

Harsh winter reveals weakness in Minnesota utility systems

by Steve Downer

A strong arctic high-pressure system brought historic cold to the North and Central U.S. regions on January 30-31, driving temperatures below 2014 'polar vortex' levels. The cold revealed either real or potential weaknesses in Minnesota electric and natural gas systems.

Temperatures were colder than any time since 2001, when the Midcontinent Independent System Operator (MISO) began operating the regional electric grid.

According to MISO, total electric generation outages during the cold spell were higher than previous cold weather events, with approximately 25 percent of the region's electrical generating capacity unavailable due to unplanned outages.

Forced electrical generation outages surpassed 20 gigawatts (GW), including wind turbines,



MMUA file photo

The Litchfield Public Utilities municipal power plants were among those pressed into action during the late January MISO 'Maximum Generation Event.' The plant in the background contains newer diesel engines.

which reportedly shut down to protect vital operating components in temperatures of 20-below zero Fahrenheit.

Total outages and capacity 'derates,' including fossil-fueled generators, took more than 35

GW of generation offline.

While the extreme cold drove high energy use, a sudden and unexpected drop in wind generation, forced outages, and uncertainty, said MISO, required the Jan. 30-31 declaration of a

'Maximum Generation Event.'

MISO on Feb. 27 presented an overview of the Event, which resulted in a call to run seldom-used municipal diesel-

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After 47 years, Larson ready to hand over reins to Fosston utility

by Steve Downer

After 47 years, Dave Larson feels like he can leave Fosston Municipal Utilities in good hands.

Assistant Public Works Director Steven Lyseng is working closely with Larson. It's a big job – along with streets, parks and all the normal city functions, Fosston provides electric, natural gas, water/wastewater, garbage and cable TV service.

Larson started at the municipal liquor store, where he worked for two years. A farm boy, he thought that a utility job would be perfect. He finally got his interview with the Public Utilities Commission, on May

7, 1974. It didn't take Commissioners long to make up their minds – he started with the utility a week later.

Larson didn't have much of a background in utilities, but he did know how to work. The skills and technical aspects he picked up as he went along. That is a process that never stopped.

Part of city hall used to be a municipal power plant. The public works director's office, which doubles as the meter testing area, used to hold diesel engines. The diesels are gone, and Larson is more apt to spend time with a computer these days—

Fosston: see page 6 please



Dave Larson (standing) is happy to be turning over the reins of Fosston Public Utilities to his young replacement – Steven Lyseng (seated).

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MMUA group treks to Washington, D.C., to advocate for Public Power

The American Public Power Association (APPA) held its 2019 Legislative Rally Feb. 25-27, at the Mayflower Hotel in Washington, D.C.

Approximately 50 attended the Rally under the MMUA banner, including utility staff and power agency personnel, local elected and appointed officials, and MMUA staff.

Energy issues have been getting a lot of media attention, and the MMUA group had much to say on the matter. Our specific issues included: tax-exempt bonds, the federal power program, pole attachment regulations, and wholesale electric markets. Our people also carried the basic message of the benefits of Public Power.

Along with travel to Washington, D.C.,

the weekend and Monday featured pre-rally seminars on a variety of topics. Monday also held briefings, committee meetings and an evening reception.

APPA's Legislative and Resolutions (L&R) Committee was active Tuesday, Feb. 26. The Committee reviewed APPA's federal legislative agenda, and discussed and adopted new policies. In the afternoon, attendees meet with their congressional delegations on Capitol Hill and attended policy briefings on specific issues hosted by APPA.

Resolutions approved by the L&R Committee included:

- Pole Attachments: The Association

Rally: see next page please



photo courtesy of SMMPA

Sen. Tina Smith addressed the assembled Public Power representatives. Among those listening was H. Smith of Blooming Prairie (right).

Rally:

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opposes actions taken by the Federal Communications Commission in its September 26, 2018, report and order to regulate public power pole attachments in contravention of the clear language in section 224 of the Communications Act that precludes the FCC from doing so. MMUA cosponsored this resolution.

• **Bond Modernization:** The Association urged Congress to improve tax-exempt municipal bonds which continue to be the most powerful tool for financing public investments in public infrastruc-

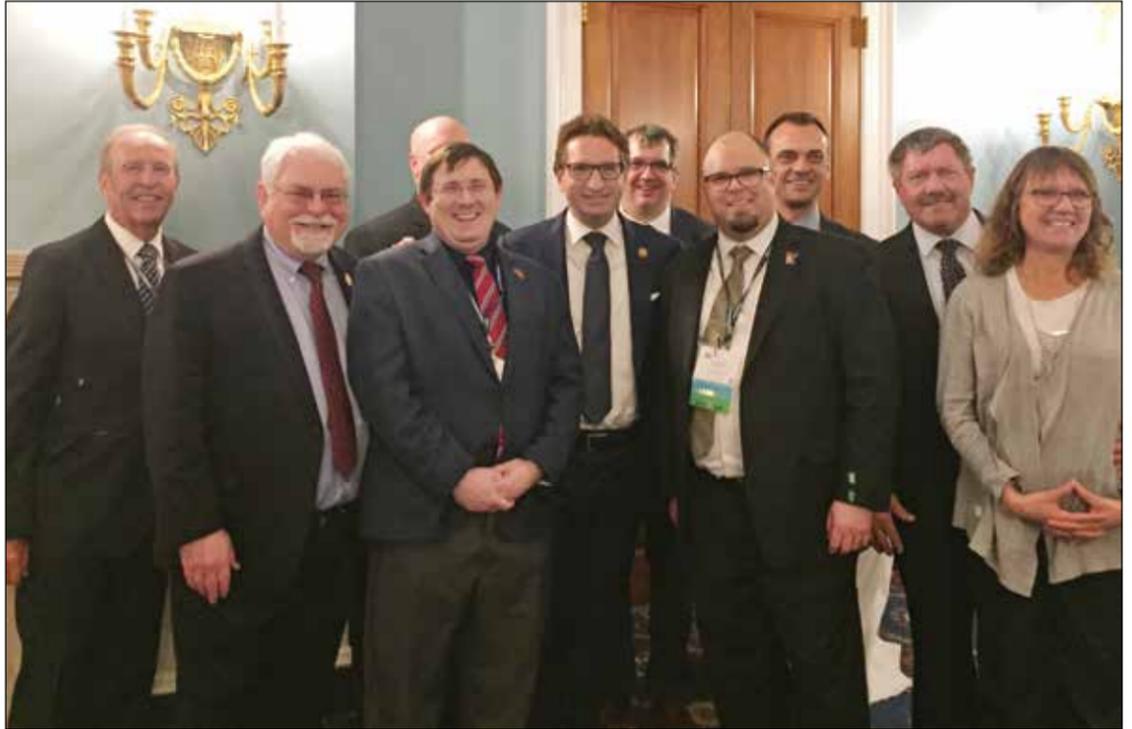
ture. MMUA also cosponsored this resolution.

• **Transmission Rates:** The Association urged the Federal Energy Regulatory Commission to implement and enforce transmission planning, cost recovery, and incentive policies to contain rising transmission costs.

• The Committee also approved resolutions on Wildfire Mitigation, and Central Valley Project Hydropower Offsets.

In the evening, PowerPAC contributors enjoyed a reception to thank them for their involvement with APPA's political action committee.

On Wednesday, Public Power advocates attended



Visiting at the MMUA Reception were, from left to right: Bob Weiss of Sleepy Eye, MMUA Executive Director Jack Kegel, Chris Kopel of CMPAS (partially obscured), David Niles of MMPPA, Rep. Dean Phillips, MMUA's Kent Sulem, Troy Adams of Elk River, Matt Westgaard of Elk River, Dave and Tammy Meyer of Glencoe.

the Legislative Rally breakfast, then traveled to Capitol Hill for meetings with their congressional delegations.

MMUA coordinated the Wednesday meetings with all 10 Minnesota Congressional



photo courtesy of SMMPPA

Senator, and Democratic presidential hopeful, Amy Klobuchar (foreground) conversed with a group that included, from left to right: MMUA President Greg French of Virginia, Dave Geschwind of SMMPPA, Steve Nyhus of Rochester and Bill Schwandt, Moorhead.

offices. Most meetings took place in the offices of House members. Because of the size of the group, the meetings with Senators Klobuchar and Smith and Representative Hagedorn took place in a large meeting room in the Capitol Visitors Center.

That evening, MMUA hosted a Congressional Reception in the House Transportation Committee hearing room. The event provided the opportunity for our group to get to know approximately 20

Congressional staff members in an informal, relaxed atmosphere. Our group also spent time with Rep. Dean Phillips, who stopped by for a visit.

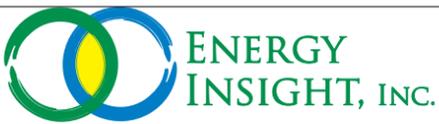
For a closer look at MMUA's positions on the issues, go to the Public Policy / Federal / Current Issues section of our website, and view or download our 2019 federal position statement booklet.

Printed copies of the booklet are also available to members upon request.



photo courtesy of SMMPPA

Minnesotans at the rally included, from left to right: Pete Moulton of St. Peter, Alysa Ressler and Mike Ressler, 'H' and Jean Peterson, all of Blooming Prairie, Kim Cosens of Owatonna, Blooming Prairie's Jerry Mausbach, Joe Hoffman of Preston, SMMPPA's Dave Geschwind and Chris Schoenherr, Tom and Shelby Kuntz of Owatonna.



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Legislative rally focuses on infrastructure, grid security, other issues

by Desmarie Waterhouse, VP, Government Relations and Counsel, APPA

Members of the public power community from across the country traveled to Washington, D.C., Feb. 25-27 for the American Public Power Association's annual Legislative Rally, which provides Association members an important opportunity to help public power communities make their voices heard in the halls of Congress.

Public power has six congressional priorities for 2019: (1) infrastructure; (2) municipal bonds; (3) power marketing administrations (PMAs) and the Tennessee Valley Authority (TVA); (4) grid security; (5) wholesale power markets; and (6) the environment.

At the 2019 rally, officials from member utilities met with federal lawmakers and staff to discuss public power's views on several key issues including hydropower licensing reform, defending the core mission of the Power Marketing Administration's (PMAs) and TVA, grid security, bond modernization, and climate change. The rally also focused on Stafford Act and Endangered Species Act reform.

Should Congress consider infrastructure legislation this year that includes an energy title, we will push for it to include provisions preserving and promoting hydropower.

The Association continues to strongly encourage Congress to pass legislation to cut the lengthy, duplicative, and at times, contradictory regulatory processes for relicensing existing hydropower projects. The current licensing process constitutes a significant impediment to the development of new hydropower facilities and the relicensing of existing facilities.

Other energy-related priorities the Association would support being included in an infrastructure bill include funding for research on energy storage and grid modernization and language to improve the interstate natural gas pipeline permitting process.

We will also continue to oppose proposals to divest the transmission assets held by TVA and three of the PMAs and changing the current cost-based rate structure for the PMAs to market-based rates.

The release of President Trump's Fiscal Year 2020 budget proposal was delayed due to the month-long government shutdown and it is unclear whether it will propose to divest the transmis-

Washington Report



sion assets of the PMAs and TVA. President Trump's FY 2019 budget request made a similar proposal.

Meanwhile, climate change issues will be front and center with Democrats in the majority in the House. The Association will continue educating lawmakers and congressional staff on public power's efforts to reduce its carbon dioxide emissions and support for policies that foster emissions-free generation, such as hydropower and nuclear, or that reduce energy use, such as energy efficiency and demand response. We will also discuss the importance of having a diverse supply of resources to keep electricity affordable and reliable.

With respect to grid security, the Association believes that close coordination among industry and government partners at all levels is imperative to deterring attacks and preparing for emergency

situations and, as such, will continue to invest considerable resources into this effort. We support the adoption by public power utilities of appropriate physical-security measures that consider the specific assets being secured.

In addition, the Association supports enhanced dialogue between the industry and federal government on physical security threats and potential remediation but does not support federal mandates in this area at the distribution level because a one-size-fits-all approach would do little to secure those assets.

We expect oversight hearings in 116th Congress, particularly in the House, and government and industry grid security activities will be a subject of interest.

The Association will work to make sure that legislators hear about the good work that public power and the broader electric utility industry is doing on grid security.

In the area of disaster response, the Association would like to see improvements to the Stafford Act beyond those

enacted in 2018.

For example, the Association has proposed a safe harbor from Federal Acquisition Regulation requirements for debris removal and emergency protective measures, by which local government procurement requirements that promote full and open competition would constitute compliance with federal procurement requirements for purposes of the Stafford Act.

The Association also believes the Federal Emergency Management Agency and lawmakers should consider ways to make it easier to use disaster mitigation funds to improve electric power system resiliency.

Public power's continued access to tax-exempt municipal bonds remains an ever-present priority for us in Congress.

President Trump in late 2017 signed into law a measure, H.R. 1, which retained the current-law tax exemption for municipal bonds but prohibited the issuance of

tax-exempt advance refunding bonds and tax credit bonds after Dec. 31, 2017.

Retention of the tax exemption for municipal bonds will save public power utilities, as well as their customers, billions of dollars annually.

The federal tax exclusion for municipal bond interest should not be limited or replaced.

In addition, we strongly support enactment of legislation to reinstate advance refunding bonds, simplify municipal bond private-use rules, and increase the current small-issuer exception limit from \$10 million to \$30 million.

Endangered Species Act reform is also on our radar this year. The Administration released proposed revisions to the ESA implementing regulations in July 2018.

We will also track any legislative activity in the areas of wholesale electricity markets and pole attachments in 2019.

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MPUC accepts investor-owned utility reliability reports, sets standards

The Minnesota Public Utilities Commission (MPUC) Jan. 31 approved annual reliability reports for Xcel Energy, Minnesota Power (MP) and Otter Tail Power (OTP), and set their proposed SAIDI, SAIFI and CAIDI reliability standards for 2018.

All Minnesota electric utilities, by law, are required to report reliability results to

their governing bodies. (The investor owned utility reports were filed in March and April 2018.) These reports include outage tracking metrics like SAIDI, SAIFI, and CAIDI, along with staffing levels and bulk power supply interruptions.

Utilities report 'storm normalized' SAIDI, SAIFI, and CAIDI by work center and for

their service territory within the state. They also propose numerical, individual reliability standards for each work center. The Commission then sets reliability performance standards annually for the utilities.

Utilities have historically used a rolling five-year average of SAIDI, SAIFI, and CAIDI. However, the Commission has 'frozen' standards for utilities at prior year's levels if there is not sufficient progress. Otter Tail's standards have been frozen at 2013 levels and Minnesota Power's 2017 standards were set at 2016 levels. Utilities are also required to provide "an action plan for remedying any failure to comply with the standard" or "why non-compliance was unavoidable under the circumstances."

Minnesota Power

The Commission froze MP's reliability standards at 2016 levels after the company failed to meet its SAIDI and SAIFI targets for 2015 or 2016. Minnesota Power also did not meet any of its standards in 2017. The Company gave weather and equipment failure as the primary reasons for not meeting its reliability goals. MP noted that it has hired additional engineers to implement a trouble order tracking and remediation system, and placed an increased focus on replacing distribution equipment. MP's report indicated that weather caused 55 percent of SAIFI incidents in 2019.

OTP

Otter Tail noted that it was unable to report Wahpeton reliability results for 2017 due to equipment issues in North Dakota. As a whole, Otter Tail has seen mainly flat or slightly increasing reliability indices over the past 10 years.

Weather and equipment failure are the most common causes of outages for OTP. OTP recognized an increasing trend in equipment failure-related outages and indicated that its new IMS software will give it greater analytical capability to identify the most effective way to combat the issue.

Although Otter Tail has had frozen standards since 2013, its overall reliability metrics have remained high, noted regulatory documents. OTP ranked in the first quartile in the IEEE 2018 survey of all utilities for its SAIDI and CAIDI results and in the second quartile for SAIFI, among small utilities (fewer

Acronyms

- CAIDI - Customer Average Interruption Duration Index
- MAIFI - Momentary Ave. Interruption Frequency Index
- SAIDI - System Average Interruption Duration Index
- SAIFI - System Average Interruption Frequency Index
- SCADA - Supervisory Control and Data Acquisition

than 100,000 customers).

Benchmarking, noted staff, could be a new method of setting reliability standards for Minnesota's investor owned utilities.

Xcel Energy

Of its 12 reliability goals

for 2017, Xcel missed only its Southeast SAIFI goal by .06 events. The Department noted that while Xcel's SAIDI and SAIFI numbers have improved or held constant over the past few years, it has seen

Reliability: see facing page

Minnesota Power			
Metric	2017 Proposed	2017 Actual	2018 Proposed
SAIDI	98.19	108.06	98.19
SAIFI	1.02	1.04	1.02
CAIDI	96.26	103.90	96.26

Xcel Energy				
Region	Metric	2017 Proposed	2017 Actual	2018 Proposed
Metro East	SAIDI	89.13	66.17	82.69
	SAIFI	0.87	0.69	0.83
	CAIDI	102.42	95.33	99.93
Metro West	SAIDI	92.06	69.51	85.17
	SAIFI	0.89	0.71	0.83
	CAIDI	103.98	97.84	102.46
Northwest	SAIDI	95.88	75.77	89.82
	SAIFI	0.81	0.76	0.79
	CAIDI	118.45	100.28	113.45
Southeast	SAIDI	99.16	87.67	102.39
	SAIFI	0.74	0.80	0.78
	CAIDI	134.40	109.73	131.46
Minnesota	SAIDI		70.85	
	SAIFI		0.72	
	CAIDI		98.63	

Note: Regulatory documents did not list Xcel proposed 2017 goals.

Otter Tail Power				
Region	Metric	2017 Proposed	2017 Actual	2018 Proposed
Minnesota	SAIDI	64.95	60.06	64.95
	SAIFI	1.13	1.01	1.13
	CAIDI	57.48	59.31	57.48
Bemidji	SAIDI	70.64	63.58	70.64
	SAIFI	1.26	0.78	1.26
	CAIDI	56.06	81.65	56.06
Crookston	SAIDI	69.33	58.71	69.33
	SAIFI	1.19	1.21	1.19
	CAIDI	58.26	48.63	58.26
Fergus Falls	SAIDI	66.97	41.62	55.97
	SAIFI	1.11	0.72	1.11
	CAIDI	60.33	58.10	60.33
Milbank	SAIDI	75.49	118.44	75.49
	SAIFI	1.82	2.84	1.82
	CAIDI	41.48	41.67	41.48
Morris	SAIDI	55.78	88.24	55.78
	SAIFI	1.01	1.58	1.01
	CAIDI	55.23	55.88	55.23
Wahpeton	SAIDI	57.24	n/a	57.24
	SAIFI	1.13	n/a	1.13
	CAIDI	50.65	n/a	50.65

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Reliability:

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a declining trend in CAIDI performance. Xcel has reduced the number of overall outage minutes as well as the frequency of outages, but customers experiencing outages are without power for a longer period of time, on average. The Company also advised shorter duration outages could continue to decline (a net positive for customers) causing CAIDI to worsen.

Xcel said “the intelligent switches we are installing on feeders are reducing the number of short duration outages by isolating the fault and automatically healing a portion of the feeder – negating an outage for the majority of customers on the feeder.”

Storm normalization

OTP and MP use the IEEE 2.5 beta method of calculating what qualify as “major event days” while Xcel calculates its storm normalized data based on the standard deviation from an average number of sustained outages per day. Staff recommended that Xcel and the Commission consider shifting to the IEEE 2.5 beta method of calculation as the standard for electric utilities.

While Xcel has seen ongoing improvements in its SAIDI and SAIFI numbers across the majority of its reporting work centers, the Southeast work center has seen worsening SAIDI goals since 2013. Xcel’s SAIDI and SAIFI goals for the Southeast region were frozen at its 2016 or 2017 level until the five-year average drops back below that goal.

Going forward

The Commission requested Xcel include in its next report a discussion of how its near-term advanced grid initiatives (including AMI) will impact its reliability metrics and results, and how these new technologies can improve reporting accuracy of metrics like MAIFI.

Each of Minnesota’s investor owned utilities now have some or all of their reliability standards frozen at previous levels for the coming report-

ing period. The Commission could examine whether it wishes to continue using a rolling five-year average to set reliability standards, or if another calculation would be appropriate.

Staff said it liked using the IEEE benchmark as a measure of utility performance “as it gives a better picture of how utilities are doing relative to one another. This is especially important for utilities like Otter Tail that have lower overall reliability targets that appear to have stagnated, but are doing well in comparison to other utilities. Benchmarking could be a new method of setting reliability standards for Minnesota’s investor owned utilities.”

The Commission has asked utilities to report on Momentary Average Interruption Frequency Index (MAIFI) in individual service quality dockets. MAIFI consists of interruptions lasting less

than five minutes, which are excluded from SAIDI, SAIFI, and CAIDI calculations.

MP indicated that while it has tracked MAIFI for the past decade, it acknowledged that its data collection will be incomplete without a significant investment in further sensing technology.

Approximately 30 percent of MP’s data is collected by its SCADA system with the rest collected manually.

Staff recommends the Commission require annual MAIFI reporting and a discussion of ways to improve MAIFI reporting capabilities.

Heads up to Regular, Associate members!

MMUA wants its Associate and Regular members to be aware of a couple developments.

Staff is calling Associate Members who have not renewed the membership for 2019. If you are not sure if you

renewed your membership, please contact Karen Heiden at kheiden@mmua.org

MMUA also asks its Regular Members to keep their eyes open for our 2019 Salary Survey, which will be emailed to you soon.



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Fosston:

continued from front page

these days Larson is more apt to spend time with a computer—whether it be for programming meters or preparing a monthly financial report.

Larson enjoyed his work and said he was blessed to work for good councils and commissions. Local policymakers were conservative but would take calculated risks to keep Fosston moving forward. That commitment to the community shows.

A 14-acre industrial park is full, and 56 acres more are available for industrial development.

A cornerstone of the industrial park is Polk County, which produces steam as a by-product at its solid waste incinerator. Steam is sold to nearby agricultural product processors.

The city put in a wastewater treatment facility for one of those customers that produces biogas, a renewable energy source. The project was jointly funded through

the Fosston Economic Development Administration, the state and federal governments.

With a lack of housing, the city is developing an 80-acre residential area.

“If you develop it, they might come,” Larson said, summing up the local take on city economic development. “If you don’t, they won’t.”

Electric system focus

The electric utility has approximately 900 customers and employs four linemen—Larson and Lyseng are the journeymen. The linemen rotate on-call duty—the only utility employees to do so.

While the opposite is generally true, Larson believes municipal linemen should get paid more than other segments of the industry because they have to work with so many aspects of the system. Fosston’s linemen are also gas qualified.

Municipals offer certain advantages, however, and not surprisingly, given his background, Larson believes in promoting people from within the organization.



The origins of Fosston city hall/public utilities headquarters is evident in the former municipal power plant, located at the far end of the building. The building is sandwiched between U.S. Hwy. 2, in the front, and train tracks in the back. Also visible is a vehicle of the municipal bus service.

Everybody at Fosston Public Utilities has a specific job but works on other utilities, as needed.

That practice extends beyond city boundaries, with cities working closely with each other. Fosston and Bagley both operate electric and gas utilities and borrow equipment and help each other out with certain big jobs.

The Fosston electric utility, however, is the main focus. The system is in very good shape, but there is work to do.

Major feeder lines were placed underground in the 1980s, and they will be replaced over the next two years. The municipal will bid out the underground directional drilling, but help pull wire and terminate the cable. Loop feeds will serve all customers.

Reliable power is important for everybody, but especially for “critical” commercial and industrial customers.

Larson worked hard over the years for improvements on a power supplier’s transmission system. ‘Blinks’ are now “down to nothing,” he said. “Electricity is no good if it is not reliable.”

Larson can get in the pickup and inspect Fosston and he knows where everything is. Which is a good thing, since the entire system is underground. He remembers the day the utility cut over system voltage from 2,400 volts to 7,200.

“You should have been here that day,” he said.

Natural gas and wastewater

The natural gas business grew over the years, with 80 percent of its revenues coming from commercial/industrial customers. Gas revenues rival those from the electric utility, with possible future expansion being studied.

Due to a possible expansion in the industrial park, the city commissioned a feasibility study for another 40 acres of wastewater ponds. The cost of \$6-7 million is “pretty hard to swallow,” Larson said, especially since the city in 2011 spent \$6 million on two, 12-acre ponds and lift stations.



Fosston linemen Bill Gustafson (left) and Shane Linehan talked at the Meter School (see page 8) with MMUA Job Training and Safety and Apprenticeship Instructor James Monroe (right). Fosston is among the utilities Monroe regularly works with.

Local boys

Larson can look back on his work with pride. He looks forward to continuing work on the family farm, where he grew up. He and his brother bought the family place in the early 1990s.

Lyseng also grew up just outside of town and is a Fosston graduate. He has been with the utility six years. He graduated from Northwest Lineman College and the MMUA apprenticeship program. He is also a certified water and wastewater opera-

tor. He was 20 when he started with the utility.

Larson and Lyseng both also serve on the fire department. Larson said he can still drive a tanker truck, but would step down if there was somebody to replace him.

“It’s time to let the reins go to another person,” he said. “If I left today, I wouldn’t be worried about the city.”

Will Lyseng be with Fosston as long as Larson?

With a quick smile, he offered one word that said a lot: “Probably.”

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This particular scene, captured in Litchfield's newest plant, occurred during the 2012 MMUA Generation School. Note the Caterpillar engines, painted black in Litchfield.

Emergency:

continued from front page

fueled reciprocating internal combustion engine electrical generators. These generators picked up local electrical load, relieving stress on the grid.

According to the MISO presentation, an "earlier than expected drop in wind, primarily caused by cold weather cutoffs," increased risk of insufficient electric supply, triggered the Max Gen Event. Subsequent outages of conventional generation, load forecast uncertainty and potential of additional outages, prompted another step in the event procedure.

School and business closings, and other voluntary load management across the region aided in dampening demand below expectations.

Responding to "emergency price signals," electric suppliers outside of the region sold well above 5 gigawatts (GW) into the MISO region through the evening of Jan. 30 and the Jan. 31 morning peak. From Jan. 30-31, the importation of power into the region is expected to cost electric suppliers some \$18 million in 'uplift charges'—charges which will likely be passed onto customers.

In its Feb. 27 review of the event, MISO listed four "Key Takeaways." They are:

- MISO and members reliably managed operations during extreme cold, where temperatures fell below -30°F in some parts of the North and Central regions.

- Resulting high load, unavailable generation, and uncertainty in both load and supply created challenges throughout the event.

- Emergency procedures were implemented and maintained from early Jan. 30 through the afternoon of Jan. 31 to reliably manage the grid and maintain public safety.

- Winter preparedness by MISO and its members ensured readiness for the extreme conditions, but, MISO noted, areas of needed improvement include load and wind forecasting, and understanding impacts of voluntary load curtailment.

In a Monthly Operations Update for January 2019, MISO noted a Jan. 30 'Instantaneous Peak Load' of 101.0 GW. A new all-time wind peak output of 16.3 GW was reached on Jan. 8. (The previous record of 15.6 GW set on March 31, 2018.)

MISO will hold training for Load Modifying Resources (LMR) owners on how to nav-

igate its system April 23-24 and again May 21-22, in anticipation of its summer peak.

State review

Not surprisingly, these developments caught the attention of state regulators.

Xcel Energy, at a Feb. 28 hearing on the situation at the Minnesota Public Utilities Commission, said the event provided the company's "first experience with cold weather cutout on wind." The company said that situation "provided valuable information for future forecast improvements."

In response to calls from Xcel to its natural gas customers, millions of energy consumers lowered their thermostats during the event in response to utility requests. Xcel also saw gas service outages near Princeton and Hugo. A company representative was quoted as acknowledging the utility's system design was inadequate for the load.



These Fairbanks Morse generators in the older Litchfield plant were among those called into service Jan. 30-31. Pictured is Litchfield's George Baldwin. These units are 'Load Modifying Resources' in MISO jargon.

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MMUA Meter School meets demand for training calibrated to individual needs



Participants in the Advanced Class got right down to work, with their self-guided program. Instructors were available for questions and checked in to gauge progress and understanding.

MMUA held its annual Meter School Feb. 13-15 and Basic Metering Pre-Conference Feb. 12-13 at the MMUA Training Center in Marshall.

Thirty-two attended the Pre-Conference and the School was attended by 52.

The training opportunities were targeted to various levels of knowledge and experience.

More than 15 different stations were available for hands-on training. Instructors created problems or scenarios for participants to work through, or students described scenarios that the instructors helped them work through.

Question and answer was a big part of the program all week long. Flexibility allowed participants to progress at a pace that fit their motivation and abilities.

The Pre-Conference used interactive classroom and hands-on training to present and reinforce the teaching. Topics covered included: theory, common abbreviations and metering formulas, self-contained metering and troubleshooting. The Pre-Conference provided a good foundation for participants continuing on with the Basic/Intermediate Class.

The Basic/Intermediate Class was aimed at personnel with little experience with electric meters. Training built on the Pre-Conference session and included more hands-on training. The course covered topics including: single phase meters and meter forms, current and voltage transformers, personal protective equipment, mounting sockets, single phase wiring, troubleshooting and power theft.

The Advanced Class used a combination of methods and tools to present and reinforce the instruction. These include an interactive classroom, self-corrected meter exams, and hands-on training. Participants worked through a self-corrected meter exam designed to help focus training needs.

Instructors included Larry Chapman and staff from Chapman Metering. Larry Chapman has worked in the metering business his entire career. Also instructing was Scott Murfield, who has worked 30 years in the electric utility industry. Most recently, a Regional Safety Coordinator for MMUA, Murfield is a certified Journeyman Lineman, Journeyman Electrician and Loss Control Professional.

A number of other MMUA training staff were on hand to help throughout the schools.



A variety of training stations were put to good use by the participants. A handful of instructors, and other experienced utility personnel, circulated throughout the program to talk and share information and experiences.

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

MMUA's Nominations and Awards Committee is accepting nominations for MMUA awards. The deadline to submit a nomination is June 14. This 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.

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 on August 21.

Here is a brief summary of the awards for which we are accepting nominations. Please consider recognizing the accomplishments of a member of our community 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

April 16 deadline nears for MMUA Scholarship entries

Spring will soon be here, as will the deadline for the MMUA Tom Bovitz Memorial Scholarship Award program.

This program was created as a public relations tool to increase the awareness of public power and create goodwill. The \$5,000 fund is split into four prizes and awarded to essay contest winners who plan to attend a post-secondary educational institution.

The local governing body of the utility picks a local winner and enters the local winner to the state contest.

The deadline for having

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.

Board nominations are also being sought. Two board members—Greg French and Bob Elston—will be completing their second, three-year term. Don Martodam was

appointed to fill the seat of a departing board member, and that seat stands for re-election this year.

Return completed nomination forms, by June 14 to The-

utilities forward local winners to MMUA is April 16, 2019. Local deadlines will need to be set earlier, to allow the local governing board (or its designee) time to review the entries.

A group of MMUA members will select the first, second, third and fourth place winners statewide. MMUA will announce the winners by mid-May.

Please contact Steve Downer at MMUA if you have any questions or comments. Thank you for helping make this program a success.

ressa Neddermeyer via email (tneeder@mmua.org), fax (763.551.0459) or mail to 3025 Harbor Lane N., Suite 400, Plymouth, MN 55447.

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Low pressure in a Colorado Xcel Energy natural gas pipeline resulted in electricity brownouts that affected 17,600 customers in the Rocky Mountains. Xcel reportedly instituted rolling half-hour outages, affecting several thousand customers at a time. The electric outages were aimed at conserving natural gas in the Breckenridge area (electricity is necessary for natural gas furnace operation). The Feb. 7 incident was under investigation. Xcel initially suspected a breach in the line, but that appeared not to be the case.

Bethany Owen has been named president of ALLETE, the parent company of Minnesota Power. Owen has been with the company more than 16 years, most recently as senior vice president and chief legal and administrative officer.

Minnesota Power and Dairyland Power Cooperative have applied for a certificate of convenience and necessity, with Wisconsin regulators, for a \$700 million natural gas-fueled power plant, to be located in Superior, Wisc. The Minnesota Public Utilities Commission approved the project, known as the Nemadji Trail Energy Center, last October on a 3-2 vote.

Minnesota Power announced in mid-February that it would likely seek a rate increase in Minnesota later this year, due to an expected drop in revenue from expiring power sales, and increasing expenses.

Industrial customers account for almost half the company's revenue. Iron ore mines operated near full capacity last year, but large paper companies cut back their production. Contracts for selling power to other entities are also expiring.

Four people were jailed in Itasca County after closing valves on Enbridge pipelines. It appears to be the second case of vandalism against Enbridge pipeline property. Three people were charged with felony property damage last year, but charges were thrown out in October. Some oppose the pipeline due to climate change concerns, and possible environmental dam-

Bits: see facing page

Bits: from facing page

age from spills.

The Minnesota Public Utilities Commission approved a new Enbridge line in June, though legal and regulatory hurdles remain.

A proposal to develop a solar garden/residential development, billed as an "Eco-Village," has slowed after Gaylord Planning and Zoning Commissioners heard concerns from neighbors, including the potential impact on migratory birds, wet ground, no vegetation to block the view of the solar panels, and a potential decline in property values.

The matter was tabled until the next meeting.

Around the State



The **Hibbing Public Utilities Commission**, on a 3-2 vote, approved increasing rates 10 percent for steam and five percent for water customers. The utility is currently signing-up customers to transition from steam to natural gas service.

Due to new information regarding less than anticipated wholesale power cost increases, the **Ely City Council** scaled back a proposed three percent electric rate increase to one percent.

The council also approved a recommended increase of \$1 in the monthly fixed water service fee.

It was the best January ever for production from **Wilmar Municipal Utilities'** (WMU) two wind turbines, as they produced nearly 625,000 kilowatt-watt

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Record-breaking cold late in the month, however, caused issues for the utility that mirrored problems in general around the region.

The wind turbines shut down, as they are only designed to operate in temperatures at or above 21 below zero, Fahrenheit.

WMU's supplier of natural gas requested the utility stick to the amount of gas in its contract, which led the utility to reduce temperature slightly in its district heating system. The district heating system is in the process of being phased out, however, and only one customer called about the issue.

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Diesel generation was hampered by thickening of fuel, which wouldn't flow properly.

Overall, WMU, like most other utilities around the state, made it through the cold spell with minimal disruption to customers.

The **New Ulm Public Utilities Commission** appointed Kris Manderfeld to the position of interim utilities director, on Feb. 26. Manderfeld has been serving as the utility's assistant finance director.

Classified Ads



Utilities Director

The Public Utilities Commission (PUC) of New Ulm, MN is currently seeking a full-time Utilities Director who will be responsible to plan, organize, and direct the operations of our five utility divisions: electric production, electric distribution, natural gas, water/steam, and wastewater treatment. Our utility, with an annual budget of \$43M, requires demonstrated leadership, organizational, communication, and personnel management skills. A Bachelor's degree in business administration, public administration, business management, engineering,

or a closely related field is required. This position requires a strong management background, extensive experience supervising technical personnel including supervisory personnel and a valid driver's license. Experience in government or private or public utility operations is preferred. This position provides a compensation range of \$103,584 to \$126,027 and a competitive benefit program. You must apply online by visiting our website at <http://www.newulm-mn.gov>. Please call 507-359-8235 with any questions. Application deadline is 4:00 PM on March 31st. EOE

Journey Lineworker or 2nd Year Apprentice-Barnesville Missouri River Energy Services (MRES) is an organization of 61 member municipi-

ties that own and operate their own electrical distribution systems. Inspired by the company's mission to supply its members with reliable, cost-effective, long-term energy and energy services in a fiscally responsible and environmentally sensitive manner, members of the MRES team embrace the challenge of understanding and solving the evolving energy needs of all customers today, and for years to come. We are looking for a highly motivated individual to begin our journey with the electric distribution maintenance services to the City of Barnesville. In this role you will be responsible for operating and maintaining the municipal electric utility distribution systems in a safe and efficient manner. You will play an ac-

tive role in the operation, construction, reconstruction, maintenance and repair with the City of Barnesville's electrical distribution systems and associated equipment and as the customer energy needs continue to evolve, so too will your roll. Journey and Apprentice Line Worker Requirements: 2nd Step Apprentice Required; Active Driver's License; Ability to Obtain a MN Class A CDL Endorsement Within 6 Months; CPR Certified; Reside within 20 minutes of Barnesville. Additional Journey Line Worker Requirements: Journey Line Worker from an accepted apprenticeship program; 4 years of experience in the operation, construction, reconstruction, and maintenance of electrical distribution systems and associ-

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Upcoming Training Opportunities

Underground School

May 14-17, at the MMUA Training Center in Marshall

Minnesota Municipal Utilities Association and our partners—Minnesota Rural Electric Association (MREA) and American Public Power Association (APPA)—are pleased to bring you the 2019 Underground School.



The Underground School offers a hands-on training track with a variety of training sessions and an advanced technical course. The School begins at 1 p.m. on the 14th and ends at noon on the 17th. Along with the School come a variety of evening and optional activities.

Individuals registered for the Multi-Session Class will rotate through six different two-hour training sessions, covering a variety of topics that can enhance safety and improve efficiency.

General Sessions held on the first and last day of the School include:

Customer De-escalation Strategies

Learn about pre-assault behaviors and methods to calm a verbally aggressive or potentially disruptive individual.

DOT/Worksite Traffic Control

This session provides an understanding of the most basic aspects of safety in a work zone and will cover important DOT regulations.

Multi-Session Classes

Registrants will rotate through each of the following six sessions. This class is intended for lineworkers of all experience levels.

• **Session 1: Locating URD Cables**
Work with various brands of locators and learn different techniques.



Note: Underground School registration fees increase April 12. Deadline to register is April 22!

• **Session 2: Table-top Splicing and Terminations**

Including hands-on work, led by 3M manufacturer's representative.

• **Session 3: Secondary Troubleshooting Work** through scenarios including back feed, open neutral and partial power.

• **Session 4: Infrared Technology**

How it works, doing it well and ways to apply the information.

• **Session 5: Exposing Live Underground Cables**

Do the work safely with a variety of equipment and tools, and proper backfilling.



• **Session 6: Accident Investigation**

An actual accident will be analyzed and thoroughly discussed. Best practices, PPE, job briefings, etc.

Advanced Class - Maintaining Your Underground System

This two-day session will be packed with intense training and will move quickly. This class is designed for seasoned lineworkers, managers, engineers and others who can benefit from the information.

Topics to be covered include:

- Power factor
- Transformer specs
- Cable specs
- Proper construction specs
- Financial considerations
- System losses
- Cable replacement plans

More Upcoming Training Opportunities

April 16-18 Substation School

Registration fees increase March 18 and deadline to sign-up is March 28, so get your approvals now! This School will be held in Buffalo.

April 23-25 Generation School

This school is held at the Hutchinson fire station and municipal utility power plants in Glencoe and Delano. Learn more about Fairbanks Morse, Cooper and Enterprise engines with hands-on training in the plants. Fees go up March 25 and the registration window closes April 4, so hop to it!

May 1-2 Competent Person and Excavation Safety

Registration fee increases April 1 and registration deadline is April 11. Sign-up now for this workshop at the MMUA Training Center in Marshall.

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