It has taken contracts or made agreements with several power supplies, including Xcel Energy. Guzman's contract with United is for a third of the co-op's power needs.

The co-op is also requiring its contractors to post bonds and it has hired the Energy Authority, a nonprofit company that manin Fort Collins, are hoping to obtain partial-requirement contracts, enabling them to get half their electricity on the wholesale market.

"We are trying to support Tri-State in developing a partial option," said Jessica Matlock, La Plata's CEO. "In the meantime, we are not going to wait. ...We're going out and seeing what's available, what is being built and what is in the pipeline."

When United Power leaves next May, so will another Tri-State member, the Northwest Rural Public Power District in Hay Springs, Nebraska. Mountain Parks Electric, in Granby, won't be far behind, looking to leave in 2025.

"Mountain Parks was part of the group looking for a partial requirement contract," said Virginia Harman, the co-op's CEO. "At this point we feel that a full withdrawal is our best path." The figure became the subject of a case before the FERC, which regulates Tri-State.

Rene Terry, a FERC administrative law judge, called the lost revenue argument "unpersuasive" and the commission staff recommended a fee in the range of \$250 million. A final decision by the commission is pending.

Mountain Parks has given notice it will leave without knowing its exit fee. "While we don't have complete certainty of the contract termination," Harman said. "We have an assessment."

The defections and partial-requirements contract could lead to Tri-State losing more than 25% of its electricity sales. On Sept. 5, facing the imminent loss of United Power, Northwest Rural Public Power and Mountain Parks, the association offered to sell its excess power on the wholesale market.

"In a tightening regional power market, Tri-State has the



through a 12.5-year power contract with Guzman.

"It has gone extremely well," said Jack Johnston, DMEA's chief executive. "Our last rate increase was right before switching to Guzman at the end of 2019 and we announced at our annual meeting that we won't have a rate increase in 2024."

Compared to Tri-State wholesale prices, DMEA customers will save tens of millions of dollars over the course of the Guzman contract, Johnston said.

Tri-State managed to hold its rates stable for seven years through 2023 before increasing them about 6.3% for 2024 to \$77.91 a delivered megawatt-hour of electricity.

Still, United's Gabriel said comparable wholesale prices on the open market for a delivered megawatt-hour are \$60 to \$65.

The main complaints that co-ops have voice about Tri-State are that the association's rates are high, its 50-year contracts are

customers get that 24/7 reliable power," said Robin Lunt, Guzman's chief commercial officer. "We have pretty robust risk policies to make sure that we're properly using all the tools in our toolkit to access a variety of markets."

"Our near-term focus is to win the West," Lunt said. "And when we say win the West we mean, Colorado and New Mexico."

Still, while Tri-State and Xcel finances are overseen by state and federal regulators, many of the operators in the wholesale market are privately-held, and financed by private investors. Guzman, for example, has raised \$130 million from ZOMA Capital and Vision Ridge Partners.

"There appears to be little transparency with some other options in the marketplace, including public information on wholesale rates, generation resources, resource adequacy, emissions profiles and other important areas, even the financial position of the supplier,"

ages and aggregates electricity loads for public power providers.

"You have to understand, it's a different world where you move from a single power supplier who assumes the risk for you," Gabriel said. "You have to be willing to assume that risk yourself."

## Tri-State is taking the demands seriously

Tri-State has responded by embarking on a \$23-billion resource plan that will close coal-fired plants, shift the association to 70% renewable generation by 2030, cutting its greenhouse gas emissions by \$2004

"Tri-State is in the middle of a meaningful transformation of our cooperatives, and our notfor-profit model," Boughey said.

It has also proposed partialrequirement contacts. The La Plata Electric Association, in Durango, and the Poudre Valley Rural Electric Association, Harman said the cooperative is close to completing negotiations for an alternative power supplier.

The biggest hurdle and point of contention for the departing co-ops has been the exit fees demanded by Tri-State.

Since its creation in 1952, the association has taken on the debt to build a network of 10 generating stations, including six coal-fired plants, with 5,800 miles of transmission lines to serve its 42 member cooperatives and their 1.2 million consumers across 200,000 square miles of Nebraska, Wyoming, Colorado and New Mexico.

The 50-year contracts are needed to amortize that big system, Tri-State officials said. The association has maintained that any co-op leaving must assume its share of the debt or pay the revenues it would have paid over the life of its contract.

That formula yielded a \$1.6 billion exit fee for United Power.

opportunity to reduce cost pressures on our remaining members by selling power to other parties," CEO Duane Highley said in a statement.

Still, the pressure on Tri-State and other generation and transmission associations will only increase, said Feaster, the energy institute analyst. "The generation and transmission/ co-op model are being fundamentally altered by the new economics," Feaster said. "Now that there are real and proven alternatives in place, and there is greater clarity around the cost and regulatory paths to get there, more are likely to switch."

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## Bangladesh receives first shipment of uranium, joins ranks of world's nuclear energy producers

On October 5, Bangladesh received its first shipment of nuclear fuel at the new Rooppur Nuclear Power Plant located in the west-central part of the country.

To mark the occasion, Bangladesh celebrated a "nuclear fuel delivery ceremony" with Russian President Vladimir Putin and Bangladeshi Prime Minister Sheikh Hasina communicating via videoconference.

Bangladesh will continue to receive uranium fuel from Russia, and the South Asian nation plans to eventually build two nuclear power plants with Russian assistance as well. Bangladesh's partner in the projects is Russian



state-owned nuclear company Rosatom, which is financing the projects. The work emerged from a 2011 bilateral agreement between the two countries.

The first unit of the Rooppur Nuclear Power Plant will generate 2400 megawatts. It was supposed to begin operation in 2024 but will not meet that target due to holdups such as COVID, supply-chain issues, and Russia's war in Ukraine. Bangladesh will become the 33rd country in the world to produce nuclear energy.

# Illinois receives \$16 million federal grid resiliency grant

On September 28, the Illinois governor's office announced the state would be the recipient of \$16 million in funds from the federal Grid Resilience and Tribal Formula Grant run by the United States Department of Energy (DOE).

According to DOE, the grants are made to "strengthen and modernize America's power grid against wildfires, extreme weather, and other natural disasters that are exacerbated by the climate crisis."

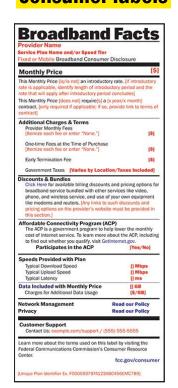
The governor's office said that the funds would go to help small municipal utilities and small co-ops in the state. The funds also have an equity component,



and they will help support residents, businesses, and utilities that are underserved and could use assistance in grid resiliency work.

Eleven other states and two territories were also chosen for the program's eighth round of funding. Illinois was the only midwestern state chosen in this round.

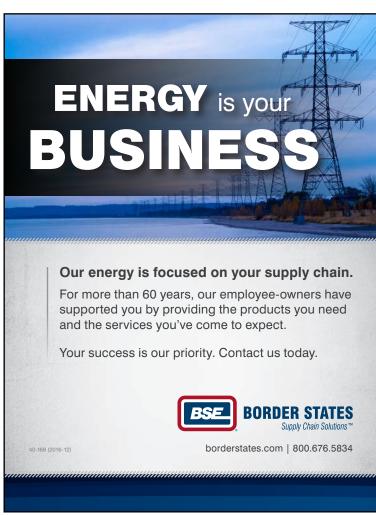
# FCC announces dates for phase-in of broadband consumer labels



On October 10, the Federal Communications Commission (FCC) issued a press release with dates that broadband providers will be required to display new broadband consumer labels.

This change is required by the Broadband Label Order, and it is a component of the Infrastructure Investment and Jobs Act. Most providers will be required to display the label by April 10, 2024, though providers with fewer than 100,000 subscriber lines will be given an extra six months. Those smaller entities are required to display the new label by October 10, 2024. The labels are required at any point of sale for internet services, including online.

The mandatory labels will clearly display information like the monthly price, taxes, fees, discounts, speeds, and data allowances included with the services being purchased. The new label format can be viewed at https://www.fcc.gov/broadbandlabels.









# Juneau, Alaska experiences three toxic discharges in its wastewater plants in one day



On October 11, Juneau, the capital of Alaska, experienced three toxic discharges in its wastewater treatment plants on the same day, with two of the discharges happening at a single wastewater treatment plant.

Two of the discharges occurred at the Mendenhall Wastewater

Treatment Plant, which is the oldest wastewater plant in Juneau's system. It was originally built in the mid-1960s. An acid spill occurred earlier in the day, with a diesel spill following. At the Auke Bay package treatment plant, a discharge of a milky white substance also occurred on October 11. That substance

was sent out for testing as plant operators were not sure what it was

An investigation was announced on October 20 to understand where the discharges originated from, along with a warning to citizens that such substances are not allowed in the city sewer system.

# Solar-powered process may sharply reduce desalination costs

Researchers at the Massachusetts Institute of Technology (MIT) published findings in the September 27 issue of the journal Joule regarding a new method of removing salt from seawater that may make desalination as inexpensive to produce as tap water.

The inspiration for the team were eddies, the swirling mini whirlpools that are often seen in bodies of water. The scientists created a small box that was separated into two sections, top and bottom. As salt water enters the box, heat from solar energy causes the water to swirl like an eddy. The water then comes into contact with an evaporator layer which, using solar energy, heats up and evaporates any water that comes into contact with it. The water vapor that is created is sent to the bottom of the box, where a condensing layer cools the vapor back into water, which is now largely devoid of salt. The leftover salt continues to circulate through and out of the device, avoiding the salt-clogging



issues that have hindered other designs.

The MIT team believes that the system, if made to be the size of a suitcase, could produce 1-1.5 gallons of drinking water per hour and last for several years without needing repair.









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# Russia continues nuclear power diplomacy



On October 13, Burkina Faso, a country in West Africa, announced that it was signing a memorandum of understanding with Russia state nuclear company Rosatom for the construction of a nuclear power plant in the country.

The memorandum of understanding follows a July 2023 request by Burkina Faso's leader Ibrahim Traore to Russian President Vladimir Putin to develop nuclear power in his country.

Specifics have not been released at this time, but the agreement noted that the development of the nuclear power plant will help assist the development of nuclear infrastructure in Burkina Faso, as well as fostering the creation of nuclear technologies for medical and agricultural uses.

## **Benton Harbor, Michigan lead contamination** claims are dismissed by U.S. District Court

Three federal cases against agencies and political figures in Michigan were dismissed by Judge Hala Jarbou on September 28.

The cases, Daretha Braziel v. Whitmer, Iesah Mitchell v. City of Benton Harbor and Dwayne Grant v. EPA, had been brought in relation to lead contamination that had occurred in the Benton Harbor, Michigan water system.

The judge found that that the named parties, including Governor Gretchen Whitmer and the Environmental Protection Agency, were not responsible for the contamination, and that their "slowness to act" (as described in the suits) was not enough to warrant the action.

Other suits that have been brought against the City of



Benton Harbor, the mayor, and a Benton Harbor water executive were allowed to proceed.

Elevated levels of lead were first detected in Benton Harbor water in 2018, although free bottled water wasn't distributed to residents until 2021.

## **Charlotte, Tallahassee** experience accidental wastewater releases

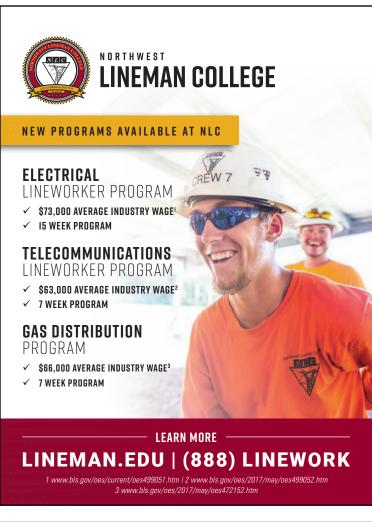
Charlotte, North Carolina, and Tallahassee, Florida, experienced accidental wastewater releases within days of one another in early October.

In Tallahassee, some 23,000 gallons of untreated wastewater was spilled on October 1 when a 24 inch diameter pipe broke in Northeast Tallahassee. The spill mainly went into two retention ponds, and the break was repaired within a couple of hours. The ponds were also quickly remediated.

On October 2, Charlotte Water was called to the site of a wastewater overflow in the south part of the city. A falling tree damaged a pipe and caused about 2,400 gallons to overflow

into Sugar Creek. Charlotte Water officials used the event to educate the public about keeping wastewater systems free of items that can cause clogs and overflows, like so-called "flushable" wipes.







**lowa town found** to be releasing untreated wastewater

Varina, a small town of 70 in **Pocahontas County, Iowa,** northwest of Des Moines has been found by the Iowa Department of Natural Resources (DNR) to be producing untreated wastewater from its drinking water treatment system and releasing it through a pipe into nearby Little Cedar Creek.

The wastewater is created when the filters used to remove iron from the town's drinking supply are cleaned, resulting in untreated wastewater. The wastewater has shown elevated levels of chlorine and ammonia nitrogen.

The city has been fined \$500 by the DNR. No deadline has been set for changes to the current wastewater system.

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On October 24, Albert Lea requested \$40 million in state bonding funds for the city's wastewater treatment plant during a visit from the House Capital Investment Committee. Legislators viewed the plant and talked to local government officials during their visit.

The Minnesota Department of Transportation is resurfacing a segment of Interstate 90 near Blue Earth and will reinstall the roadway's Golden Stripe. The Golden Stripe marks the point where the nation's longest roadway was completed in 1978, as crews worked from east to west and west to east. They met near Blue Earth. The stripe is 27 feet wide and was paved over years ago after its original installation. The stripe was similar to the "Golden Spike" that marked the place where the transcontinental railroad was completed.



**East Grand Forks** has begun the process of updating its five-year strategic plan for economic development and tax base growth in the city. The last process led to a plan that was adopted in 2018.

On October 2, the Elk River City Council heard a presentation on the planned transition to automated metering being carried out by Elk River Municipal Utilities. The transition to automated metering is expected to be finished by early 2025.

A software glitch at **New Prague** Municipal Utilities ended up sending customers the date as their bill instead of their actual billing amount. Residents saw a billing amount of \$9,152,023 because the software read the date of 9/15/2023 as the amount due. Utilities staff quickly worked to clear up the confusion and get the actual billing amounts to customers.

Students from North Branch and **Rush City** came together at Wild Mountain Recreation Area on September 21 for the 21st annual Chisago County Children's Water Festival. Students learned about water and how it is key to the survival of all living things. Topics explored included fish, the water cycle, aquatic invasive species, macroinvertebrates, watersheds, drinking water, water pollution, and lakes. Students took home a souvenir T-shirt to remember their day

and their ongoing responsibility to our water resources.

Rochester Public Utilities' planned rate changes were approved unanimously by Rochester's public utility board on October 24. The rate increases are expected to result in an added \$1.65 to the average monthly water bill and \$4.12 to the average monthly electric bill for residential customers.

**Rushford** is considering the creation of a future redevelopment tax increment financing (TIF) district to assist with costs



associated with the Rushford Redevelopment Project. The project is on the site of the former Farmers Win Cooperative. On

October 10, the Rushford City Council voted unanimously to approve the terms of an internal loan that could assist with the creation of a TIF.



The Wadena Development Authority celebrated a ribbon cutting on October 2 for the opening of the new Pinewood Estates housing development. Pinewood Estates

has 41 lots that are mostly designated for single-family housing, and nine parcels that are planned for multi-family housing. The new development was created in response to a lack of affordable housing in Wadena.

Bird flu is once again spreading across the state's poultry farms. After first being seen in Meeker County in early October, cases have been confirmed in Blue Earth, Becker, Kandiyohi and Redwood counties. An estimated 100,000 birds have been killed so far to prevent the spread of the illness.

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# Bits & Pieces

In a September 21 filing by the Electric Reliability Council of Texas (ERCOT) to the Texas Public Utilities Commission, ERCOT provided reliability forecasts under 48 modeling scenarios for coal generation retirement. ERCOT emphasized its concerns with proposed Environmental Protection Agency (EPA) rules on coal electrical generation requiring 8.3 gigawatts (GW) of coal and natural gas generation to be retired. The regulators then directed ERCOT to conduct further modeling that holds loss-of-load expectations down to one day in 10, one day in 15, and one day in 20 years. Current ERCOT modeling assumptions call for a 3.3 GW reduction in fossil fuel generation. Stated one Texas PUC Commissioner in reference to the EPA limits, "This ain't gonna happen."

Energy News Network reported on October 2 that a new Minnesota law will help small nonprofits arguing before the Minnesota Public Utilities Commission receive compensation for sharing information that shapes commissioner's decisions. According to the article, "Those payments were already available to groups intervening in utility rate cases, but the new law expands them to a wider range of cases. They include cases in which utilities are seeking permission to implement pilot programs, collect money for infrastructure projects, or win approval for performance measures."

Bloomberg reported on October 4 that Germany would bring several mothballed coal plants back to the market this winter to avoid blackouts and brownouts when demand peaks.



On October 9, *Reuters* reported news from the Israeli energy ministry. The ministry said that production had been suspended at the Tamar gas field off of the country's southern coast due to security concerns after Hamas gunmen made a deadly attack on Israeli territory on October 7. Gas from the field is also exported to Egypt and Jordan.

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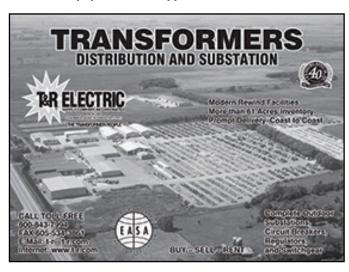


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On October 12, South Africa's Department of Water and Sanitation (DWS) head Sean Phillips said that municipal wastewater treatment plants in the country are in poor shape, with at least 40 percent in critical condition and some close to collapsing. DWS said that as of 2022, 30 percent of municipalities in the country supplied poor-quality water to their residents.



The Houston Chronicle reported on October 13 that bitcoin mining in the state is driving up Texan's electric bills by \$1.8 billion annually, and that the number is expected to grow in the coming years.

Utility providers from around the state of Wisconsin gathered at the Wisconsin State Capitol in Madison on October 18 to celebrate their work. Representatives from the Municipal Electric Utilities of Wisconsin (MEUW) met with legislators, and more than 80 utility trucks paraded around the capitol building in celebration of MEUW's 95th anniversary.

The Star Tribune reported on October 20 that Minnesota wastewater sampling of coronavirus showed late-September levels that dropped below the already-low summer levels.

The Guardian reported on October 22 that in September 2023, Eastern Australia had a half-hour where renewable energy was able to meet 98.6 percent of Eastern Australia's electricity needs. This is the closest that Eastern Australia has gotten to meeting all its power needs with renewables in the grid's history.

Ford Motor Company announced on October 26 that the company would be postponing about \$12 billion in planned spending on new electric vehicle (EV) manufacturing capacity. Ford said that this was because many North American Ford customers are no longer willing to pay a premium for an EV over other types of cars, including internal-combustion and hybrid models.

## San Jose City Council approves new municipal utility department, study period for creation of municipal utility

On October 3, the San Jose, California, city council voted unanimously to create a new department called "San Jose Power" for the city.

In the same action, they authorized a feasibility study on the creation of a new municipal utility. The study period is expected to last three years, after

which time the city will decide whether to move forward with a municipal utility.

San Jose is known as the "Capital of Silicon Valley," and it is in one of the wealthiest regions of the country. The City has found its residents becoming increasingly disillusioned with the service provided by Pacific Gas & Electric (PG&E), its current power provider.

Some benefits of a new municipal utility that have already been determined, include utility rates somewhere between 15 and 25 percent lower than PG&E rates, and faster connection of new customers to the grid.

## Al use could explode global electricity demand

A paper published in the journal Joule on October 10 argued that the widespread adoption of artificial intelligence (AI) by the public could lead to electricity consumption by AI that rivals the electricity use of individual countries.

The research, from Alex De Vries at Vrije Universiteit Amsterdam, The Netherlands, found that when AI systems used large language models (LLM) to learn by receiving large amounts of data, they consumed amounts of electricity by figures approaching a factor of 10. The research notes comments from Google saying searches on their website using an AI search versus a standard search increase electricity use by ten times.

If AI search becomes the norm, Google's electricity usage for AI alone could approach the annual electricity usage of the country of Ireland, which currently uses 29.3 Terawatthours annually. As AI becomes prevalent in society, its energy demands may create further strain on an already taxed power grid.



## First "electricity grid at sea" to be built in Belgium

On October 3, Princess Elisabeth **Island received its environmental** permits from agencies of the Belgian government.

The "island"—also known as "Elia"— is a planned artificial island to be located in the North Sea off of the Belgian coast.

Princess Elisabeth Island will act as an energy hub in the area, tying offshore wind farms to Belgium as well as acting as a future interconnection point with Denmark and the United Kingdom. It will support the Princess Elisabeth Zone, a future 3.5-gigawatt wind farm

that will send power to the island, where it will be converted to high-voltage electricity and sent to neighboring countries.

Construction is expected to begin in March of 2024 and to be completed in August of 2026.

## **EIA forecasts 2023 American** hydropower generation will be 6 percent lower than 2022 melt that resulted in a loss of

On September 28, the United **States Energy Information** Administration (EIA) released its hydropower production forecast for 2023.

In 2022, national hydropower production was approximately 250 billion kilowatt-hours (kWh), while 2023 production will likely total just under 250 billion kWh, a projected decrease of 6 percent.

Hydropower generated in the Pacific Northwest is projected to drop 19 percent compared to last year due to a quick May snow-

water supply. California, on the other hand, is projected to have 99 percent more hydropower production in 2023 than in 2022 because of strong snowfall in the winter of 2022-2023 that helped hydropower facilities generate electricity in 2023.

El Nino is expected to create more precipitation in the American Southwest and California in the latter half of this year, while it will be warmer in the Pacific Northwest than average, impacting precipitation levels there.

## **Companies pass first test in UK's competition** to select manufacturer for small modular nuclear reactors

On October 2, six companies were chosen by the British Government to proceed to the second stage of a national competition to help develop a small modular reactor (SMR) for domestic use in the United Kingdom.

The companies chosen were EDF, GE-Hitachi Nuclear Energy International, Holtec Britain, NuScale Power, Rolls-Royce, and Westinghouse Electric Company UK.

The Government plans to begin

the next phase of the competition immediately. The winner will be announced in the spring of 2024, and contracting will occur by the summer of 2024.

## **Upcoming Events**

## **Transformer School and Pre-Conference**

## **January 23-26 MMUA Training Center**

The combination of classroom and hands-on instruction at this school is designed to increase understanding of the inner workings of a transformer, appropriate installations, and applications for maximum reliability.

Register for the school and the pre-conference separately by November 11 for the best rate. More information at mmua. org/event/transformer-2024.

## **Meter School and Pre-Conference**

#### February 6-9 **MMUA Training Center**

Meter School is an opportunity to obtain hands-on technical electric metering training. Basic/intermediate and advanced tracks are available. A Pre-Conference is also held in conjunction with the school. Register online at mmua.org/ event/meter-2024.

## **Emergency Preparedness** and Restoration Conference

## February 21-22 Holiday Inn, St. Cloud

Join other hometown utility and city professionals at this interactive conference. Increase your understanding of the mutual aid process and strengthen relationships with fellow industry professionals. Register by February 1 at mmua. org/event/emergency-2024.

## **Membership Directory**

In October, MMUA released the 2023 Membership Directory. The directory features selected staff contact information, utility and company profiles, information on MMUA programs and services, and statistics on electrical and gas usage of members.

Additional print copies of the directory are available for \$35 each. To purchase, please contact Christian Glanville at cglanville@mmua.org.

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