New technologies lead to new partnership

Municipal joint action agencies work together on demand response, AMI offering

by Steve Downer

Can municipal utility organizations rise above their self-interest and work together to advance Public Power in Minnesota?

'Yes,' is the resounding answer.

Municipal utilities in the 1970s came together to form a number of joint action agencies, which brought economies of scale to electric generation and transmission. While occasionally vying for new members, agencies typically work closely together on a variety of public policy and regulatory issues. And each is dedicated to preserving and advancing the interests of their individual utility members.

Agencies do work together. For instance, the Southern Minnesota Municipal Power Agency (SMMPA) gained economies of scale by working with Central Minnesota Power Agency Services in 2017, while developing the five-megawatt Lemond Solar Center, near Owatonna.

Now, Missouri River Energy Services (MRES) has opened up its 'coordinated demand response' (CDR) and automated metering infrastructure (AMI) service to SMMPA members on a trial basis.

At the prompting of a member concerned about the cost of expensive headend electronics, MRES started 'hosting' CDR in 2010. The agency was already using a CDR platform to collect data and dispatch generation. It added load management to its capabilities.

In the spring of 2013 Valley City, North Dakota approached MRES about hosting CDR/AMI using Radio Frequency (RF) technology. After some research, MRES agreed to host the service and recommended that RF be the technology of choice going forward with all CDR/AMI installations.

To further study and identify additional 'smart grid' technologies to benefit both the utility and its customers, MRES formed a smart grid focus group. The agency is taking steps to implement time-of-use (TOU) wholesale rates in 2023. To enable TOU, AMI is needed to pass price 'signals' and rates to customers.

Detroit Lakes Public Utility replaced an aging load management system with the MRES hosted CDR program, and subsequently began installing a small AMI pilot in late 2018. The utility is currently installing water 'nodes.' With a year's worth of data, said General Manager Vernell Roberts, the utility can make a better-informed decision on any advantages that might be presented by adopting TOU rates.

Meanwhile, SMMPA had also convened an active working group of staff and members, investigating and discussing AMI, electric vehicles (EVs), community solar, and other emerging issues. AMI bubbled to the top of the technologies offering real-world benefit today.

While its larger members could potential-

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Generation School complements new power plant role

Municipal utility power plants have proven their worth over the years, most recently during the April 11 blizzard.

And, while many utilities maintain plants as a hedge against high prices in the wholesale market or for reliability purposes, the modern municipal power plant is increasingly valuable as a complement to intermittent solar and wind generation.

That makes maintaining the power plant an increasingly important issue. To meet that need, MMUA held its annual Generation School April 23-25 at various sites, generally west of the Twin Cities.

This school offered valuable classroom and hands-on instruction on three different engine sets—Enterprise, Cooper and Fairbanks Morse—plus networking opportunities for generator operators and technicians.

Home base for the school was the Hutchinson Fire Department. Jeff Crampton of Fairbanks Morse started the afternoon program with a review of Basic System Maintenance.

The group then boarded a bus for a trip to the award-winning Shakopee Energy Park power plant. The plant was operating when the tour arrived, perhaps no surprise given the number of hours being logged by the newest generation of efficient municipal plants. Joel Ruen of Avant led the tour and interesting discussion.

A welcome reception, sponsored by Ziegler Power Systems, was held that evening.

Participants dispersed the next morning to either the Delano or Glencoe municipal power plants. Crampton led the training on a Fairbanks unit at Delano. Steve Payne of

Generation School: see back page please

Participants in the MMUA Generation School got an up-close look at one of the newer municipal power plants in Minnesota–the Shakopee Energy Park, near Canterbury Park in Shakopee.

Municipal utilities, power plants, shine during April blizzard

Severe weather caused widespread power outages in the Midwest and Great Plains Wednesday, April 10 and following days. Municipal generating plants were called into action in the wake of widespread electric transmission damage.

Blizzard conditions persisted into early Friday. Highways were closed. Severe Thunderstorm Warnings were issued for areas where heavy snow was falling. Wind gusts of more than 50 mph were reported by the National Weather Service, along with hail and lightning. Up to three-fourths of an inch of ice coated power lines in southern Minnesota. The ice and high winds led to outages.

With service from three different transmission feeds interrupted, Worthington Public Utilities (WPU) started generating 14 megawatts of electricity at approximately 5 a.m. on Thursday, April 11. The generators ran 42 hours, until a stable transmission feed was restored, at approximately 11 p.m. on Friday, April 12 by Great River Energy (GRE). Service on an ITC Holdings line was restored 20 minutes earlier.

The WPU electric distribution system is entirely underground and was undamaged. One municipal street light was damaged.

The storm followed, nearly six years to the day, an even more destructive ice storm that caused widespread outages and also pressed the Worthington power plant into action. WPU generated for 92 hours in 2013 (45 hours with no outside transmission service and 47 hours to supplement limited transmission); this year it generated for 42.

Without sufficient capacity to carry the entire city at times of peak use, the utility

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ly fend for themselves in the technology field, many of the smaller members could not afford to compete for full-time IT talent, would benefit from economies of scale when purchasing expensive electronics, and would run the risk of being overlooked by vendors working with much larger utilities. That led the SMMPA group to approach vendors about potential hosted solutions. In the process, vendor representatives mentioned that MRES was already offering a virtual solution.

On the way to a national public power conference, MRES CEO Tom Heller and SMMPA CEO Dave Geschwind met at the airport and discussed various issues. They concluded that on this topic, there was no sense in re-creating the wheel.

MRES now has 14 members using one or a combination of the services. Two SMMPA members—Lake City and Grand Marais—are also participating in the MRES programs. Lake City is installing AMI and Grand Marais is installing both AMI and CDR.

"It made sense for us—we didn't have to start at ground zero," said SMMPA's Chief External Affairs Officer Chris Schoenherr. MRES was very open to helping SMMPA in any way it could, he said.

MRES didn't offer the service to SMMPA members simply out of altruism. While there are various fees, the real benefit for MRES, said Director of Power Supply and Operations Ray Wahle, is that vendors pay more attention to the agency as the number of meters participating in the service grows.

"Our communities are very pleased with the service," Wahle said. "We were pleased to offer it to SMMPA members. They have been a great addition."

MRES staff provide "world-class support" and are generous with time and expertise, Schoenherr said. He is enthusiastic about the partnership, which is an effective use of resources and makes all the participants stronger.

"It's a tremendous value, particularly for smaller members," Schoenherr said. "It's a tremendous value to all of Public Power in Minnesota."

Metering technologies bridge gap from old programs to new

Municipal utilities have operated load management programs, now better known as Coordinated Demand Response (CDR), for decades.

A modern complement to CDR is Advanced Metering Infrastructure (AMI).

CDR reduces peak demand, especially on hot summer days, which helps utilities save money and delay the need for infrastructure improvements.

MRES offers a hosted CDR program that helps members cost-effectively install and operate direct load control of central air conditioners, electric water heaters, and other equipment. MRES hosts the headend CDR software and provides the communications system, along with operational and IT support, and has negotiated discounts on the hardware. MRES has identified demand response as a least cost resource.

AMI enables two-way communications between the utility and the customer meter or other devices. The AMI data can then be uploaded to the city's customer information system so that the city can create both the electric and water bills. AMI provides the backbone for many 'smart grid' technologies that can enhance system performance and efficiency. It can also provide customers with tools to better manage their electrical usage and costs, and can enable technology options, such as solar generation and electric vehicles. MRES is also offering these additional smart grid technologies to its members.

MRES hosts headend AMI software and provides the communications system, along with operational and IT support, and has negotiated discounts on the hardware.

Municipal members own the field equipment and direct how they want their programs operated. Municipal members have access to their programs and data through a portal via the internet.

The hosted service allows 'virtualized' IT. Each city has a virtual server, but only MRES can monitor or control the whole. It also provides for a higher level of cyber security.

With more utilities studying the service, it could well grow in future years. And with the agencies and their members actively employing new technologies and shared services, it will be interesting to see what, if any, new initiatives might be coming in the months ahead.

Schneider named NMPA general manager

Jasper Schneider is the new General Manager at Northern Municipal Power Agency (NMPA).

Schneider brings extensive expertise in electric utility and telecommunications leadership to the position, with a blend of backgrounds in technology, law, finance, and rural policy.

Schneider comes to the Thief River Falls-based municipal joint action agency from the National Information Solutions Cooperative (NISC). For four years at NISC, Schneider led a division responsible for providing NISC's 800 members technology solutions.

Prior to NISC, Schneider ran the United States Department of Agriculture's Rural Utility Service as State Director in North Dakota, and as acting Administrator in Washington, D.C. Prior to Schneider's public service career, he had a private law practice and worked at Cisco Systems.

He holds a law degree from Hamline University School of Law, in St. Paul, MN. Schneider and his wife have four children. He is a trustee of the University of Jamestown, a board member of the National Cooperative Business Association.

Schneider represented the 21st legislative district (central Fargo) in the North Dakota House of Representatives from 2006 to 2009. He ran as a member of the North Dakota Democratic Non-Partisan League.

Schneider resigned from the North Dakota House on November 3, 2009 after being appointed State Director for the USDA Rural Development.

Schneider replaces the retired Darryl Tveitbakk.

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A topic worth addressing

There are many reasons to keep your municipal utility. Can you quantify what they are?

Last month's *Resource* dealt with some difficult topics, including an electric cooperative's buy-out offer of a municipal utility, outlined at a public meeting to discuss the offer.

The article outlined the buy-out pitch. It did not go into the very many reasons that argue against selling a municipal electric utility.

It is a rare city administrator or clerk that doesn't readily acknowledge the benefits provided by municipal ownership of an electric or natural gas utility. The transition from one top staff person to another is a situation that needs to be handled carefully by those concerned with perpetuating municipal ownership. A long-standing and widespread appreciation of the benefits of the utility will go a long way to ensuring a successful transition.

A man once called municipal utilities "the offensive linemen of the utility industry." It is an apt description – the thought being that if your name isn't mentioned you are doing your job – toiling in the 'trenches', so the stars can grab the headlines.

Problem is, doing a good job in the background isn't enough anymore.

The world is clearly changing – changing in many ways, changing rapidly, and likely to veer off in some unforeseen direction. The staunch supporters of your utility may be moving to senior housing in a neighboring city. Are you doing anything to replace them with new advocates for Public Power?

Some segments of the industry have done a good job of telling their customers what a good job they have been doing. And telling them over and over again. Of course, this only rings true if you have a good story to tell, and there are ample tools available today to help a municipal utility along this path.

Some come from the American Public Power Association, which provides 'Community Powered' campaign materials. The best known are:

• Public Power Week. This is the longest-running program to trumpet the benefits of Public Power, and one used effectively by many utilities. The core message of Public Power—local control and allegiance to the customer and community, not distant shareholders—is a winning message. How are people to know these things unless somebody tells them? Nothing beats bringing your customers in to your facility, displaying programs and equipment, visiting with and even feeding them. A sure winner.

• Reliable Public Power Provider RP^3. This program includes a number of metrics, and involves a fair amount of record-keeping and reporting. Many utilities are stretched too thin to take the time to quantify what a good job they are doing. Events are showing that this is a weakness. To quantify that your utility has outstanding reliability, operates safely, develops its workforce, and steadily improves its system is a sure-fire public relations winner.

These programs, and the recognition that lies at the end of the process, are good. But they only get you part of the way to where you need to go.

Utilities need to quantify, in a systematic way, the numerous other benefits they provide locally. These include:

• Financial benefits, not the least of which include access to tax-exempt financing and all the variety of local benefits which vary from utility to utility. These include, to name just a few: donated or shared services (in all their variety), local jobs, salaries, economic benefit, and transfers to the general fund. I can think of no more effective argument for a municipal electric utility than pointing out how, and to what extent, a municipal utility allows a city to reduce its property taxes.

• Reliability. Probably because they know what one good storm can do, municipal utilities seem reluctant to talk about their reliability. This seems to me a weakness. Rates are important, but everybody knows modern life grinds to a halt without electricity. Municipal utilities have a great story to tell when it comes to reliability, especially if you maintain a local power plant and employ a local line crew. You need to quantify your reliability record in numbers, and tell people about it.

• Local control – Everybody knows the frustration of trying to deal with a large, impersonal organization located 'who knows where.' A municipal utility has a local number, a local address, and local people. A customer can walk in and talk to a person if they want to pay a bill, or have a question or concern.

• Utility policies and programs reflect the community and are designed to serve local customers. And while it occasionally leads to a certain angst when working through issues, the public meeting is something no other form of utility will embrace.

While many changes threaten the local utility, in many other ways these are the best of times for Public Power.

Inexpensive, easily mastered communications tools are available. National and state associations have become increasingly capable in a variety of areas. Joint action agencies have very effective tools and services to help their members offer cutting-edge utility services, no matter the size of the community. And all these organizations are exploring new and innovative ways to work together, to help the municipal utility remain the utility that others must be measured against.

Municipal utilities have a history of proving their place in the electric utility industry. The first edition of the MMUA Directory (June 1933), asks its members to work together "to solve rightly the problems confronting municipally owned utilities."

Working together, we remain, as our forebears were in 1933, "unselfishly and wholeheartedly devoted to the progress of municipal ownership."

- the editor

Around the State

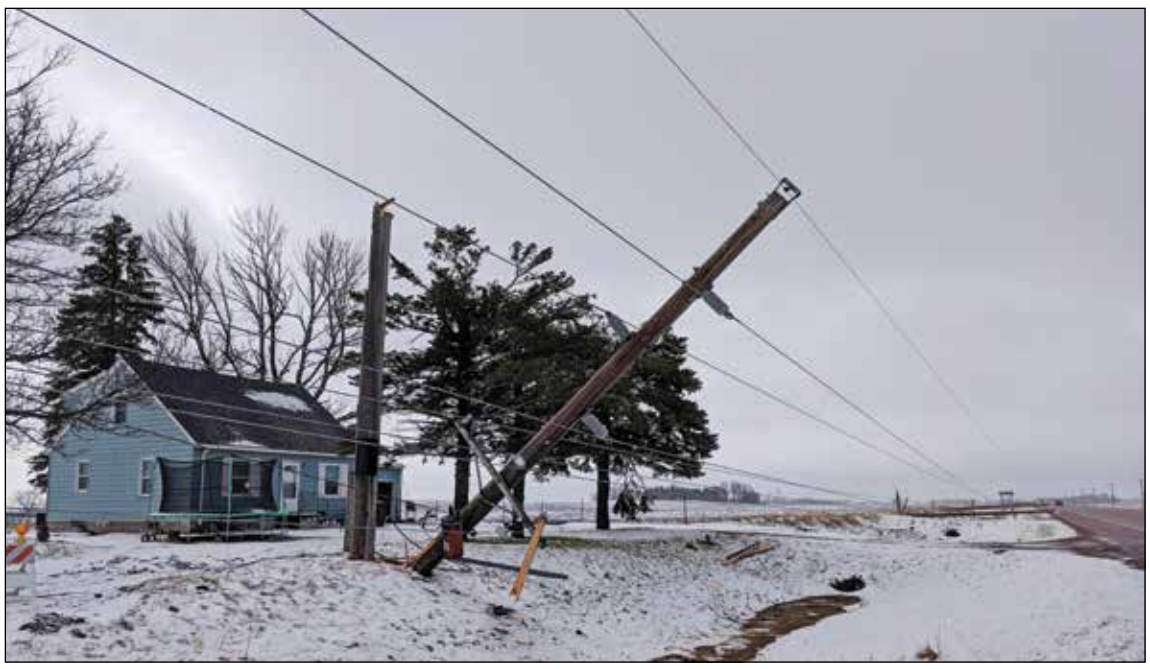
A spring blizzard—which some termed a 'bomb cyclone'—left nearly 77,000 customers without power across Minnesota, the Dakotas, Iowa and Michigan on April 11. While up to two feet of snow blanketed some areas, in southwest Minnesota up to a half-inch of ice coated trees and power lines and winds reached 50 miles per hour.

Fairmont Public Utilities appeared to be the hardest hit municipal electric utility. Along with April 11 outages within the City of Fairmont, 14 poles in a 69-kV transmission line that Fairmont uses to serve the City of East Chain came down in the storm. Customers in Fairmont were back in power by the 12th, but East Chain was out until April 14.

Due to the extent of the damage, Fairmont called MMUA and the mutual aid network was activated.

Despite the fact that many highways were closed, 10 lineworkers knowledgeable in transmission line construction, and their equipment, from Elk River, Hutchinson, Brainerd and Glencoe arrived in Fairmont at 10 a.m., April 12. They cleared the damaged line that day, while supplies were shipped from various sources. New poles came from the municipal utility in Sidney Neb. Marshall Municipal Utilities supplied 50 insulators, while Blue Earth, Luverne and Olivia supplied other hardware items.

By the end of the day on April 14, the line had been rebuilt. Progress was slow as trucks had to be pulled from pole to pole due to wet and muddy conditions. The crews were released Monday, April 15.



MMUA photo by Ryan Mihalak

A call to MMUA put the Mutual Aid program into action in April, primarily to repair a Fairmont Public Utilities transmission line that runs south along Hwy. 15 and then east to serve the City of East Chain. A portion of the damage is seen here.

Due to issues caused by heavy ice and winds, the **Windom Electric Department** April 11 shut down power, citywide, from noon until approximately 1:30 p.m.

The outage allowed the local electric crew to attach additional guy wires to the two switch poles by the substation. The poles were beginning to shake due to heavy ice and winds. If the poles snapped—which had been happening to a number of poles throughout the area—they could fall on the substation, which would result in greater damage and a longer power outage.

The coming outage was announced in advance through numerous sources, giving customers some time to prepare.

The Mankato-area was in a state of emergency following the April storm, with widespread power outages in the area. Just down the road in **Janesville**, the lights were still on thanks to electricity pumped out by the municipal power plant. Transmission service to the municipal utility was disturbed April 11, but the municipal generated for 16 hours until outside service was restored. Most of the municipal distribution system is underground, so it was virtually unscathed.

Rochester Public Utilities on Friday, April 12 sent crews and three bucket trucks, two digger derricks, two pickups with pole trailers and 14, 40-foot poles to assist People's Energy Cooperative, following the April 11 storm.

RPU and its partners hosted the 17th Annual Arbor Day Celebration on April 26.

The event featured a variety of activities and displays. A free lunch of hot dogs, corn on the cob, chips, cookies, and soda was provided. Tree experts answered questions on tree planting and care, along with many other vendor activities. Children enjoyed Smokey Bear, games and more.

Winners of an elementary school students Arbor Day poster contest were announced and prizes awarded.

RPU line crews partnered with the city Parks & Recreation Department on a tree planting.

Anoka Municipal Utilities April 19 hosted a "Build a Birdhouse with a Lineman" event.

Kids of all ages enjoyed building birdhouses made from repurposed meter covers and wood from wire reels.

Along with the birdhouses, people seemed to especially appreciate meeting and getting to know the municipal electric linemen. "They talked about how they see them around town in their trucks, but getting to talk with them and learn a little about what they do was a bonus," said one utility staff person.

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As the demand for electricity dropped off at night, blackouts ceased. As the demand for power increased during the morning hours, rolling blackouts resumed as necessary.

Six years ago, a large agricultural processor was in the middle of a production shift when transmission service was interrupted. The utility dedicated sufficient generation to allow them to clear the production floor. This time around, the plant was in the midst of a clean-up shift, easing the transition to a rolling service schedule.

Experience eased the process, both for the utility and its customers. The first day was tough, said WPU General Manager Scott Hain, as everybody wants information in the first hours following a disaster and there is little to give.

"People really behaved well," Hain said. The utility told people "the more you conserve, the more we can serve," and they responded, significantly reducing the daytime peak. Businesses without their own generators operated in shifts, getting people to the check-out lines prior to the top of the hour. Industry delayed production shifts until full service was restored.

As it did six years ago, the utility debriefed once the situation returned to normal, and asked: what worked, what didn't?

"It couldn't have gone any smoother," Hain said, though some adjustments are likely to better coordinate electric and water service.

WPU reports on mission, reliability report

In a recent communication, Worthington Public Utilities (WPU) told its customers that the utility's mission is to provide high quality and reasonably priced utility products and services for the Worthington area. For the year 2018, WPU reported it was very successful in achieving that mission.

The electric industry has established standardized reliability indices that allow electric distribution utilities to track their reliability performance and can also be used to compare performance against other utilities, said WPU.

Based on data compiled by the American Public Power Association (APPA) for 2018, the average System Average Interruption Frequency Index (SAIFI) of all respondents was 0.954 compared to WPU's SAIFI of 0.029, meaning a customer of the average respondent was nearly 33 times more likely than a WPU customer to experience an outage during the year. When an outage did occur, it took WPU an average of approximately 48 minutes to restore service as compared to an average duration of nearly 181 minutes. In 2018 the average WPU customer experienced an unscheduled loss of power for 0.66 minutes during the year compared to a customer of the average respondent experiencing unscheduled outages lasting a little over 185 minutes.

WPU General Manager Scott Hain and the municipal power plant, from an MMUA file photo.

Madelia plant pressed into extended service

Editor's note: The following originally ran in the Madelia Times Messenger, and was submitted by Madelia Municipal Light & Power (MMLP) General Manager Chris Trembley.

Blizzard conditions the evening of Wednesday, April 10 led to the longest 'islanding' and extended use of the Madelia Municipal Light and Power generating plant in over 33 years.

Transmission lines were brought down by winds and ice buildup that created a phenomenon referred to as "galloping." Galloping power lines may sound ridiculous, but they really do occur and can be very dangerous. The lines can bounce and buck enough to hit another line, damage themselves enough to cause a power outage, or even snap the poles and create wide spread outages.

At approximately 11:15 p.m., Wednesday, April 10, Madelia Municipal Light and Power Generation Operator Darren Gifferson was first alerted to the situation. Shortly thereafter, Trembley reported, Line Foreman Les Sem was notified that the line shop was without power. By 11:20 all employees were notified and the process of generating power for the City of Madelia began at approximately 11:45, leaving the community without power for about 30 minutes.

This began one of the longest generation runs in recent history. By about 8:30 a.m. Thursday morning, it had been identified that our transmission line had been repaired and was stable enough to carry the load. Soon thereafter there were blinks in the power, which can be detrimental to our residents and businesses, so it was determined that the transmission system was not stable enough to carry us due to the continued high winds and weather issues. Therefore, MMLP was generating again by approximately 10:10 a.m. Thursday and continued until around 4:45 p.m.

At that time, we thought the winds had subsided enough to utilize grid power – as did everyone else around the area – which created non-useable power because the transmission lines became overwhelmed and were not ready for the loads of other power plants. We began the third and final generation shift shortly after 6 p.m. and continued until about 7:15.

Although as of Friday morning, I had identified thousands of customers still without power elsewhere in southern Minnesota, Madelia was only without power for roughly 30 minutes total. Our employees put in over 34 hours in a 40-hour period, working tirelessly together to keep two of these engines pumping power through the plant and to our customers.

This is the purpose of having a municipal power plant with the capabilities of carrying this town from a "black plant start" . . . keeping the lights on, medical devices operating, and the refrigerators and furnaces operational when so many around us were without these necessities for days.

The MMLP employees performed flawlessly. Their knowledge and ability to work together made Madelia shine in a time of darkness.

Electric Utility Infrastructure energy efficiency study finds some potential

The Minnesota Department of Commerce has released its final report on the State of Minnesota Electric Utility Infrastructure (EUI) Energy Efficiency Potential Study.

The results of the study show that EUI projects have the potential to deliver a portion of Minnesota utilities' conservation goals between 2020 and 2039. The models estimate that "achievable potential" EUI conservation represents approximately 0.13 percent of electric sales (excluding CIP exempt sales) over the course of the study.

The identified potential is split between the generation sector (3.3 percent of goals) and the transmission and distribution sector (5.7 percent).

The total cumulative statewide technical potential for conservation over the period of this study in the generation sector is estimated to be approximately 3.3 percent of total statewide projected CIP electric conservation goals from 2020-2039.

Conductors represent the largest amount of technical potential among the distribution and transmission measure categories. Conservation voltage reduction represents 26 percent of the total distribution and transmission potential and transformers represent 28 percent.

The team identified three comprehensive loss studies, one for each of the large electric IOUs in the state. Of those, the most recent was completed in 2016 and the oldest was in 2007. Losses as a percentage of distribution energy delivered ranged from 5.75 percent to 9.59 percent (one study reported a separate value of 11.07 percent losses during peak loading periods).

Unfortunately, findings revealed that existing loss studies were inadequate to draw conclusions.

The Minnesota Department of Commerce contracted with GDS Associates (GDS), Center for Energy and Environment (CEE), The Cadmus Group, and Demand Side Analytics (DSA) for the study. A 14-member Advisory Committee included MMUA Director of Engineering and Policy Analysis Robert Jagusch.

City of Boulder makes offer for Xcel electric system

The city of Boulder, Colorado, in April made a $68.5 million offer to acquire electric assets from Xcel.

The bid is for more than 100,000 assets, including everything from meters and poles to conduits and easements, but no generation assets are involved.

A city spokesperson said the offer was intended to start negotiations. A condemnation filing was possible if negotiations were unsuccessful.

The city seeks to put together a proposal to present to voters, possibly as soon as Nov. 2020.

When Boulder began its municipalization effort in 2011, Xcel's generation portfolio was heavily dependent on fossil fuels, and Boulder wanted to switch to renewable resources and have more control over its energy future, as well as capture some of the economic benefits of being a public power utility.

Since then, Xcel has been moving away from fossil fuels and has pledged zero carbon dioxide emissions by 2050. But Boulder is already reaping some economic benefits from its municipalization efforts.

A previous franchise agreement with Xcel was providing the city with $1.4 million a year. Voters in 2010 passed a ballot measure that replaced the franchise fee with a utility occupation tax. In 2011, voters approved an increase in the tax and in 2017 they approved an extension of the tax. The utility occupation tax goes to the city's general fund. Funds to research municipalization were authorized in 2011 and 2017 ballot measures.

MMUA holds Substation School April 16-18

MMUA partnered with Minnesota Rural Electric Association (MREA) on the 2019 Substation School, held April 16-18 in Buffalo. In addition to classroom instruction, participants toured the Buffalo Municipal Utilities substation and nearby Minnesota Municipal Power Agency (MMPA) 'Tatanka' Solar Field.

The school started the afternoon of Thursday, April 16 with a presentation by Jeff Kranz of Rochester Public Utilities on Substation Maintenance and Inspections. Kranz covered best practices on a variety of operational concepts and maintenance issues.

Wednesday morning started with Fundamentals of Substation Equipment & Control Systems by Jamie Sieren of Power System Engineering. He covered Safety, Codes, Symbols and Designations, Drawings, Equipment, Protective Relaying and Control.

Ralph Jacobson of IPS Solar talked about Implementing a Solar Field. After lunch, (despite a pouring rain) the group viewed the substation and solar field. The Buffalo Substation tour was led by Sheldon Sorensen of Barr Engineering and Tatanka Solar Field, solar plant tour was led by Buffalo Utilities Director Joe Steffel.

Participants at the MMUA Substation School toured the state-of-the-art Buffalo Municipal Utilities substation.

The school concluded Thursday morning with a look at The "Ins and Outs" of a Substation, from a lineman's perspective, presented by Nick Koslowski, East Central Energy. Participants fully engaged during this hands-on demonstration of various tools, hardware and SCADA systems.

Distributed energy workshops provided vital information on impending new state mandate

Every municipal electric utility in Minnesota—by June 17—is required to adopt new Interconnection Process for Distributed Energy Resources, and MMUA is helping its members prepare for the transition.

The association held a series of Distributed Energy Resources (DER) workshops in March, designed to help bring utilities into compliance with state law. The training also provided necessary updates to the Model Municipal DG (Distributed Generation) Policy and Interconnection RULES and the Model Cogeneration and Small Power Production Tariffs.

The training reflected work involving MMUA, the Minnesota Rural Electric Association and STAR Energy Services to develop a streamlined interconnection process for municipal and cooperative utilities, based closely on a version of the rules adopted by the Minnesota Public Utilities Commission (MPUC).

Bill Black discussed the MMUA DER compliance guide, developed just for municipal electric utilities.

These municipal-specific timelines, documents and responsibilities are laid out in the Minnesota Municipal Interconnection Process (M-MIP).

Workshops were held March 20 at Owatonna Public Utilities, March 22 in Grand Rapids, March 27 in Detroit Lakes and March 28 in Marshall.

Main speaker was Kristi Robinson, Senior Electrical Engineer with STAR Energy Services. Her primary areas of responsibility include system planning, renewable policy and regulation, metering, integration of utility technologies, cost of service studies and operation management of Southern Minnesota Energy Cooperative. MMUA's Bill Black accompanied Robinson during each session.

Municipal Utilities: Good for all of us

Editor's note: The following is the winning essay in MMUA's most recent scholarship contest.

by Riley Wempner
Austin, Minn.

Chances are, as most people come home each night, turn on the television, and enjoy a glass of water, the thought of their local utilities is not on their minds. The concept of such simple services such as electricity, water, and gas are often times overlooked, and it's only when we are cut off from these luxuries that we notice them the most. Luckily, however, we live in an age where local utilities are readily available, and even more fortunate for the city of Austin these amenities are provided by one of Minnesota's 124 municipal electric utilities.

Unlike privately owned utility companies, municipal utilities are non-profit and therefor better benefit the community in which it serves. Municipal utilities are owned and operated by the city itself, and are motivated to help achieve the goals and needs of the community rather than make a profit. Municipal companies are able to return money back to the city, helping to keep taxes down for its residents. Also, because municipal utilities are non-profit, they typically have lower rates than privately owned businesses. This also leads to competition between other private utility companies, which helps bring down rates of other utilities, benefitting everyone involved. The most important aspect regarding municipal utilities, however, is the reliability and response they have to problems in the community. With the crews being located in the city itself, municipal utility employees are able to quickly and effectively respond to any emergency or power outage the community experiences, and no place better exhibits this quality than the city of Austin.

I was only nine years old when a tornado came through Austin, but I still remember the fear that ran through me. I didn't think it could get any worse until the power went out, and when it did I remember feeling so scared sitting there in the dark listening to the sirens howl. However, not even thirty minutes passed before the lights came back on, and I remember feeling so relieved by the comfort the light and power brought with it. It was the reliability and response of the local utilities that had my power restored in under half an hour. The crew members of the Austin municipal utilities provide dependable and steady service because they reside here themselves, and they know their friends, family, and neighbors rely on them when things go south.

The recent construction of a new utility facility in Austin has already made impacts on the community. The new space has allowed for educational experiences to be held at the facility itself, and has opened the door for many future educational classes and programs as well. With the new facility also came increased efficiency, allowing members of Austin Utilities

Scholarship: see page 11

Winners selected in MMUA scholarship contest

The MMUA Tom Bovitz Memorial Scholarship Award winners were selected Thursday, April 25. The top four essays in the 19th annual contest were:

- First Place: Riley Wempner, Austin
- Second Place: Rebecca Brown, Alexandria
- Third Place: Shelby Zander, Shakopee
- Fourth Place: Elizabeth Trebelhorn, Winthrop

The first-place scholarship carries an award of $2,000, second place $1,500, third place $1,000 and fourth place $500.

The contest was created as a public relations tool to increase the awareness of public power and create goodwill in the community for the local municipally-owned utility. Essay theme was "Municipal Utilities: Good for All of Us."

The essays were initially submitted to the governing body of the local utility. Winners of the local contests were then entered in the statewide contest. Judges included five MMUA member utility representatives and one MMUA staff member. Judges ranked their top four essays, point values were assigned and winners selected.

The award is named in honor of the late Tom Bovitz, a firm believer in the value of education, who was a former general manager of Hibbing Public Utilities and MMUA president.

MMUA thanks all its members who forwarded contest materials to their local schools, all the utility staff people who coordinated local activities, local judges and all contest entrants.

Nomination window opens for MMUA board of directors, full slate of awards

MMUA's Nominations and Awards Committee is accepting nominations for the MMUA board of directors, and awards. The deadline to submit a nomination is June 14.

Two board nominations are being sought, as Greg French and Bob Elston will be completing their second, three-year terms.

In addition, last year Don Martodam was appointed to fill the seat of a departing board member, and that seat stands for re-election this year.

The MMUA awards program is a great way to recognize a municipal utility colleague, a public official, or a municipal utility system for showing leadership and innovation and providing an example for others to follow.

Board and Award nomination forms can be downloaded from MMUA.org at the Awards and Recognition page on the 'About' menu. All nominations will be considered by MMUA's Nomination and Awards Committee and the awards will be presented at the MMUA Summer Conference in August.

Here is a brief summary of the awards for which we are accepting nominations. Please consider recognizing the accomplishments of a deserving utility or individual by submitting a nomination.

• System Innovation Award. This award is given to a utility that has demonstrated leadership and innovation in customer service, energy efficiency or renewables, technology, or other areas.

• Public Service Award. This award is given to a state, or federal elected or appointed official who has been a strong supporter of MMUA and its members.

• Distinguished Service Award. This award is given to individuals who perform outstanding service in support of the association and its goals.

• Community Service Award. This award is given to an individual who has performed long and well in support of a municipal utility at the local level.

• Rising Star Award. This 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 Award. 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.

Please return completed nomination forms, by June 14 to Theresa Neddermeyer (tneddermeyer@mmua.org), fax (763.551.0459) or mail to 3025 Harbor Lane N., Suite 400, Plymouth, MN 55447.

Associate Member News

Spiegel & McDiarmid recently received recognition from Chambers USA and Super Lawyers.

For the sixth consecutive year, Chambers & Partners has recognized Spiegel & McDiarmid LLP as one of the nation's leading law firms in the area of "Energy: Electricity (Regulatory & Litigation) — Nationwide." Chambers also recognizes Cindy Bogorad, David Pomper, and Scott Strauss individually as among the top lawyers in category. In the practice area of Energy & Natural Resources, Washington DC Super Lawyers has again selected Cindy Bogorad, Jeff Schwarz and Scott Strauss as "Super Lawyers," and Katie Mapes has again been named a "Rising Star." Super Lawyers is a rating service of outstanding attorneys from more than 70 practice areas.

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Classified Ads

Electric Transmission and Distribution Supervisor

Detroit Lakes, MN a thriving and vibrant community with excellent amenities and is an outdoor enthusiast's paradise. The Detroit Lakes Public Utilities is searching for an Electric Transmission and Distribution Supervisor for its electric utility.

The Public Utilities Electric Transmission and Distribution Supervisor is responsible for the overall direction, supervision, and instruction of electric department employees in the construction, operation and maintenance of generation, transmission, substation and distribution facilities, employee issues, scheduling and assigning work, performance management, process development, and resource allocation. Assists in the overall planning, design, construction, operation and maintenance of the City's electric utilities facilities and participates in development and administration of operation, capital and personnel budgets for this department. Required qualifications: Associates degree with advanced training in Line worker or electric technologies, successful completion of a 4 year, 8000 hour apprentice lineman training program, and seven years' experience as a journey line worker with 1 to 3 years in a Supervisory position, or an equivalent combination of experience and education that provides the knowledge, skills and ability needed to effectively direct the operations under the positions supervision.

Submit a Cover Letter, Resume, Certifications, Licenses and Employment Application to Glori French, City Clerk at gfrench@cityofdetroitlakes.com or 1025 Roosevelt Avenue by 4:30 PM on Friday, May 24, 2019. Employment Application, benefits and job description are available at www.cityofdetroitlakes.com. Employment background investigation, drug and alcohol testing will be performed. The City of Detroit Lakes is an Equal Opportunity Employer.

Power Plant Operator / Repairman

GENERAL DESCRIPTION

Under the general supervision of the General Manager, to lead in the operation and

Bits: see facing page

maintenance of all electric generation equipment of MMLP and provide support in operations and regular scheduled maintenance of all electrical generation equipment for two other local municipal power plants.

ESSENTIAL FUNCTIONS OF THE JOB

· Ability to follow proper SOP
· Inspects and monitors all equipment for proper operation.
· Records all necessary gauge and meter readings.
· Performs system adjustments in order to maintain a constant power supply.
· Performs minor repairs and adjustments to equipment and machinery.
· Conducts repair of generators and other power plant equipment as required.
· Complies with requirements of air emission permit.
· Subject to call out after regular work hours and weekend on call schedule
· Monitors cooling tower water quality.
· Performs general housecleaning of equipment and work area.
· Adheres to all departmental safety standards and guidelines.
· Attends all required and assigned training.
· Records information in the power plant records in compliance with applicable federal and state regulations or as may be required by PUC policy.
· Assist line crew as a groundman when needed.
· Reside within 15-mile radius for call out response requirements.

The aforementioned functions are normal for this position. They are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

KNOWLEDGE, SKILLS AND ABILITIES

· Strong mechanical abilities.
· Ability to perform basic mathematical computations.
· Ability to effectively supervise others.
· Skilled in communicating both orally and in written form.
· A thorough knowledge of electrical equipment operation.
· Ability to analyze and forecast electric consumption.
· Ability to use a personal computer and associated software.

EDUCATION AND EXPERIENCE

Position requires a high school diploma or equivalent and Special Engineers license, CDL and CPR certification. Or the ability to obtain Special Engineer license, CDL and CPR certification within one year of hire date.

DESIRED EXPERIENCE

Municipal power plant operations including black start processes, synchronizing and co-generation functions.

PHYSICAL REQUIREMENTS

The ability to occasionally lift 50 pounds; work in extreme heat or cold.

WAGE

Up to $35.44/hr. depending on qualifications and an additional $12,000 with stand by compensation. A competitive benefits package is also offered. If interested, please send resume to ctrembley@cccinternet.net

Professional Services Directory

Equipment Manufacturers, Suppliers, Service

Equipment and Supplies

Generation Services and Equipment

Management & Professional Consultants

Training & Education

See our Classified listings online

All MMUA Regular Members are now able to post, for no charge, classified ads at www.mmua.org

For a full and complete list of current job openings, for sale and wanted items, see the News/Classifieds section at www.mmua.org

Scholarship

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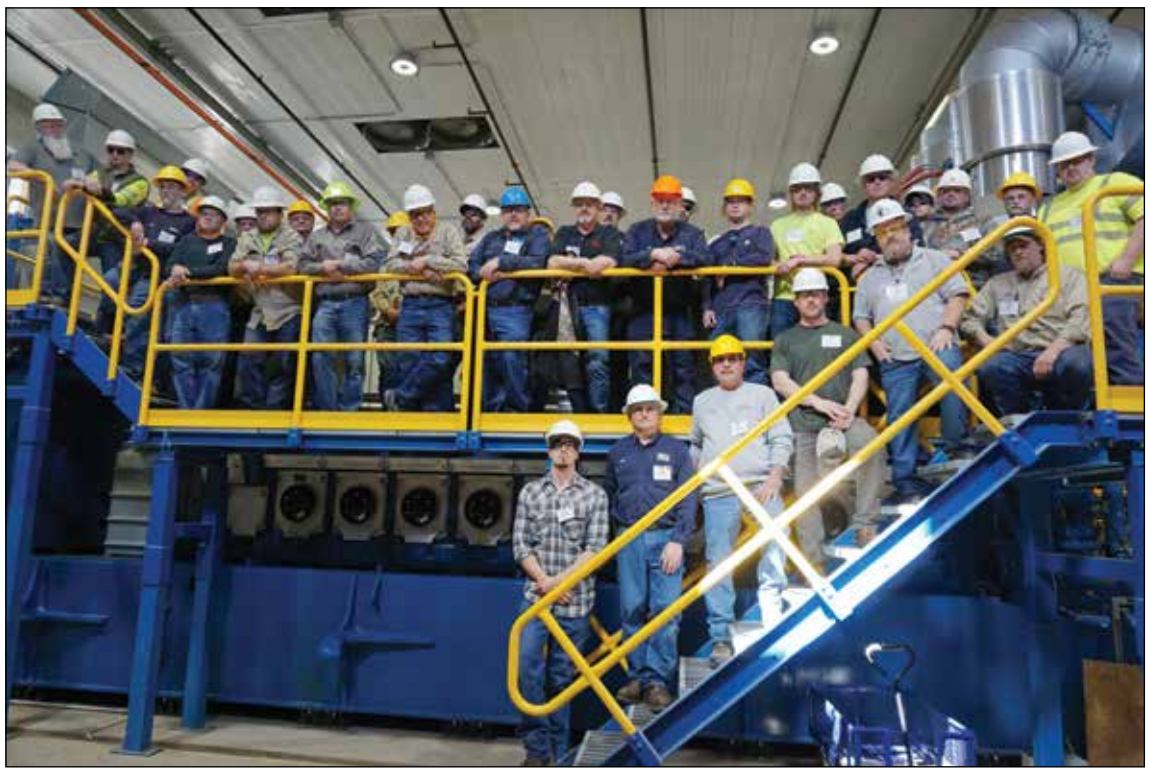
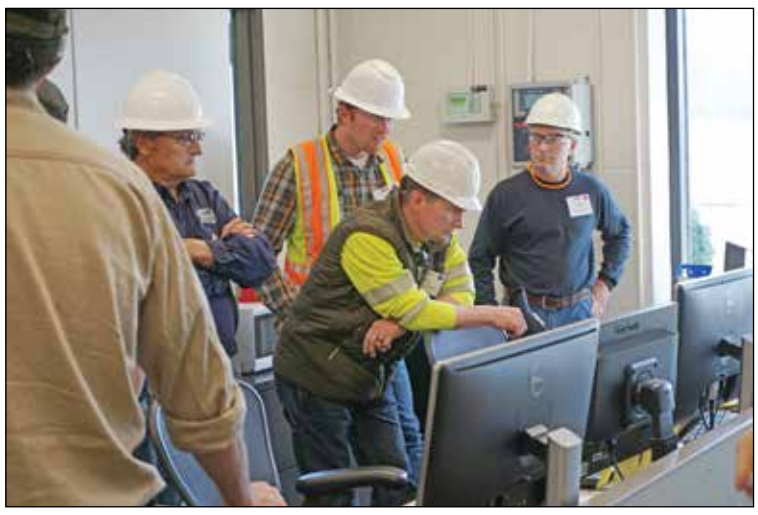
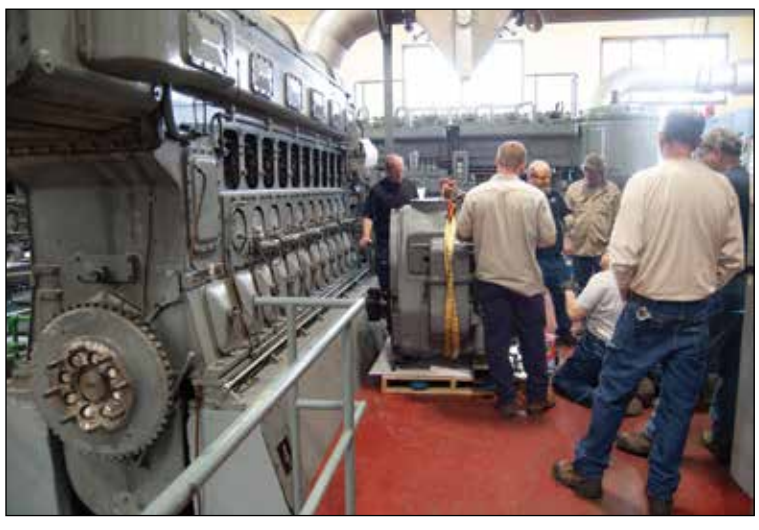
to be closer to and more connected with one another and the community. It's no surprise that both customer satisfaction and communication satisfaction between Austin Utilities and its customers was continuously above ninety-five percent in recent years. Austin Municipal Utilities not only provides clean water, electricity, and gas to the community, but does so with the intentions of being a community partner. From the fundraising campaigns, educational programs, community workshops, public demonstrations and donations all the way to the installment of a Monarch butterfly waystation, it's clear that the Austin Municipal Utilities are more than just a company; they are a true community contributor. So the next time you come home to a warm house, or sit down to your favorite television show, or enjoy a clean glass of water, give just a little thought and a little thanks to your local municipal utility.



Participants at the Generation School gathered for a group photo on one of the gigantic Wartsilla engines at the Shakopee Energy Park (SEP).



When it comes to electric utilities, you don't have to look very far before a computer comes into play. Here, participants get an up-close look at the SEP control room.



Jeff Crampton of Fairbanks Morse (facing camera, center) led hands-on training at the Delano Municipal Utilities power plant.

Generation:

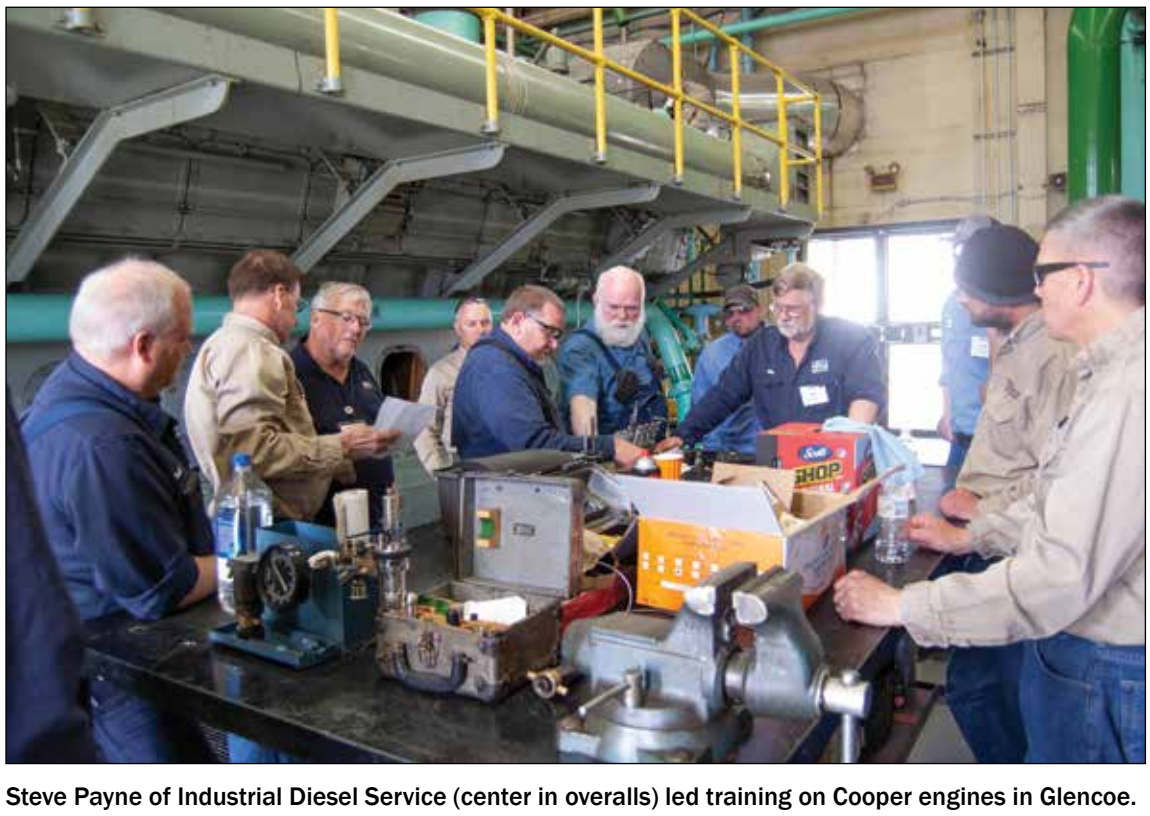
continued from front page

Industrial Diesel Service led training on Cooper engines in Glencoe, while Rex Stormer and Lester Wheeler of Exline led Enterprise engine training.

Safety is the first consideration in all types of electrical work. Despite rigorous precautions, things sometimes go wrong. Friday morning's program led off with a presentation by Paul Twite, general manager of Delano Municipal Utilities and Tom Ewert of MMUA, on a power plant fire and its aftermath (nobody was hurt!).

Tony Kassa of STAR Energy Services discussed Recloser Testing, while MMUA's Bob Sewell wrapped up the program with an open discussion on what people learned.

Thirty-five people registered for the event, plus instructors and others. MMUA thanks the utilities that allowed us into their plants for the training and the involvement of their dedicated employees. We also thank the people that attended and the utilities that sent them, along with our instructors.



Steve Payne of Industrial Diesel Service (center in overalls) led training on Cooper engines in Glencoe.