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St. Charles and Lanesboro join multi-partner solar energy project

by Steve Downer

With the full support of the cities involved, privately-owned solar energy plants recently connected to municipal electric utility systems of the Upper Midwest Municipal Energy Group (UMMEG).

UMMEG is power agency representing 15 municipalities in the Mississippi River bluff country of Wisconsin, Iowa and Minnesota, including MMUA-members St. Charles and Lanesboro.

The municipals will buy the fixed-rate energy for 25 years. Along with a stable rate and increased percentage of sales from renewable energy, the municipals anticipate benefits from reduced transmission costs, as the solar energy will flow directly into their substations, and distribution systems.

Transmission costs in recent years have increased from up to 40 percent of its wholesale power bill to approximately 60 percent, said St. Charles City Administrator Nick Koverman. St. Charles anticipates saving \$31,000 per year in transmission costs.

The projects are designed to produce no more energy than



Jerod Wagner of Lanesboro Public Utilities shows off the solar energy plant that is interconnected with the municipal electric distribution system.

is needed by the municipal systems on a low-usage day.

St. Charles purchased its local solar site and is leasing it to the project owner for the project life. The utility paid for the new power line from the site to its substation.

The St. Charles solar site is next to a large church on the city's eastern border and adjacent to a rural residence. The

neighboring homeowner was brought into the process. Along with a screened fence, the city is planning to plant evergreens along the property line as a further visual screen.

The 1,800-customer utility, which hasn't had a rate increase since 2013, is eager to get a full year's worth of data to better assess the solar system's rate impact.

The 2 megawatts (at full output) installation came online Sept. 23.

The 600-kilowatt Lanesboro installation is expected to supply an average of 20 percent of the electricity consumed by the utility's 625 customers. The site is just outside of the city's southeast border on a slope consid-

Solar: see page 5 please

MPUC continues to address utility system reliability

Gas system shortcomings addressed, electric generation issues receive scant attention

by Steve Downer

Minnesota's electric and natural gas utility systems were stressed last winter, failures occurred, and the Minnesota Public Utilities Commission (MPUC) has addressed the issue several times since then, including Oct. 10.

The latest meeting revolved around the Xcel Energy gas outages in the rural Princeton and Hugo areas, natural gas customer curtailment penalty levels and other lessons learned.

Minnesota "experienced an extreme weather event" Jan. 28-Feb. 1, noted MPUC staff briefing papers, with some of the coldest weather since 1996. Utilities generally performed well, but along with the isolated service issues, a large number of interruptible natural gas customers failed to fully comply with curtailment requests.

Fully 25 percent of the state's electric generating resource was unavailable during the event, noted the briefing papers, mainly because wind generation shut down due to extreme cold.

Interestingly to the municipal utilities that were called upon to generate electricity during the event, electric generation issues were addressed in just three pages of the 45-page document, and the issue was not discussed.

Dakota Electric stated that Great River Energy (GRE) wind generation went off-line due to excessive cold temperatures late Jan. 29 and returned on the morning of Jan. 31. Coal, gas and solar saw no issues.

Xcel Energy stated that wind generation dropped from 1,500 MW on Jan. 28 to 150 MW on Jan. 30, picking back up to 580 MW on Jan. 31. Some of that variation was due to plants going offline due to cold, and some was due to reduced wind velocities producing "suboptimal generation conditions." All Xcel Electric wind farms have cold-weather cut-offs at -22, except Mower County, which cuts off at -13.

Several of Xcel's gas-based peaking units had difficulties at start-up due to frozen fuel valves.

Xcel also reported that its Black Dog, High Bridge and Riverside natural gas plants were reduced to "economic minimum generation levels" for three hours Jan. 30 due to a compressor station failure at the Northern Natural Gas (NNG) facility

in Farmington. The shutoff was taken by Xcel to maintain natural gas pressure for retail customers in the Metro area. The Department of Commerce, Division of Energy Resources, noted

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MMUA hosts lineworker rodeo

MMUA hosted the third annual Minnesota Lineworkers Rodeo Oct. 15 at its Training Center in Marshall. The event preceded the Overhead School. The top overall Journeyman honors in the event went to Colton Koster of RPU (pictured at left). For more on the Rodeo, see the back page.

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After 20 years of operation, MMUA purchases Training Center land in Marshall

MMUA has entered into an agreement with the City of Marshall to purchase the land occupied by the MMUA Training Center.

MMUA began leasing 19 acres of land in Marshall for use as a training center on October 1, 1999. In 2000, it completed construction on a facility which houses an office, meeting room and a large warehouse that also doubles as a meeting room/classroom. The cost of the building was about \$350,000, which was paid almost entirely through member donations.

Over the years, MMUA,

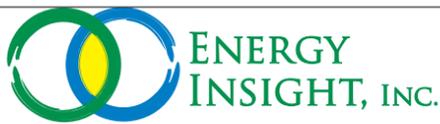
with tremendous help from its Regular and Associate Members, has constructed complete overhead and underground electric systems on the property, as well as a gas distribution system.

It has added two underground vaults and two substations, and has acquired two bucket trucks, a digger derrick, a skid steer and a utility vehicle.

MMUA has also acquired a valuable inventory of utility equipment and tools, most of which have been donated. Building improvements have been made, including the re-



MMUA staff that have played key roles in the development of the Training Center in Marshall are, from left to right: Kevin Thompson, Cody Raveling, Executive Director Jack Kegel and Director of Training and Safety Mike Willetts. Thompson, a regional safety coordinator, was the first MMUA Training Center Coordinator. Raveling is the current Training Center Coordinator and also serves as a Job Training and Safety instructor.



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cent conversion to LED lighting.

While further improvements are envisioned, said MMUA Executive Director

Jack Kegel, it would be hard to make significant additional investments without knowing that the association would be able to continue operating on the site in the long term.

With the original 20 year lease on the property expiring this year, Kegel said, it seemed an appropriate time to discuss the possibility of purchasing the property from the City of Marshall.

In July of this year MMUA reached an agreement with the City to purchase the training center land for \$1,000 per acre.

The MMUA Board of Directors approved the purchase in August. The City requested that it retain ownership of a small portion of the leased

land to be used as part of an archery range being developed by the City. MMUA accepted the City's request, and the survey shows that the area to be purchased comprises 17.87 acres.

MMUA's attorneys prepared a purchase agreement for the property, which was approved by the Marshall City Council on Oct. 8. Marshall City Administrator Sharon Hanson and MMUA's Kegel signed the purchase agreement on Oct. 16. MMUA and the City are now working through the additional steps necessary to close on the transaction, which will likely occur in December or January.



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St. Charles ‘reinvents’ itself following loss of largest employer, utility customer

After losing its largest employer and utility customer to fire, the City of St. Charles has taken steps to ‘reinvent’ itself. Ten years after North Star Foods went up in flames, the city’s efforts are bearing fruit.

A roadmap shows St. Charles situated alongside Interstate 90, but a visit shows the city nestled comfortably down a hill on the north side of I-90. Recognizing that its destiny may well lie astride the Interstate, the city has invested in development in that area.

In 2011, the city completed its first comprehensive plan and developed the I-90 Business Park. It purchased land, built roads and extended electric, water and sewer utilities to a newly-developed industrial park.

A new Dodge dealership opened in November. Loves Travel Center is scheduled to be developed on the south side of the interstate in 2020. Plans call for 50 full time-equivalent employees and a facility that will be a large utility customer.

A hotel has been discussed at the interchange for several years, and interest continues to percolate around that opportunity.

With Whitewater State Park seven miles away, St. Charles draws 300,000 visitors a year. The city of 3,800 is located 20 miles from Winona, and Rochester. A large part of the population works for Mayo, and the city boasts a number of local industries and commercial establishments.

Not every economic development effort bears fruit, but some do. The city and county partnered on a ‘workforce housing’ development of single-family homes on the city’s east side, and it has only a couple lots remaining. Recognizing the benefits the investment has reaped in the form of taxes and utility income, the city has purchased an adjacent 16 acres, for possible future development.

City Administrator Nick Koverman said city policy-

makers are intent on investing throughout the community.

To that end, the city has applied for a small cities grant to rehabilitate some of its existing housing stock.

The downtown was improved with a joint city and St. Charles Public School District effort. Together, the entities won a state grant to complete a Safe Routes to School plan. The city, for its part, obtained a \$300,000 MnDOT grant to implement one of the recommendations of the plan: building ADA-compliant pedestrian curb ramps with new concrete sidewalk, bituminous street pavement, modifications to the storm sewer for the new street alignment and flashing crosswalk signs on 11th Street and Whitewater Avenue/Highway 74.

A downtown terminus of the ‘safe schools’ route is a new Veteran’s Park—a joint grassroots effort spearheaded by the VFW and Legion clubs.

The city has made a number of moves on the energy front. In August 2018, the



The St. Charles electric substation sits down the hill from the municipal power plant and transmission lines. The plant was among the municipal plants called into service during last winter’s ‘polar vortex.’

council approved an agreement between the city and MiEnergy. The cooperative supplies power to the city (through a Upper Midwest Municipal Power Group contact with Dairyland Power Cooperative). As part of the agreement the city received 40 acres of service territory

on its northwest side. Easing that agreement was the fact that MiEnergy was serving the customers, in a city industrial park, with a circuit from the municipal substation.

St. Charles Light & Water operates a power plant, which includes four 2.2 MW

diesel engine generator sets, installed in 2004. The plant was called into service during last winter’s polar vortex and successfully carried the local electrical load when called upon by the Midcontinent Independent System Operator.

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Ditto new APPA CEO

The American Public Power Association (Association) Board of Directors has appointed Joy Ditto as the organization’s new President and CEO effective January 13. Ditto is the president and CEO of the Utilities Technology Council (UTC), a Washington, D.C.-based trade association

Before joining UTC, Ditto worked in advocacy for the American Public Power Association for 15 years.

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Reliability:

continued from front page

that the NNG issues resulted in over 1,000 MW of capacity reduction over a 10-hour time period. Xcel said it had adequate alternative resources

online during the event to cover load, even with reduction in power at those plants and at its wind facilities.

Minnesota Power (MP) had its Taconite Ridge Wind Farm stop generating due to cold temperatures, but there was

Xcel Gas Natural Gas Dist. Model – 2019 Weather Zone Planning Temperatures

State regulatory agencies reviewed historical temperature data for the Princeton area, and said Xcel Gas' planning assumptions for this area "were inherently flawed." Xcel's new distribution planning model is split into 10 weather zones. The distribution system minimum temperature was calculated using the likelihood that a temperature could be reached once within 30 years. The updated (lowered) minimum temperatures are now:

Ashland	Brainerd	Eau Claire	Fargo	Faribault	Grand Forks	La Crosse	St. Cloud	St. Paul	Western
-37	-48	-37	-35	-37	-40	-35	-40	-32	-34

Note: The vast majority of wind turbines shut down at -22, according to the MPUC docket.

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"no material effect" on overall generation due to low wind. MP's Bison wind facility did not shut down due to cold, but went from 450 MW to 0 MW production during the afternoon and evening of Jan. 29, due to lack of wind.

MP said a biomass generating facility was offline due to gas supply issues and one natural gas-fired unit was taken offline due to a cold-related mechanical issue. MP reported no weather-related issues at coal and hydroelectric plants. Solar plants operated as normal, though limited by clouds and snow.

MP wind turbines generally shut off at -22, though one installation goes offline at -4. Solar generators are not guaranteed below -22, said MP, but did not report issues.

Otter Tail reported several wind farms were offline due

to cold on Jan. 30-Jan. 31. Its wind turbines all have shut off temperatures of -22.

Overall, 25 percent of generation was unavailable during part of the event. Wind forecasting was "erratic" with large over-forecasts for all utilities.

It was a review of electric utility load management use, during the emergency event, that lifted the veil on the dire state of electric generation.

Minnesota's only state-regulated electric cooperative—Dakota Electric—stated that it responded to calls for load management from GRE, which reportedly managed about 359 MW in overall load reduction that day. GRE called for full load control on Jan. 30 from 3 p.m. to 9 p.m. GRE and its member co-ops reportedly saw a total demand response of 459 MW.

The Midcontinent Independent System Operator (MISO) declared an emergency on Jan. 30, at 3 a.m., and it ended at 11 a.m. on Jan. 31. In addition to the usual emergency processes, large 'firm load' customers implemented voluntary curtailments until 9 p.m. on Jan. 30.

Minnesota Power reported 235 MW of demand response, including 200 MW of load reduction from industrial customers.

Xcel and Otter Tail tariffs, noted regulatory documents, contemplate summer interruptions rather than winter.

Xcel Gas and CenterPoint are to file information with the MPUC on their system reinforcement projects. The state-regulated natural gas utilities received approval of a number of tariff changes.

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A 'report card' produced by a coalition of environmental groups gave Xcel Energy an 'A' for its plans to close three coal-fired electric generating units in Becker, but an 'F' for planning to replace one of the units with a smaller natural gas-fired unit.

Natural gas emits roughly half of coal's carbon emissions.

"Less dirty than coal is still too dirty," a spokesperson for the groups was quoted as saying. They would prefer to see more renewable and energy-storage technologies.

Bits & Pieces



Electric generating resources on recent Minnesota Public Utilities Commission (MPUC) dockets include:

Oct. 10: Three Waters Wind Farm LLC application for a certificate of need for up to 200 MW in Jackson County. The MPUC accepted the application as complete with an informal review (not a contested case) process.

Oct. 24: Buffalo Ridge Wind Energy LLC (a subsidiary of NextEra Energy

Resources) certificate of need for 109 MW wind plant in Lincoln County. The application was deemed complete, and an informal review process was approved, intervention granted to the Laborers District Council of Minnesota and North Dakota (LIUNA) and rules varied (to allow more time to review the application).

Nov. 7: Elk Creek Solar certificate of need for up to 80 MW solar project, to be sited on 681 acres of prime farm-

land in Rock County. The MPUC was to determine a number of issues, including if the application was complete. The developer has a power purchase agreement with Xcel. The MPUC order had not been published as of our deadline.

S&P Global Platts reported that renewable generation totaling 1.7 gigawatts (GW) was under construction in the Midcontinent Independent

System Operator footprint and slated for completion by the end of 2019. An additional 1.4 GW will be delivered in 2020 or 2021, according to a report released Oct. 21.

The additional wind generation is likely to put pressure on power prices, noted the report, particularly in the wind-heavy MISO North region, where transmission constraints may be contributing to construction completion delays, an analyst said.

Solar: Many partners make projects work for UMMEG

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ered marginal for other uses.

Lanesboro also operates a hydro-electric plant on the Root River.

"I am excited that we are able to add more renewable energy into our system, adding to our history of hydro generation for the last 123 years," said Lanesboro City Administrator Michele Peterson. "We are always looking for ways to be more efficient, and ultimately pass those savings on to our ratepayers."

How it came together

OneEnergy Renewables, based in Seattle, Wash., began discussions with food cooperative Organic Valley about a partnership to work on a solar project with the municipal utilities in Cash-ton, Iowa and La Farge, Wisc.

The plan was to have the local utilities purchase the electricity and capacity credits, which Organic Valley would then buy as Renewable Energy Credits (RECs). When EnergyOne presented its proposal to Cashton and La Farge, they asked if the project could be spread out to other UMMEG members.

St. Charles and Lanesboro first heard of the possible project in mid-2018. With local support the pieces quickly fell into place. Construction started in January 2019.

All told, the 'Butter Solar' portfolio includes 10 facilities in three states and, at full output, will generate 22.6 MW of power for 13 participating municipalities.

As these 10 projects would provide power above and beyond what Organic Valley uses, other partners were sought. Along with Organic Valley, Dr. Bronner's, the City of Madison, Wisc., and Native Energy agreed to buy the Renewable Energy Credits (RECs) associated with the electrical production for 25 years. The RECs allows these entities to meet their 'carbon neutral' goals, and their sale helped project financial feasibility.

Calgary-based BluEarth

Renewables acquired the development rights for the portfolio in December 2018, and

developed land leases. It will be the owner and operator of the project.

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MMUA holds annual Overhead School Oct. 15-18, with a little help from its friends

MMUA held its annual Overhead School Oct. 15-18 at its Training Center in Marshall. The event was co-hosted by the American Public Power Association and Minnesota Rural Electric Association. The event was held in conjunction with the MMUA Cross Training School, and followed the Oct. 15 Minnesota Lineworkers Rodeo.

More than 50 lineworkers participated in the school. They came from 33 municipal utilities in Minnesota, Michigan and South Dakota and one rural electric cooperative.

Most participants rotated through the multi-session class. Topics and instructors included:

- 3-Phase Transformer Bank Troubleshooting: led by

Tyler Malloy, Brainerd Public Utilities; Chad Peterson, Rochester Public Utilities.

- 3-Phase Pole Replacement: led by Bob Steidl, ALP Utilities; Jeff Martinson, Austin Utilities.

- Capacitor Bank and Maintenance: led by Tony Mead, Marshall Municipal Utilities; Rob Adamson, Rochester Public Utilities.

- Preventative Maintenance: Joe Moore, Moorhead Public Service; Scott Thoreson, Elk River Municipal Utilities.

The Advanced Class focused on Relays, Mapping and Switching. It was led by Todd Keach and Jeff Kranz, Rochester Public Utilities; Ken L'Esperance, CE Power Engineered Services.



Chitt Keophilalay of Adrian, Ryan Miller of Brainerd, MMUA's James Monroe and Tanner Ellis of Melrose all participated in the Lineworkers Rodeo, and Overhead School. Monroe works with each of these apprentices through the MMUA Apprentice Lineworker Training Program.

MMUA thanks all the utilities and companies that attended and those that provided instructors and equipment or supplies for the school, including:

- ABM Equipment
- ALP Utilities
- Altec Industries
- Austin Utilities
- Brainerd Public Utilities
- CE Power Engineered Services
- Connexus Energy
- Elk River Municipal Utilities
- EZ Spot Ur
- Marshall Municipal Utilities
- Moorhead Public Service
- Rochester Public Utilities
- Terex
- Titan Machinery

Cross Training School

This school, led by James Monroe of MMUA, worked on training competent 'ground persons' to better assist lineworkers. The program provided basic—yet thorough—skills training on a wide variety of subjects. The school was held Oct. 15-17.



Above: Neil Stiller of RPU lent his expertise to the Capacitor Bank and Maintenance class. As the equipment in the trailer shows, MMUA training includes a healthy dose of hands-on training. Below: Brandon Wheaton of Traverse City, Mich., (green helmet) offered comments during the class.



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Koster, Gleason of RPU take top honors at third annual Minnesota Rodeo

The 2019 Minnesota Lineworkers Rodeo was held Tuesday, Oct. 15 at the MMUA Training Center in Marshall.

Colton Koster of Rochester Public Utilities (RPU) was the top finisher overall in the Journeyman competition. Hunter Gleason of RPU was the top overall apprentice.

Six journeymen recorded perfect scores and were separated by time. Following Koster they were Jamie VonBank of Shakopee, Trevor Morin of Marshall, Rob Adamson of RPU, Tyler Malloy of Brainerd and Chad Peterson of RPU.

Utilities sending people to participate included: Melrose, Adrian, Rochester, Marshall, Shakopee, Brainerd, Elk River and Chaska.

MMUA salutes all the contestants and the utilities that sent them.

We also thank the associate member businesses that added so much in making for a successful event.

Special thanks to our members who served as a Rodeo judges or auditors:

Hurtman Rescue:

Larry Lamote, Dale Narlock, Dave Hunstad, Miles Heide, Jeff Bechthold, Greg Drent, Jeff Martinson.



The MMUA Training Center in Marshall was the site of the third annual Minnesota Lineworkers Rodeo.

Single Phase Conductor Tie In:

Todd Keach, Steve Johnson, Scott Thoreson, Trent Hawkinson, Brad Carlson

Obstacle Course:

Steve Tiegs, Brendan Olson, Kent Sanders, Wade Williams.

For complete results see the 'Breaking News' section of our website. Photographs are posted on our Facebook page.



MMUA's Anthony Lenz (left) and MRES' Jeff Bechthold worked the event.



Matt Zipp of Elk River competed in the Hurtman Rescue event.



RPU's Rob Adamson was a top finisher in the Journeyman Overall competition.

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Rebuild of Lanesboro's historical dam, hydroelectric upgrade planned for 2020

Solar isn't the only renewable electric generation connected to the Lanesboro Public Utilities system.

The city has operated a hydroelectric plant since the creation of the municipal electric utility in 1902. While one turbine was removed a couple decades ago, a 240-kilowatt turbine remains in service. The hydro plant in recent years has supplied approximately 15 percent of city's total electric supply.

The plant has been updated over the years, but the hydro system's biggest improvement, since it was built by a private developer in 1895, is set for next year.

The Lanesboro Dam, built in 1868, is set for a major overhaul. One of only six 'gravity arch' dams left in the country, it is made of stacked and fitted limestone blocks and listed on the National Registry of Historic Places.

That designation was fitting. It also created a number of issues to overcome when seeking to repair the structure, which has deteriorated with the years and has been

listed by the Minnesota DNR as "high hazard." It is in critical need of repair.

After years of effort, the city, with tremendous help from its local legislators, obtained \$4 million in state bonding to fund renovation. Along with the bonding and some DNR money, Lanesboro Public Utilities has set aside \$100,000 to help in the effort.

Bids have been let and work is scheduled to begin April 15, 2020. A gravity dam will be built immediately behind the existing dam, leaving the historic arch in place. Replacement limestone, where needed, will be cut from a certain area quarry, as required by the historic designation guidelines.

The municipal powerhouse and Root River diversion channel were constructed in 1903. Operators are looking forward to a new Supervisory Control and Data Acquisition system to monitor and automate hydro operations. Larger diversion channel gates will be installed and operated remotely, resulting in safer, more efficient operation.



A bird's eye artist's rendering of the new Lanesboro dam, showing pylons upstream of the dam face. The hydropower diversion channel is pictured at right. Below, the dam as pictured October 2019.

The DNR, concerned with possible changes in the downstream river level, negotiated inspection, operation and maintenance requirements with the city. The diversion channel 'outfall' into the main channel remains in the same location.

Several gauges will be added along the river that connect directly to the new city SCADA system, to allow the dam operators to keep a close eye on stream levels in real-time. A start-up and shutdown plan was developed to allow safe power generation while meeting DNR requirements.

Some upgrades have occurred in anticipation of the dam rebuild. Two feeder circuits that previously crossed the dam overhead have been placed underground, in conduit bored under the river.

The powerhouse also houses a 2.2 megawatt diesel-fueled Fairbanks Morse engine/



generator set. The Midcontinent Independent System Operator (MISO) called on the utility to operate the engine during last winter's polar vortex. The engine carried the entire municipal load until MISO declared an 'emergency event' was past.

An 800-kilowatt Nordberg unit was recently removed, as it would not meet emissions standards.

The distribution system voltage was upgraded last year from 2400 delta to 4160

wye. The utility had been installing dual-voltage transformers for some time. A contractor completed the work and also replaced some poles, cutouts and other necessary items.

Distribution system maps are also being updated and digitized.

Oldest wastewater plant in the state to be replaced

The dam wasn't the only aging infrastructure in the city that is being modernized: The wastewater treatment facility is the oldest in the state—built in the 1938. Though updated several times, a new plant was needed and design work is underway. It will remain a Class C plant, with the same discharge location. Depending on final design, the price tag could range from \$5 to \$8 million, a lot of money for a city of 765 people. The quest for grants and low-interest financing will start in earnest once the design is set.

A new location has been secured, but it has been a lengthy, difficult process. City Administrator Michele Peterson said the project has been a good example of different people and agencies working together to identify solutions to a difficult issue.

Two utility workers handle the water, sewer and electric generation. A local commission oversees all administrative functions of the utilities.

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MMUA has three new Associate Members. They are: Innovative Systems, Interstate Power Systems and L70 Technologies, Inc.

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Associate Member News

enhanced voice and hosted business solutions.

The company is located at 1000 Innovative Drive, Mitchell, SD 57301. Phone is 605.995.6120.

For more information, visit www.innovsys.com

Interstate Power Systems is the authorized distributor for MTU Onsite Energy electric power generation and microgrid systems in the states of Montana, parts of Wyoming, North Dakota, South Dakota, parts of

Nebraska, Minnesota, Iowa, Wisconsin, parts of Indiana, parts of Illinois, and the Upper Peninsula of Michigan.

The company is located at 21568 Highview Avenue, Lakeville, MN 55044. Phone numbers include 952.854.5511 or 800.222.6060. Main contact is Clay Hardenburger, Business Development Manager, phone: 262.781.7100.

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The company is located at 901 Twelve Oaks Center Drive, #920, Wayzata, MN 55391. Phone is 952.300.2631. The main contact is Daniel Boivin, Executive, who can be reached at 952.378.1822.

Visit the company only at www.l70technologies.com

Xcel Energy, Minnesota Power request rate hikes

Xcel Energy and Minnesota Power have each announced plans to increase electricity rates by about 15 percent over the next three years.

The plans by the state's two largest utilities are subject to approval by the Minnesota Public Utilities Commission.

Xcel said its proposed rate increase will allow the utility to invest in transmission and distribution lines to help strengthen reliability and carry power from new wind farms, as well as install 'smart' meters.

Minnesota Power officials say their rate increase proposal would allow the utility to continue its plans to improve the grid and supply half of electricity generation from renewable sources by 2021.

Both utilities have asked for an interim rate increase while regulators consider the proposals.

TKDA, an employee-owned provider of engineering, architecture, and planning services, announced that Douglas W. Fischer, PE, has joined the firm and will serve as vice president of the Municipal Division.

Fischer has served since 2002 as county engineer for Anoka County, Minnesota.

Over the course of his county engineer career, Fischer was responsible for more than \$500 million of infrastructure improvements. Under his leadership, Anoka County was the first and only non-MnDOT road authority to use the design-build method of procurement

for a road and bridge project, which required him to help bring about special legislation at the state capitol.

Fischer earned a Bachelor of Science in civil engineering from Iowa State University. In addition to other professional roles, he has served as president and on the board of directors of both the Minnesota Section of the American Society of Civil Engineers and the Minnesota County Engineers Association.

Fischer is taking over the division leadership from Dennis Postler, who is moving to a new position for TKDA in California.

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Request for Qualifications
 The Northeast Minnesota Municipal Power Agency is comprised of 16 municipal utility members located in northeast Minnesota. The group has recently reorganized after a period of inactivity. The majority of NEMMPA members currently purchase wholesale power from Minnesota Power (ALLETE). NEMMPA is interested in contracting with a technical advisor/consultant to assist in its efforts to consider potential options for alternative power supply for its members. The scope for the advisors services would be developed with the NEMMPA board and members but could potentially include meeting to discuss and explore power supply options, issue and manage an RFP for a power supply study or power supply proposal process, arrange and conduct meetings/presentations with potential power supply entities or power agencies and other related activities. NEMMPA is issuing this Request for Qualifications (RFQ) to parties interested in providing this technical advisor service. Statements of Qualifications (SOQ) should contain relevant information regarding experience for this assignment and an outline of a proposed approach to the work. SOQs should be submitted to Julie Kennedy, General Manager, Grand Rapids Public Utilities, 500 SE 4th Street, Grand Rapids, MN 55744 by December 13, 2019. SOQs may also be submitted electronically to jakennedy@grpuc.org. Questions regarding this RFQ can be directed to Julie Kennedy at jakennedy@grpuc.org or 218-326-7687.

Superintendent/ Public Works Director

Responsible for supervisory work of personnel in the construction, operation, maintenance and repair of the electric, natural gas, water, wastewater, and airport systems, as well as maintenance for public works, parks, airport, and streets for the City of Henning; and perform any related duties as required. Minimum qualifications: Valid MN Class A license. Including a CDL or ability to obtain one within 6 months of employment. Trained and certified in CPR and first aid. Must pass DOT Drug and Alcohol Test (position is subject to pre-employment and random drug and alcohol testing).

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continued from facing page

Employees will be expected to obtain a Class C water and Class D wastewater license after an appropriate amount of training. Employees will be expected to pass an approved journeyman lineman's certification. This will directly affect his/her steps in the Step and Grade plan. Applications will be accepted until the vacancy is filled. Job description and application may be picked up at the Henning City Office at 612 Front Street in Henning or online at cityofhenning.com and can be dropped off at City Hall or emailed to henngov@arvig.net. For the complete job posting, see the News > Classifieds page at www.mmua.org

Water Operator

Elk River Municipal Utilities is accepting applications for a full time Water Operator. Responsibilities include: assisting with the operation, maintenance, repairs, and record keeping for the water system; performing water meter sizing, installation, and troubleshooting; providing general support for other departments; and assisting with general duties. Position qualifications include: 2 years college or vocational training in water operations or equivalent experience, 2 years applicable experience, a minimum of a Class D water license with the ability to obtain a Class B within 5 years, a valid MN driver's license with the ability to obtain a Class A license within 1 year, participation in on-call rotation, and live/relocate within a 20 mile radius of Elk River Utilities' Field Services Building. 2019 salary range is \$22.89 to \$32.68 per hour with excellent benefits. Please visit our website at www.ermumn.com/pages/employment-opportunities for a full job description. Resumes, along with a completed Water Operator Application Packet, must be received by November 22, 2019. Please submit resume to: Elk River Municipal

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For a full and complete look at our latest Classified Ads, please go to the News > Classifieds section of our favorite internet resource, www.mmua.org

New York approves large energy storage plant

The New York State Public Service Commission Oct. 17 approved construction of the largest battery storage facility in that state's history.

The storage facility will be built on a portion of the Ravenswood Generating Station property in Long Island City, Queens, New York.

Lithium-ion batteries will supply up to eight hours of storage capacity and will be able to charge and discharge up to 316 MW of power.

The facility is expected to be partially operational by March 2021.

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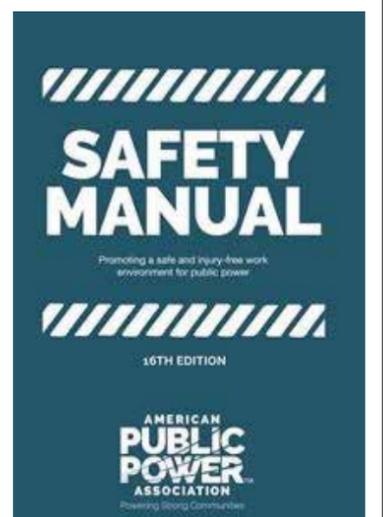
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SMMMPA uses 'project financing' for transmission investment

Southern Minnesota Municipal Power Agency (SMMMPA) completed a \$26 million issuance on October 8, putting in place long-term financing for the agency's investment in the Badger-Coulee transmission line, which was energized in December of 2018.

The 161-mile, 345-kilovolt transmission line from the Briggs Road Substation north of La Crosse, Wisc., to northern Dane County near Madison, Wisc., addresses electric system reliability issues locally and in the Midwest, providing economic savings and supports renewable energy policy, SMMMPA said on Nov.

1. This marks the first time SMMMPA utilized project financing, allowing SMMMPA members Austin and Rochester to continue project participation in the transmission line post 2030 when their current power supply agreements expire.

As part of the bond issuance process, SMMMPA met with the various rating agencies. Fitch Ratings upgraded SMMMPA's power supply system revenue bonds to "AA-" from "A+" in September. The outlook for the rating is "Stable."

SMMMPA is one of five joint

action agencies to have this rating from Fitch. S&P and Moody's affirmed their current ratings of A+ and A1, respectively.

Based on SMMMPA's strong financial position, the agency was able to put the long-term Badger-Coulee financing in place at an all-in true interest rate of 2.2 percent, the lowest rate in SMMMPA's history, it said.

SMMMPA generates and transmits wholesale electricity to its 18 municipally-owned member utilities. It also provides programs and services to help its members' customers use energy wisely.

Upcoming Events

Technical & Operations Conference

December 3-5, Best Western Plus Kelly Inn, St. Cloud

We hope to see you at the T&O Conference, and the Trade Show on Dec. 4!

NEW
in 2020

Overhead/Underground Line Design

January 21-22, MMUA, Plymouth

Good design is fundamental to a properly-functioning electric distribution system. Attend this new MMUA workshop and better understand elements of system design.

Taught by R. John Miner, a registered professional engineer with over 45 years of experience in the industry. Miner has been a frequent presenter for MMUA over the years, and has led APPA workshops for 30 years.



Meter School & Pre-Conference

February 11-14, MMUA Training Center, Marshall

Meter School offers participants valuable technical training and hands-on work with electric metering equipment. For an optimal educational experience, participants select their preferred class level—Basic/Intermediate or Advanced.

A Pre-Conference is held in conjunction with the School. Pre-Conference is a refresher course on basic metering, or introductory course for those with little metering experience. Sign-up for both!



Instructors include Larry Chapman & Mark Parson of Chapman Metering, and Scott Murfield!

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