



Participants kept a close eye on a directional drilling operations hands-on session during the Underground School, held Oct. 6-9 at the MMUA Training Center in Marshall.

MMUA moves ahead with hands-on work

Pandemic or not, electric utility workers need to be properly trained. MMUA continued that essential work with its annual 2020 Underground School, held Oct. 6-9 at the MMUA Training Center in Marshall.

We partnered with the Minnesota Rural Electric Association (MREA) and American Public Power Association (APPA) to offer the school.

Hands-on training was featured. The hands-on Multi-Session Class rotated through six different sessions,

Underground: page 8

MMUA
3131 Fernbrook Lane North, #200
Plymouth, MN 55447
763.551.1230

Periodicals
Postage
PAID
at
Twin Cities, MN

The RESOURCE

Official Publication of the
Minnesota Municipal Utilities Association

MMUA

November 2020

Volume 26, No. 10

Mountain Lake invests in its future as utility powers growth

by Steve Downer

Mountain Lake is a city on the move.

Investment in and growth of municipal infrastructure is going hand-in-hand with commercial and industrial growth in the Cottonwood County city of 2,100.

Obvious signs of investment and growth are visible along Minn. Hwy. 60, which from Windom to St. James was recently expanded to four lanes. Mountain Lake is in the middle of that 27-mile stretch.

Seeing the improvement coming, Mountain Lake invested in a new 27-acre, eight-lot com-

mercial park adjacent to the highway. The property was purchased in 2016 for \$342,000. The city later sold additional bonds to finance installation of roads, curb-and-gutter, water, sanitary sewer and storm sewer, along with electric service.

First fruits of the commercial park investment include two tenants: an A&W restaurant and a new Casey's convenience store.

Less obvious than the commercial development but larger investments have been made in the wastewater and electric sys-



Ron Nelson, Mountain Lake electric superintendent, is proud of the utility's new substation, including its state-of-the-art electronic controls.

Mountain Lake: page 4

Brownton municipal electric utility observes centennial on Nov. 23

The City of Brownton municipal electric utility was formed 100 years ago, on Nov. 23. On that date in 1920, the voters approved a referendum for the creation of a municipal system in a landslide: 159 for to 30 against.

It was a short campaign. The city council on Nov. 4 approved putting the question to the voters. The ballot question included borrowing \$10,000 "for the purpose of changing and making improvements on the electric distribution system and the municipal water system," including provision of alternating current, three-phase power available 24 hours a day.

Handwritten council minutes from March 2, 1920 report two



Downtown Brownton is home to a number of small businesses.

representatives from the Northern States Light and Power Company addressed the council. They were allowed to talk regarding the "electric light

proposition," after the council had finished its other business.

On Aug. 5, 1920, the council directed the citizen's committee to "look up for buyers for village

bonds for electric light improvements" and report to the council on Aug. 10.

The citizen's committee must have done its work well. On Nov. 26, three days after the referendum, the council called for bids. A total expenditure of \$9,470 was parceled out among three different companies. Interest on the bonds was at 6 percent annually, with a 20-year payback period, both maximums addressed in the ballot question.

The St. Paul Electric Company outbid Hutchinson Electric Service for electric light and water system materials and construction. Northwest Elec-

Brownton: see page 10 please

*Inside
Stories*

**MMUA
Signs-Up
Annual Sponsors**
page 2



**City of Shelly
Marks Centennial
of Service**
page 11



**Utility Gifts
Giant Pumpkin
to Anoka**
page 12



Associate Members! MMUA Annual Sponsor drive for 2021 is now underway

MMUA is now signing-up sponsors for 2021. Sponsorship is a great value for the involved Associate Member, or for those who want to raise their profile.

We are holding the line on the Annual Sponsorship contribution, at \$1,750.

MMUA Sponsors receive the following benefits:

- Recognition as an MMUA Annual Sponsor online at www.mmua.org
- Recognition as an Annual Sponsor on banners and 'table top' cards at MMUA events
- Recognition as an Annual Sponsor in MMUA publica-

tions

- One color ad in the *Resource* newsletter. (Ad size is either 2-column by 5-inch or 4-column by 2.5 inches.) This includes a free, color, business card-sized ad in the Professional Services Directory (on pages 14-15 of the newsletter). Sponsors can also upgrade to a larger ad for an additional fee.

- One trade show table (including power) and two attendees at either the Summer Conference or Technical and Operations (T&O) Conference.

Two meeting registrations at either the Summer Confer-

ence or T&O Conference.

The total value of the *Resource* ad, trade show table and meeting registrations for 2021 stands at approximately \$3,700. The \$1,750 sponsorship package is a real value for the involved associate member. In addition, we keep our sponsors in mind as we go through the year, and add

value whenever and wherever we can.

We urge you to be seen on our website, at our meetings, and in our publications.

To sign-up as an MMUA Annual Sponsor, complete the Annual Sponsor form on the MMUA website at Sponsors > Become a Sponsor.

MMUA will also be contact-

ing its current Annual Sponsors and its Associate Members.

For more information, particularly related to advertising, contact Steve Downer at sdowner@mmua.org or call 763-746-0702. Questions on meetings should be directed to Rita Kelly at rkelly@mmua.org or 763-746-0707.

Moorhead Public Service approves carbon-free future starting in 2021

The Moorhead Public Service Commission Oct. 20 unanimously approved to make Moorhead Public Service (MPS) and, in effect, all of Moorhead's electricity, 100 percent carbon-free, beginning in 2021, by using the Bright Energy Choices (BEC) Program from its supplementary energy provider, Missouri River Energy Services (MRES), which is based in Sioux Falls, South Dakota.

Employing data from 2019, MRES' most current reporting period, MPS' total energy supply is already 87 percent carbon-free based upon energy generated from hydro-

power, wind, solar, and other carbon-free energy sources. Through the BEC Program, MPS can purchase Renewable Energy Credits (RECs) from MRES to offset the remaining 13 percent of energy coming from carbon-based power resources and make MPS, and all of Moorhead, 100 percent carbon-free. An REC reflects the positive environmental attributes of 1,000 kilowatt hours (kWh) of renewable and carbon-free energy (1 REC = 1

MWh).

The price of RECs has dropped significantly in the last year due to an abundance of solar and wind energy, especially wind energy, in other parts of the country. This reduction in price per REC makes it feasible for MPS to purchase enough RECs through MRES' BEC Program to be 100 percent carbon-free without affecting electric rates, noted the utility.

HCPD wins APPA Public Power Communications awards

MMUA Affiliate Member Heartland Consumers Power District (HCPD) was among the 42 public power electric utilities and utility organizations earning Excellence in Public Power Communications Awards from the American Public Power Association.

The awards were presented during APPA's virtual Customer Connections Conference (October 27-28).

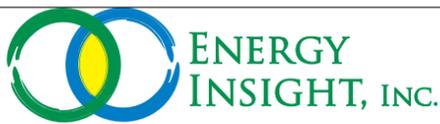
The annual awards recognize excellence in communications. The entries are judged in three categories: print/digital, web/social media, and

video. Awards were given to those that showed ingenuity and creativity in telling their stories through outstanding copy, design, financial data presentation, graphics, social media engagement, video editing, and web layout and interactivity.

HCPD competed in Class D, for organizations with gross revenues of less than \$75 million.

The South Dakota-based power agency won an Award of Excellence for Video and an Award of Merit for its use of Web/Social Media

Congratulations, HCPD!



MATT HALEY
PRESIDENT

952-767-7464
www.EnergyInsightInc.com

7935 Stone Creek Drive, Suite 140 Chanhassen, MN 55317



To unify, support and serve as a common voice for municipal utilities

Officers and Directors

President

Mark Nibaur, Austin, President

President-Elect

Jenny Palmer, Winthrop

Secretary/Treasurer

Don Martodam, Hawley

Directors

Bruce DeBlicke, Willmar

Scott Grabe, Staples

Joe Hoffman, Preston

Julie Kennedy, Grand Rapids

Kevin Lee, Marshall

Scott Magnuson, Brainerd

Don Martodam, Hawley

Dave Meyer, Glencoe

Chris Trembley, Madelia

Staff

Executive Director

Jack Kegel, jkegel@mmua.org

Director of Administration

Rita Kelly, rkelly@mmua.org

Dir. of Communications/Member Relations

Steve Downer, sdowner@mmua.org

Director of Engineering & Policy Analysis

Bob Jagusch, rjagusch@mmua.org

Director of Finance

Larry Pederson, lpederson@mmua.org

Director of Government Relations

Kent Sulem, ksulem@mmua.org

Director of Training and Safety

Mike Willetts, mwilletts@mmua.org

Government Relations Attorney

Bill Black, bblack@mmua.org

Accounting Assistant

Karen Heiden, kheiden@mmua.org

Admin. & Safety Support Assistant

Theresa Neddermeyer,

tneddermeyer@mmua.org

Natural Gas Circuit Rider

Robin Klug, rklug@mmua.org

Regional Safety Group Program Leader

Mike Sewell, msewell@mmua.org

JT&S and Apprenticeship Instructor

James Monroe, jmonroe@mmua.org

Regional Safety Coord./JTS Instructors

Jay Reading, jreading@mmua.org

Bruce Westergaard,

bwestergaard@mmua.org

Generation Coordinator/JTS Instructor

Bob Sewell, bsewell@mmua.org

Training Center Coordinator/JTS Instructor

Cody Raveling, craveling@mmua.org

Regional Safety Coordinators

Janet Aultman, jaultman@mmua.org

Tom Ewert, tewert@mmua.org

Mark Hottel, mhottel@mmua.org

Anthony Lenz, alenz@mmua.org

Brad Levasseur, blevasseur@mmua.org

Dave Lundberg, dlundberg@mmua.org

Marc Machacek, mmachacek@mmua.org

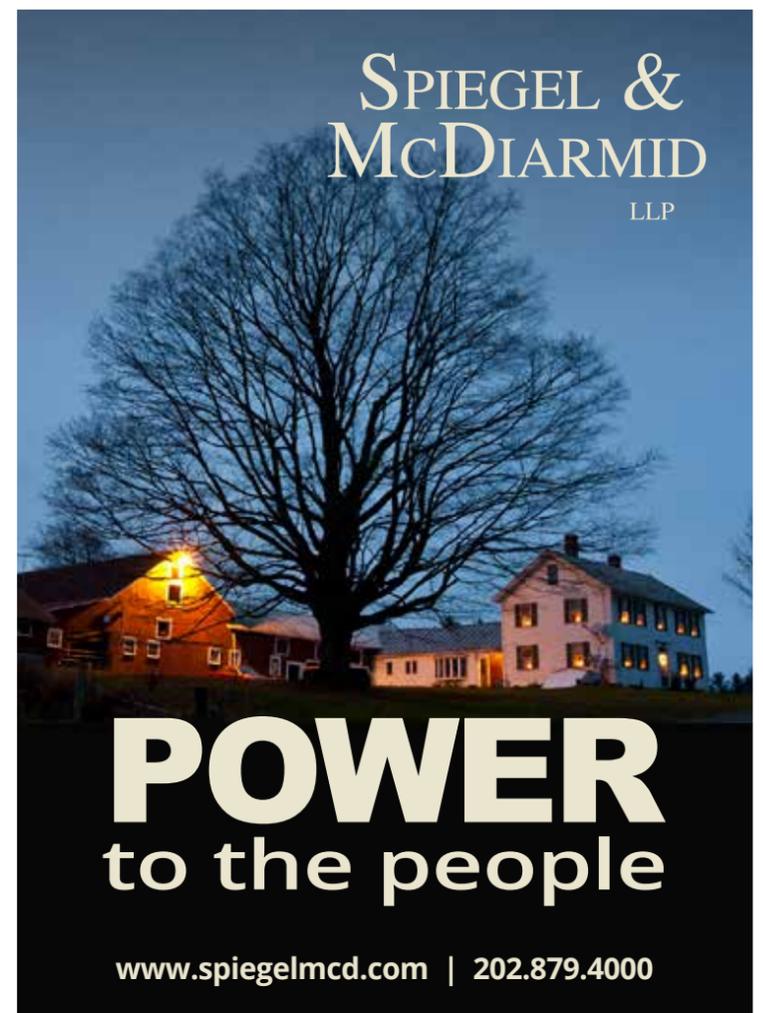
Ryan Mihalak, rmihalak@mmua.org

Jordan St. Clair, jstclair@mmua.org

Joseph Schmidt, jschmidt@mmua.org

Kevin Thompson, kthompson@mmua.org

MMUA The Resource USPS #009836. ISSN: 1080-3750 is published Monthly; except combined July/August, by MMUA at 3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447-5337. Periodicals postage paid at St. Paul, MN. POSTMASTER: Send address changes to MMUA The Resource, 3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447-5337. Annual subscription rates: \$12 per subscription (included in dues), associate members, \$12 (included in dues). 3131 Fernbrook Lane North, Suite 200, Plymouth, MN 55447-5337. Phone 763-551-1230, members 1-800-422-0119. FAX 763-551-0459.



SPIEGEL &
McDIARMID
LLP

POWER
to the people

www.spiegelmc.com | 202.879.4000

Allowing another to serve in your city could become a snare in troubled time

'A house divided against itself cannot stand.'

Abraham Lincoln, June 16, 1858.

You can add another bullet point to a municipal utility's vital interest in providing electric service throughout the city it serves: if you don't, somebody else might use that shortcoming as a lever for an eventual takeover of the municipal system.

The point was proven at an Oct. 20 Shakopee city council meeting. Had city voters approved a Nov. 3 referendum to abolish the local utilities commission, the city said it would then enter into a 24-month agreement with a third party to manage the municipal utility.

APPA cancels event; transitions others to 'virtual' from APPA

After careful consideration, the American Public Power Association (APPA) will transition several of APPA's major events in the first quarter of 2021—including the Legislative Rally, Engineering & Operations and Joint Action conferences to virtual events.

APPA has also cancelled the 2021 Public Power Lineworkers Rodeo and the CEO Roundtable. The location of the 2021 Rodeo was a significant factor in this decision given ongoing stringent restrictions in Los Angeles. The primarily strategic and networking nature of the CEO Roundtable does not lend itself to a virtual event.

For the CEO Roundtable/executive engagement, we are exploring opportunities for virtual and in-person activities in conjunction with our conferences later in 2021 and will circle back when those are firmed up.

APPA surveyed the 2020 attendees for each of these meetings and received valuable feedback, which played an important role in our final decision. While we recognize that some of our members are eager to attend in-person events (as are some of the APPA staff), many members, including speakers, still face travel restrictions, whether because of COVID-19 concerns or because of the budgetary impacts of COVID-19, or both.

The expected limitations in physically accessing congressional offices were also taken into consideration in terms of the Legislative Rally. Finally, cost was a significant factor in our decision, both from APPA's perspective and from an attendee perspective. Offering the programs virtually allows attendees to participate even with travel restrictions

After two years, the council would be presented with a number of options, including agreeing to let the management company take control of the municipal electric system.

While the proposals presented by the third parties varied in the degree of perceived 'friendliness' to municipal ownership, each entity touted its existing ties to the city. The three entrants in this high-stakes contest include:

The Minnesota Municipal Power Agency (MMPA). This municipal power agency is the Shakopee Public Utility (SPU) wholesale electric supplier, under a contract running to 2050. MMPA has a generating station in the

and reduces travel and other costs associated with the in-person events.

APPA is exploring additional opportunities for strategic discussion and networking and will announce new opportunities in place of canceled events as decisions are made.

city—the 46-megawatt Shakopee Energy Park, which includes five reciprocating internal combustion energy generators. SPU has a seat on the MMPA board, and the agency—the friendly entrant in this high-stakes contest—touted its favorable wholesale rates in comparison to other providers.

Minnesota Valley Electric Cooperative (MVEC) serves three seemingly minor portions of the city—on the east, south and west—at retail. The cooperative is headquartered in nearby Jordan. Along with serving portions of the city, MVEC also touted its automated metering infrastructure as an energy management tool to manage energy use and reduce costs.

Xcel provides transmission service to SPU. Xcel also operates electric generation—six oil- or natural gas-fired simple cycle combustion turbines—at its Blue Lake substation in Shakopee, on the east side of the city just south of the Minnesota River. Xcel also purchases power from the Blue Lake Solar Facility,

sited on a buffer zone of land immediately adjacent to the Metropolitan Council's Blue Lake Wastewater Treatment Plant.

Most importantly, Xcel serves significant industrial load on the north side of the city along Minn. Hwy. 101.

Shakopee has preserved its right to serve these customers over the years but never mustered the local political will to purchase them from Xcel (and its predecessor, NSP). Had the municipal utility exerted the political will to serve throughout the city in the past, it is clear both Xcel and MVEC would have one less claim to serve the entire city today.

Had the SPU Commission been abolished, the city said it intended to enter into a 24-month agreement with the utility management company. At that point, the council would have options, including agreeing to let the management company take control over SPU.

What that meant for the

future of municipal electric service in Shakopee was unsettling at best.

A city's vital interests

The following points are among the vital interests in providing electric service throughout a city, previously identified by MMUA:

- To treat all electric rate-payers and taxpayers in the City equally.

- To ensure and preserve the financial stability and fiscal integrity of the City's overall financial structure and credit ratings.

- To provide for greater efficiency of the municipal utility through economies of scale.

- To facilitate intermediate and long-range planning for electric generation, transmission, and distribution facilities—for the municipal utility and neighboring utilities.

- To provide electric service to residents and users in the City at terms and conditions subject to the control and regulation of the City.

- Steve Downer



Trusted.

Professional.

Solutions.

- Substations
- Distribution
- Transmission
- Generation
- Long-Range Plans
- Relaying & SCADA
- Rate Studies
- Mapping & GIS
- Construction Staking
- Sectionalizing Studies & Coordination
- Arc Flash Studies
- Distributed Generation Studies



Rock Rapids, IA
712-472-2531

Sioux Falls, SD
605-339-4157

Sioux City, IA
712-266-1554

dgr.com  



DAVE BERG CONSULTING, LLC

David A. Berg, PE - Principal
'Dedicated to providing personal service to consumer-owned utilities'

Cost of Service Studies
Utility Rate Design
Contract Negotiations
Utility Education
Expert Testimony
Feasibility Studies

dave@davebergconsulting.com

15213 Danbury Ave W
Rosemount, MN 55068
(612)850-2305
www.davebergconsulting.com



www.mcgrannshea.com

Providing Legal Counsel to Minnesota Municipalities in:

- Energy and Utility Matters
- Municipal Bonds
- Administrative Proceedings
- Economic Development
- Legislative Representation
- Real Estate Law
- Municipal Law
- Construction Law
- Litigation
- Environmental Law

Contact: William McGrann, Doug Carnival or Kaela Brennan

800 Nicollet Mall, Suite 2600, Minneapolis, MN 55402-7035
Telephone: 612-338-2525 ■ Facsimile: 612-339-2386

Mountain Lake:

continued from front page

tems, largely to handle industrial growth.

The city built a 10-kVa electric substation three years ago. The new substation handles approximately 70 percent of the city's load, with the remainder handled through a 5-kVa substation located near the municipal power plant.

A radial (one-way) transmission line supplies electricity at 69,000 volts and the city distributes it at 4,160. The line runs 5.3 miles and ties into the GRE system.

The municipal is exploring a new transmission line to another source.

A big driver for the new substation was expansion of Milk Specialties Global, which operates a whey manufacturing facility in Mountain Lake. Other industrial customers located on the city's east side include Balzer, a locally-owned manufacturer that sells agricultural equipment products world-wide.

A Dollar General store opened this spring. Two new four-plexes are under con-



Mountain Lake's new commercial park is located adjacent to Minn. Hwy. 60, recently improved to four lanes in the area.

struction, and three new twin homes are going in the city's newest subdivision, near the lake.

Streetlights were retrofitted to LED three years ago.

The city annually budgets for electric line improvements. The municipal uses contractors for bigger projects, including recent rebuilding of a farm line. That allows the city's three-man electric crew to continue with other projects, including an ongoing effort of placing lines underground. The crew is also busy installing new water and electric meters compatible with a radio-read system.

A new digital map of the

electric infrastructure was recently completed by Central Minnesota Power Agency Services (CMPAS). The CMPAS staff is "amazingly helpful," said Ron Melson, city electric superintendent.

Mountain Lake also works closely with area municipals on a variety of projects.

The municipal plant's three Fairbanks Morse engines ran full-time until the mid-1970s. Two Caterpillar generator sets have been added. The plant can be up and running in five minutes. All the generating units are compliant with air emission regulations.

The city installed a Suzlon 1-megawatt wind turbine, on



City Administrator Michael Schulte is shepherding the \$10.6 million wastewater treatment improvement project through the process.

its western edge, in 2007. Energy feeds into the local grid.

The city also employs two people for water/wastewater and three in the street department.

City invests heavily in infrastructure

To ensure its future health and prosperity, Mountain Lake has also invested heavily in other infrastructure. This effort, though not without debate, spanned many years and advanced with the support of numerous local policymakers.

It started in 2004, when the city built a new water plant.

Public discussion on the city's Facility Plan (sanitary sewer collection, wastewater treatment, lift station, storm sewer, water distribution and supply system) started with the initial public hearing in August 2010.

The city spent \$12 million from 2012 to 2014 to fix leaking sewer lines. In 2015, a new 1,000 gallon-per-minute well came online.

As it tried to absorb that expenditure, the city sought a state grant to help pay for a \$13.4 million project to rehabilitate and expand its old and overloaded wastewater stabilization pond system.

The effort bore fruit, as Mountain Lake received \$10.6 million for wastewater treatment improvements. The funds are a combination Minnesota Public Facilities Authority point source implementation grant and loan. Two new aerated, lined, 12-acre wastewater ponds are under construction, along with chemical feed pumps and a storage tank, a submersible pump lift station and forcemain to the primary aeration ponds.

The facility discharges to the Watonwan River. The Class D facility will be reclassified to Class C.

The existing wastewater treatment facility, consisting of three ponds, was built in 1957.

On the school front, voters approved a \$13 million district bond referendum project in August 2018. A 140,000 square-foot public school remodel and addition is complete.

MPUC issues Detroit Lakes route permit for 115-kV transmission line

The Minnesota Public Utilities Commission (MPUC) Oct. 22 issued a route permit to Detroit Lakes Public Utilities (DLPU) for a High-Voltage Transmission Line (HVTL) Route Permit in Becker County.

DLPU has owned and operated a municipal electric system since 1903. It provides electric, water and wastewater service to the citizens of Detroit Lakes and surrounding areas. The utility has grown substantially in recent decades, as water quality concerns around area lakes has led to requested annexations and subsequent provision of municipal services. The utility has a service territory of approximately 41 square miles.

The transmission project involves construction of approximately 2.19 miles of 115,000-volt line and a new 115/12.47 kV distribution substation. The north terminus of the HVTL will be at the proposed substation near the intersection of U.S. Hwy. 59 and County Road 22, and the southern terminus will be an existing 115 kV HVTL owned by Great River Energy in Lake View Township.

DLPU will locate the new

transmission line within the highway right-of-way to minimize impacts to adjacent landowners.

For planning and construction purposes, DLPU requested a 200-foot right-of-way for much of the route, based on the highway centerline. The final right-of-way will vary between 15 and 41 feet wide to accommodate MnDOT's clear zone requirements.

DLPU completed an Electric System Study and Capital Improvements Plan in 2017. The system was analyzed and loads are projected to increase through 2026. System load growth projections are expected to increase the peak system demand from a level of 39,049 kilowatts (kW) in 2019 to a level near 48,976 kW by 2026.

The system study showed that under emergency scenarios such as the loss of a distribution feeder, substation transformer, or 12.47 kV bus during heavily loaded periods, unacceptable voltage conditions would occur on areas of the system. With the loss of the substations and or 12.47 kV busses, the remaining system would be incapable of serving the entire load without poor voltage condi-

tions.

The solution selected by DLPU to remedy the potentially unacceptable conditions on the electric system was construction of the new substation and HVTL on the south side of the DLPU service territory. Other options were looked at but were deemed unfeasible for resolving the voltage issues on the southern portion of the system.

The new substation will be DLPU's fourth. The new transmission line will be the second 115-kV line owned and operated by DLPU.

Alternative permitting process

The siting process for the DLPU high-voltage transmission started July 9, 2019, when the utility filed a route permit application to construct a 2.19-mile 115 kilovolt (kV).

Due to the relatively low voltage and short length of the proposed line, DLPU filed the application under the Minnesota Public Utilities Commission's alternative permitting process. The Alternative Permitting process is outlined in Minnesota Rules parts 7850.2800 to 7850.3900. The proposed HVTL was eligible

for consideration under Minn. Stat. §216E.04, subd. 2(3), and state rules, because the project is between 100 and 200 kV and less than 10 miles in length.

DLPU initially asked the

County board to handle the siting request, but the board declined, throwing the question to the state regulatory process.

Reading joins MMUA safety team

Jay Reading has joined MMUA as a regional safety coordinator/job training and safety instructor.

Reading is a Journeyman lineman and holds a number of related licenses and certifications.

Most recently, he was employed as a Journeyman Lineworker for the Glencoe Light and Power Commission, where he started work in August 2018.

For the previous three years before that, he worked as an Apprentice Lineworker, for Missouri River Energy Services, in Jackson.

He started his career as an Apprentice Lineworker with Highline Construction Inc., Paynesville, where he worked from May 2013 to June 2015. While working for Highline he participated in the 2013 Rapid City, S.D., mutual aid response.

Reading in 2013 earned an



Jay Reading

Associated of Applied Science degree in Power Line Technology from Minnesota West Community College, Jackson.

Along with holding his Journeyman card, Reading holds a Class A commercial driver's license, and is certified in CPR, as a digger operator and on hurtman rescue.

He is versatile and organized with a strong work ethic. Welcome aboard, Jay!

We work so you can.

Customer Service, Field Efficiency, Office Productivity, Data Analysis, Asset Management and more. Single service or multi-service, we've got something for everybody.

- Customer Management and Billing
- Financial Management
- Work Order and Plant Management
- Payment and Processing
- Meter Data Management
- Business and Customer Portals
- Prepay Solutions
- GIS/Engineering Systems
- Cyber Security Solutions
- Mobile Service Products
- Employee Benefit Plans and a whole lot more ...

Talk To Us
About Fiber
Billing!

UTILITY
WORK
AHEAD

Come see for yourself what more than 80 years of serving utilities can do for you.



Central
Service
Association

Professional
Computer
Solutions



Professional Computer Solutions, LLC / www.pcs-csa.com / Toll free 888.843.3106
Central Service Association / Toll free 877.842.5962 / www.csa1.com

While the Nov. 3 presidential election hung in the balance the following day, state and local elections appeared to proceed smoothly in Minnesota.

MMUA salutes everybody involved in the election, from municipal candidates to city staff and election judges.

We are ever mindful of the crucial role you play in our well-being. Thank you!

Olivia has obtained a \$7.4 million U.S. Department of Agriculture (USDA) Rural Development loan to improve water, storm and sewer system infrastructure. Improvements will replace infrastructure that was originally constructed in the 1930s. Wastewater pipelines will be replaced to address infiltration and inflow between the wastewater and storm

Around the State



water collection systems. The improvements will no longer require the city to bypass the treatment plant during wet weather periods.

The **Rochester Public Utilities Board** Oct. 28 approved a budget that called for no water or electric rate increases for 2021. Staff has recommended increases of 3.5 percent from 2022-2025 however.

Council action on the proposed budget was expected in November.

A local electrical contractor Oct. 20 installed **Hutchinson's** first electric vehicle (EV) charging sta-

tion. The "fast charger" cost approximately \$50,000. The Hutchinson Utilities Commission approved a rate for the charger that equates to a price approximately one-third the current gasoline price, to encourage use.

City and utility officials expect further EV charging development.

The State Hwy. 15/Main Street project in Hutchinson was completed in mid-October. MnDOT offered a virtual ribbon-cutting ceremony to celebrate the project, which included city replacement of sanitary, storm sewer and water lines.

Springfield's East End Park is the site of two 50 kW DC fast chargers and two 11.5 kW Level 2 chargers

Funding came from a grant from the Minnesota Pollution Control Agency (MPCA). ZEF will install, own, and manage the equipment.

PUC Superintendent Scott Johnson made the successful grant application for Springfield. Springfield was chosen for the grant for its location on the busy U.S. Highway 14 corridor and its proximity to commercial activity nearby which offers EV owners the opportunity to shop or dine.

The Minnesota Department of Transportation has completed the \$39.3 million replacement of the **Baudette/Rainy River International Bridge**, which links

north-central Minnesota to Ontario.

The bridge, which crosses the Rainy River, connects state Route 72 and Ontario Highway 11. Restrictions on cross-border travel remain in place due to the coronavirus pandemic. However, people providing essential services, including truck drivers who regularly cross the border to keep goods flowing, are exempt from quarantine requirements.

It is the only border crossing for 50 miles in either direction, and crosses an approximately 1,200 feet wide

section of the Rainy River. The bridge has one lane of traffic in each direction and a sidewalk on one side.

The project was a partnership between MnDOT and the Ministry of Transportation of Ontario, and is maintained by both agencies.

According to the Oct. 15 **Ely Timberjays**, \$50,000 of federal CARES Act funding made available to the City of Ely is being passed along to local businesses in the form of grants. A local committee

continued on facing page

A PROVEN PROVIDER of innovative electrical solutions.
AN INDUSTRY LEADER leading a changing industry.
A SUPPLY CHAIN PARTNER who'll be there for you.



- Supporting Utility Systems since 1935
- Full-line Supplier of Utility Products
- Most Extensive Offering of Utility Technical Support Services
- Superior Emergency Support Staff
- Tool Supply and Repair
- Rubber Insulating Equipment
- Certified Dielectric Testing Services
- On-Site Testing
- Arc Flash and FR Clothing Systems
- Custom Grounds and Jumpers
- Broadband Communication Services

Eagan, MN
763.588.0545

Fargo, ND
800.742.8054

CUSTOMERS. FIRST. ALWAYS.

irby.com

ZIEGLER POWER SYSTEMS

RELIABLE POWER WHEN YOU NEED IT

SALES AND RENTAL

- Diesel and natural gas generators
- UPS, switchgear, circuit breakers, protective relays, and Automatic Transfer Switches
- Portable temperature control units

24/7 EMERGENCY SERVICE AVAILABLE:
888.320.4292

Shakopee, MN
8050 County Road 101 East
888.320.4292



www.zieglercat.com/power

Correction

An error was made in the Around the State section of last month's edition. Past due account numbers attributed to New Ulm Public Utilities were actually from Moorhead Public Service. MMUA regrets the error and apologizes to the members involved.

Midwest supplier for:
ERMCO Transformers

SUPPLYING THE CO-OP ADVANTAGE

From the transmission line to the home, RESCO stands ready with the supplies you need. Receive quality products and superior service from one of the Midwest's largest full-line distributors of high-voltage electrical products.

RESCO

Office & Warehouse:
4100 30th Ave. S, Moorhead, MN
800.346.3330
info@resco1.com | resco1.com

STORM RESPONSE
866.273.5030

CORE & MAIN

WE'RE ALL ABOUT

Minnesota

Our local experts offer smart solutions for all your utility water, electric and gas meter needs.

Local Knowledge | Local Experience | Local Service, Nationwide®

coreandmain.com

continued from facing page

is in charge of disbursing the funds. Each local business received a letter and one-page application form. Funds could be used for any operating expense.

Businesses to be eligible

must be in good standing with the Minnesota Department of Revenue, Secretary of State and St. Louis County, and be able to demonstrate a financial hardship as a result of the COVID-19 outbreak.



Along with all the usual local races, several referendum questions were present on local ballots in MMUA member cities. This particular sign, urging a 'No' vote on the question regarding abolition of the local utilities commission, was one of many found in Princeton.

Shakopee, Princeton crush referendums on commissions

Two identically worded ballot questions—to abolish local municipal public utilities commissions—failed in the Nov. 3 general election.

Neither vote was close.

In Shakopee, city question No. 1 was worded: Shall the Shakopee Public Utilities Commission be abolished?

The question failed with

11,794 voting 'No' and 8,312 voting 'Yes,' 59 to 41 percent.

In Princeton, the question to abolish the public utilities commission failed 1,102 to 524, or 68 to 32 percent.

Interestingly in Princeton, incumbent Mayor Brad Schumacher won by two votes, 796-794 over Thom Walker.

The Shakopee City Council Oct. 20 heard proposals to manage the municipal electric utility. Had the referendum been approved, the city said it would enter into a 24-month agreement with the utility management company. A future option would have been letting the company take control over SPU.

New & IMPROVED!

Tapered Race Rotary Reel Collars



Improve Efficiency & Safety

Reduce your Labor Costs

Works Great on Plows, Trailers & Trucks

Tapered Sleeves to Fit Various Size Reel Hubs

3pt. Bolt Safety Fastening System (Bolts will NOT fall out & Reel will NOT slide on Bar)

NOW AVAILABLE for 2-1/4" and 2-1/2" Reel Bars



For more information call: 320.274.7223

FS3^{INC}

9030 64th Street NW
Annandale, MN 55302
WWW.FS3INC.BIZ



INFRASTRUCTURAL RENEWAL.
ALIGNED VISIONS. INNOVATIVE SOLUTIONS.

SOLVING YOUR MOST COMPLEX CHALLENGES.

With SEH, you are a true partner and collaborator.

Building a Better World for All of Us[®]

Engineers | Architects | Planners | Scientists

800.325.2055 | sehinc.com/subscribe



Underground:

continued from front page

covering a variety of topics to improve safety and efficiency.

The school started Tuesday afternoon with a general session on Tick and Lyme Disease Prevention, by Brian Anderson (aka The Tick Terminator).

MMUA Regional Safety Coordinator Ryan Mihalak followed up that biting presentation with a look at Understanding the New Federal Motor Carrier Safety Administration Clearinghouse Rules. Mihalak covered key points of the Clearinghouse and how it affects CDL-holding employees.

Most activity shifted outside to the training field for Wednesday and Thursday. The multi-session rotation included:

- Session 1: 3-Phase Riser Construction. Terminating, proper clearances, and other topics will all be discussed and practiced. Procedures for properly grounding the phases was covered along with underground splices.

- Session 2: Directional

Drill Operations. This included hands-on experience operating a directional drill, as well as the equipment needed to complete a project.

- Session 3: Locating & Fault Finding URD Cables. Participants worked with various brands of locators with the most up-to-date styles available. Different techniques were taught.

- Session 4: Introduction to GIS/GPS Data Collection. This demonstrated how to collect and edit data in ESRI Collector for ARC GIS and Map Viewer.

- Session 5: Leaking Transformer Change-out. This session covered the information and skills necessary to properly change-out a leaking transformer, including how to handle contaminated areas.

- Session 6: Proper Cable Pulling Techniques and Benefits. Marking cables, lubrication, cable protection, and techniques for termination were covered. Cable pulling tensions and cable pulling machines were demonstrated.

The overriding safety message was driven home Friday morning, with a presenta-

Cross Training School helps train lineworker's helpers

MMUA held its annual Cross Training School Oct. 6-8, in conjunction with the Underground School. The goal of the Cross Training School is to help train a competent ground person who will be able to recognize tools, equipment and hazards to better help a lineworker.

Participants included non-lineworker employees, typically from smaller cities, who may occasionally be called to work alongside a qualified lineworker during an outage or other emergency.

This fundamental "basic training" helped increase participant knowledge of tools/equipment, broadened general understanding and increased confidence in their ability to assist.

Lead instructor was MMUA's James Monroe.

Topics, all taught at a ba-



Participants in the Cross Training School gained an appreciation for linework and a better understanding of how to help a qualified lineworker on a variety of tasks.

sic level, included:

- Hazard recognition
- Safety in Overhead & Underground Lines
- How Electricity is Made; How it Works
- Transformers
- Underground, Overhead

Lines

- Meters
- Bucket Truck Operation
- Elbows, Terminations, Splices
- How to Locate & Isolate Faults on Underground Lines.

tion on The Power of a Minute by Scott Meinecke, of the Iowa Association of Electric

Cooperatives. This program focused on the true value of a minute—as it pertains to

getting utility people safely home at the end of the day.

Providing Turnkey Construction Services Since 1973

Safe. Reliable. Quality Services

www.mptech.biz

Gas. Overhead & Underground Electric Installation. Splicing & Termination. Cable Pulling. Pole Replacement. Maintenance & Support. Conduit & Man-Hole Installation. Hydro Vac. Storm Restoration. Alternative Energy

Minnesota Office:
9938 State Hwy 55 NW Annandale, MN

Texas Office:
14140 Cypress N Houston, Houston, TX

NORTHWEST LINEMAN COLLEGE

NEW PROGRAMS AVAILABLE AT NLC

TELECOMMUNICATIONS LINEMAN 7 WEEKS	GAS DISTRIBUTION 7 WEEKS	ELECTRICAL LINEMAN 15 WEEKS
--	-----------------------------	-----------------------------------

[LEARN MORE](#)

LINEMAN.EDU | (888) LINEMAN

Nine municipal lineworkers earn journeyman rank

Within the past year, nine men associated with municipal utilities completed the requirements to earn their journeyman lineworker status, working through the Northwest Lineman College (NLC).

They are:

Brandon Steeneck, City of Vermillion; Chad Klages, Fairfax Municipal Utilities; Michael Frentress, Detroit Lakes Public Utilities (Substation Program); Nicholas Hommerding, Elk River Municipal Utilities; Tanner Christopherson, City of Pierre, S.D.; Joseph Weber, New Ulm Public Utilities; Jeff Marks, City of Mountain Iron; Jordan Schuettpelz, Shakopee Public Utilities and Adam Henning, formerly of Adrian Public Utilities.

Henning, Marks and Schuettpelz were also enrolled in the MMUA On-Site, On-Demand Apprentice Lineworker Training Program.

NLC is MMUA's preferred vendor for lineworker training program materials.

Through a partnership with MMUA, this training can be held at the local utility, under the guidance of MMUA instructors. The program includes education, skills, and behavior training.

Power System Engineering

FULL SERVICE CONSULTANTS

866-825-8895

Visit our website and find an expert today!
www.powersystem.org

We'd welcome the opportunity to work with you

Forward-Thinking Solutions for Business, Infrastructure & Technology

- Utility Economics & Rates
- Energy Resources
- Utility Engineering & Operations
- Industrial Engineering
- Technology, Communications & Automation



Brad Olson of Brainerd Public Utilities and Jim Stephens of 3M (second and third from left) led the class on 3-Phase Riser Construction.

MMUA holds School with a lot of help from our friends

Like all of the schools we hold at our Training Center in Marshall, the MMUA Underground School could not have happened without a lot of help from members and vendors.

Instructors and the classes they taught were:

3-Phase Riser Construction:

Brad Olson, Brainerd Public Utilities

Jim Stephens, 3M

Directional Drill Operations:

Tony Mead, Marshall Municipal Utilities

Kevin Kollos, Wyatt Pfeiffer and Austin Kaiser, Ditch Witch of MN & IA

Locating & Fault Finding URD Cables:

Gary Grimms, Locators and Supplies

Introduction to GIS/GPS Data Collection:

Andy DeBlieck, Detroit Lakes Public Utility

Leaking Transformer Change-out:

Larry Lamote, Marshall Municipal Utilities

Proper Cable Pulling Techniques:

Matt Hannafin & Matt Fredericks,

Upper Midwest Utility Sales

Equipment suppliers:

Marshall Municipal Utilities

Detroit Lakes Public Utility

Brainerd Public Utilities

Ditch Witch of Minnesota & Iowa

Locators & Supplies

Upper Midwest Utility Sales

3M

Titan Machinery



Ditch Witch of Minnesota and Iowa generously supplied instructors and various pieces of equipment, including this underground directional drilling machine.



Kevin Kollos of Ditch Witch has been involved with every Underground School held at the MMUA Training Center. Thanks Kevin and Ditch Witch!



photos by Steve Downer

From the very beginning, Marshall Municipal Utilities (MMU) has played a big role in the success of our Training Center. During the Underground School, MMU's Larry Lamote led the hands-on training session on Leaking Transformer Changeout. In the picture above, Lamote (at left) oversees the training. At left is another view of this session.

Brownton:

continued from front page

tric Apparatus Company supplied meters. Northern States Light and Power Co. was chosen to supply power. The wholesale supply contract was approved on Jan. 5, 1921. At that time, approval was also given for the building of “a 3 phase circuit for power service,” with the line running from the “Power house” south to the city. (Where the power house was located is shrouded in the mists of time.)

Brownton took power from Northern States Light and Power or its successors (eventually becoming known as Xcel Energy) until the 1990s. Brownton remains on the NSP transmission system to this day.

Rates were adopted effective March 1, 1921, including a minimum charge of \$1 a month for residential customers and a charge of 15 cents per kilowatt-hour (kwh) for current over 5 kwh. The commercial rate was 11 cents per kwh and one dollar per horsepower of connected load. Customers received a discount of five percent if paid by the first of the month.

Little more than a year after those rates were established they were lowered: residential rates to 11 cents per kwh and commercial to 7 cents per kwh.

Bills show recurring charges from the Renville County Electric Company. It is unclear what goods or services were provided.

As the days shortened, the city paid a person \$5 a month to turn on the streetlights for



The southeast entrance to the city may soon be the site of a new Dollar General store, to the left in this picture. The city is currently working to obtain electric service territory rights from Xcel.

the morning train. The council, at this time, also ordained that automobiles drive on right side of the road.

MMPA and natural gas

The city of approximately 730 residents is located 60 miles west of the Minneapolis/St. Paul metro area (12 miles south of Hutchinson) at the intersection of U.S. Hwy. 212 and Minn. Hwy. 15.

In 1992, Brownton and seven other cities, all NSP wholesale customers, formed the Minnesota Municipal Power Agency (MMPA). The agency now supplies the city's electricity.

In 2007, Brownton constructed a new substation. The city has also worked to upgrade and improve its electrical distribution systems to provide better, more reliable service.

Brownton's electric system maintenance is performed by area electric contractors, including Quade Electric of Hutchinson. Quade is an In-

dustrial/Commercial, Residential/Farm, and High Voltage contractor, in business since 1931. The company has a long history with municipal utilities in the area. (Harold P. Quade was president of the Hutchinson Utilities Commission in 1972. Howard Quade was second vice president of MMUA in 1979 and was a member of the Hutchinson Utilities Commission beginning in 1966.)

The municipal electric distribution system should be looped for the first time by the end of November. The reliability-enhancing improvement is part of an effort to extend municipal services to a Dollar General store development. Negotiations are ongoing with Xcel to serve the customer electricity.

Having successfully operated the electric utility for many years, but without natural gas service, Brownton voters approved a referendum for a municipal gas system on March 19, 2013.

Brownton's supplier is Hutchinson Utilities Commission (HUC). HUC transports gas to the United Farmers Cooperative (UFC) elevator site, just west of Brownton. From UFC, a 'town border station' is located on the outskirts of Brownton, which then pipes natural gas to homes and businesses in the city.

HUC entered into an operations and maintenance agreement to help Brownton. With a new system, maintenance is minimal. HUC uses its automated meter reading system to provide Brownton with meter reading and billing services.

The mists of time

Where was the power plant located that first supplied electricity to Brownton?

Hutchinson is one possibility.

In 1915, the Hutchinson Lighting & Manufacturing Company sold its interests to Northwest Light & Power Co. and nine years later, North-

ern States Power Company (NSP) served Hutchinson. Hutchinson municipalized electric service in 1935.

Minneapolis General Electric Company changed its name to Northern States Power Company in 1916. In the company's first 20 years, NSP bought 25 more Upper Midwest utility companies.

The NSP history on-line does not list the “Northern States Light and Power Company” repeatedly referred to in the early Brownton minutes. Was this a clerical misstatement of the company name?



Zero Infrastructure Solution

Hybrid communications network utilizing both public carrier and RF mesh

Easy, Targeted Deployment

Deploy when and where automation is needed first, using existing employees and skills

Lowest Total Cost of Ownership

No costly infrastructure to maintain; only a simple, inclusive annual fee

Learn More Now!

Lisa Fennell
Regional Sales Director
(612) 963-6867
lisa.fennell@nighthawkcontrol.com



220 South Sixth Street
Suite 1300
Minneapolis, MN 55402

TEL 612.349.6868
FAX 612.349.6108
Info@AvantEnergy.com



For over 30 years, Avant Energy has supported municipal utilities and power agencies in their effort to deliver economic and reliable power. Avant works with its clients to develop innovative, yet practical solutions based on a simple, overarching belief that, “better is possible.”

BETTER IS POSSIBLE

STRATEGIC PLANNING
RATE DESIGN
UTILITY ASSESSMENT

.....WWW.AVANTENERGY.COM.....

From our very beginning we've focused on
WHAT'S IMPORTANT...

To us, your project isn't a job - it's an opportunity to make a positive impact, protect future generations, and ensure the vitality of where we live and work.

Providing water engineering and related services to help clients achieve success.

WATER ENGINEERING | SURVEY/MAPPING/GIS | FINANCIAL SERVICES
INSTRUMENTATION & CONTROLS | ELECTRICAL ENGINEERING



Advanced Engineering and Environmental Services, Inc.
www.ae2s.com

Shelly, with a century of service, boasts lowest rates in the Red River Valley

The City of Shelly has been in the municipal electric business for 100 years.

Though not the biggest utility, the Red River Valley city of approximately 200 boasts of solid service and low electric rates.

City Clerk Mark Dohman said Shelly has “the cheapest power up and down the Valley.”

The federal Western Area Power Administration (WAPA) supplies a large portion of Shelly’s wholesale power. While the WAPA allocation varies month to month, it is typically over half of the

municipal supply. Otter Tail Power is the city’s other supplier.

Electric distribution system maintenance in the city is performed by North Holt Electric, out of Grand Forks, N.D. The city has had a business relationship with the electrical contractor since the 1960s, said Dohman, and the company knows the municipal system inside and out.

Maintenance on the municipal system is scheduled well in advance, allowing the contractor to fit the municipal work into slack times of its schedule. And when repairs



The Shelly Community and Senior Center also serves as city hall. The Columbia Grain facility also pictured here is one of the city’s good utility customers.

are of an urgent nature, Holt Electric has always responded in a timely manner.

Shelly annually budgets for improvements to its electric system, including the placing of overhead lines underground. All city street lights have been converted to LED technology.

The water and sewer systems have also been upgraded in recent years.

Jonithan Meyer is the city public works superintendent. He coordinates electric system work and operates the other utilities, with a little help. Dohman, retired from a U.S. Navy career, pitches in with the utilities when needed. A part-time person is also available, and Mayor Ron Cakebread contributes with his professional expertise in system controls.

The water system was rebuilt in 1994, with a new well, well house and pumps.

Extensive sewer work was done in 2008, with the re-lining of most the lines and installation of a new lift station pump.

The water and wastewater improvements were paid for through a combination of Minnesota Rural Development and Public Facilities Authority grants and loans, along with local contributions.

Along with its favorable utility service and low taxes, Shelly boasts a solid supply of affordable single-family homes. Homes sell quickly, with many people commuting to jobs in Fargo or Hillsboro, N.D.

The Columbia Grain elevator is going strong and is the city’s largest electric customer.

The railroad played an important role in the city’s early history. But the rails were removed last year as the cost

of repairing bridges along the line were deemed uneconomical. A snowmobile club is looking to develop a trail along the rail bed.

Early days of electric service

The early history of electric supply in Shelly is somewhat unclear. It is likely the city has always purchased power from Otter Tail Power.

In 1940, according to a cooperative history, the Red River Valley Cooperative Power Association and the village of Halstad sponsored a joint dedication and celebration. The village of Halstad dedicated its new municipal power plant which served the REA project with wholesale energy, and the cooperative dedicated its first 160 miles of energized line.

According to the cooperative history, Halstad people

had become very discouraged with the unsatisfactory electric service they were receiving at that time from a private power company.

That was likely also the impetus for creation of the municipal system in Shelly. The city began receiving WAPA power when it became available in the 1970s.



The Shelly public works building is up the street from city hall.

Osmose
Making your grid as **STRONG** as the **COMMUNITIES** it serves

- Steel
- Wood
- Contact Voltage
- Overhead
- Engineering
- Analytics
- Products
- Joint Use
- Storm Support

Your local Osmose professional is:
Lloyd Nelson | lnelson@osmose.com | 701-306-8761
osmose.com

energis

“Servicing everything inside the substation fence”

Testing & Maintenance

- Annual & 5-10 Year
 - Testing
 - Assessment
 - Inspection
- Batteries
- Breakers & Switchgear
- Transformers
- Regulators/Reclosers
- Relays
- Cables

Start Up & Protection

- Metering
- Relay Verification
- System Commissioning
- 3rd Party Verification
- Panel Assembly
- Turn Key

Other Services

- Asset Management
- Asset Renewal
- Project Management
- Consulting
- Engineering Analysis
- Training

Contact Us
920 632 7929
info@energisinc.com
energisinc.com

24-Hour Emergency Service
800 928 6960

Accreditation
NETA
ACCEPTING COMPANY

Green Bay, WI · Waukesha, WI Albert Lea, MN · Iron Mountain, MI

BE PREPARED WITH FS3’s EXCAVATION VERIFICATION KIT

FS3’s Excavation Verification Kit Includes:
(1) tri-fold ruler, (3) foldable “MARK” markers, (1) foldable “HIT” marker, whiteboard, marker set and eraser all compacted neatly into a 13” x 17” drawstring backpack.

FS3^{INC} PH: 320-274-7223 | WWW.FS3INC.BIZ

Anoka Municipal Utility gifts gigantic pumpkin sculpture to City of Anoka

ANOKA, Minn. — With guests waiting anxiously, Anoka Municipal Utility (AMU) proudly unveiled and gifted a handmade, 12-foot tall, 8-foot wide giant pumpkin

kin made of repurposed materials to the City of Anoka in a ceremony on Oct. 1. The ceremony was in celebration of the 100th year anniversary of Anoka Halloween, Inc.



The Anoka Municipal Utility engaged in a community project to design and build the giant pumpkin sculpture now displayed outside of city hall. Anoka is the 'Halloween Capital of the World.'



NextEra Energy Marketing is a wholesale power supplier responsible for the electricity and fuel management for all of NextEra Energy Resources' generation fleet, which includes the largest renewable energy portfolio in North America.

Kristi Johnson
Director Power Marketing/Oriation
Kristi.Johnson@nee.com
561-304-5114

NextEraEnergyResources.com



The pumpkin's main frame is made from reels in which AMU's conduit is stored.

The top hat is a freshly cleaned barrel that formerly held waste. The brim of the hat is from an old cabinet used to house electrical components.

Greg Geiger, Electric Utility Director said, "I'd been looking for a fun, meaningful team-building exercise for the Electric Department that would spill over into other departments and yet be a special gift to the residents of

Anoka. With this project, we accomplished our goal."

The actual time it took to construct all aspects of the pumpkin was about 60 hours; however, the planning and design of it was closer to three times that amount. Local artist Greg Pavlik donated countless hours to bring the sculpture to completion. Pavlik is a master welder and an "old school, jack of all trades."

City employees also volunteered their time by working on the project during their lunch breaks or after work

hours.

The pumpkin now sits in the fountain area just in front of Anoka City Hall. It will be stationed there each fall until the annual Christmas tree is "planted" in its place. From there, it will be placed in a city park or another unique location within the city for the public to view year-round.

AMU has encouraged the public to submit name suggestions. The top five names will be selected and the public will vote on those.

The Anoka Halloween Ambassadors accepted the gift on behalf of the city.

Anoka Municipal Utility is a community-owned, not-for-profit, electric supplier serving the city of Anoka, and portions of the cities of Ramsey, Coon Rapids, Champlin and Dayton.

The citizens of Anoka chose to create AMU over a century ago in the year 1909 under the name "Anoka Electric & Water Works," to provide economical, reliable electric power and have local control over an essential service. Later, it was renamed Anoka Municipal Utility.

TRANSFORMERS

DISTRIBUTION AND SUBSTATION



Modern Rewind Facilities
More than 61 Acres Inventory
Prompt Delivery—Coast to Coast

CALL TOLL-FREE
800-843-7994
FAX 605-534-3861
E-Mail: t-r@t-r.com
Internet: www.t-r.com



Complete Outdoor
Substations,
Circuit Breakers,
Regulators,
and Switchgear

MISO expects adequate winter capacity; but circumstances could stress electric grid

RTO Insider reported Oct. 29 that the Midcontinent Independent System Operator (MISO) expects to have adequate capacity to navigate winter but, as in the past, a combination of high demand and unexpectedly high generation outages could put regional electric supply operations in jeopardy.

MISO reportedly said it could exhaust resources on a January peak day and be forced to order 'load-shedding' from members.

MISO has increased winter preparation since the polar vortexes and 'maximum generation events' of 2014 and 2019, and a two-day MISO South emergency in January 2018. Since 2019, the regional transmission organization has been factoring in the cold-weather cutoff thresholds of wind generators.

The North American Electric Reliability Council (NERC) is developing cold weather standards, spurred

by MISO South's early 2018 emergency.

In a 2019 report on the MISO South emergency, FERC and NERC concluded that generation owners failed to properly winterize their equipment, contributing to the supply crunch.

MISO's current loss-of-load modeling reportedly tends to underestimate wintertime risk, a trend that will be exaggerated as the footprint adds more solar generation, MISO

analysis shows.

Using certain calculation, the RTO found risk in January, February, May and December, in addition to the prevailing risk in June, July, August and September identified under summer peak loss-of-load modeling.

MISO doesn't expect any unusual transmission limitations this winter, and approximately 200 natural gas generators representing 70 GW of capacity reportedly

have ample access to basins, pipelines and storage.

Winter weather prediction

The National Oceanic and Atmospheric Administration is forecasting above-average temperatures this winter in MISO South and lower-than-normal temperatures for Minnesota, Wisconsin and the Dakotas. The agency also predicts more precipitation than usual in MISO Midwest and a drier winter for South.

Coalition of environmental groups launch campaign to eliminate natural gas electric generation

The following article is excerpted from the Oct. 22 Midwest Energy News, published by Fresh Energy.

With a billion-dollar gas-fired power plant proposal on the horizon, a new campaign

in Minnesota is attempting to shift public opinion on natural gas.

The coalition of environmental and clean energy groups behind the "Energy We Can't Afford" campaign

in Minnesota is "attempting to shift public opinion on the fuel by highlighting its ties to fracking and potential financial risks."

The strategy: challenge the perception that gas is cheap or clean. Or natural.

Once seen as a cleaner-burning alternative to coal, natural gas has led to the retirement of coal plants and new wind and solar plants.

But natural gas has lost its luster among environmentalists.

The groups behind the "Energy We Can't Afford" campaign are working to mobilize the public to help lobby against the approval of new natural gas power plants.

The Sierra Club's North Star chapter is leading the campaign along with climate activist group MN350. Other coalition members include Fresh Energy.

Minnesota's utilities have pledged to close all but one of the state's remaining four coal plants, noted the article, but their long-term plans call for building new natural gas

plants while adding significantly to their renewable energy portfolios.

Utilities have long argued gas offers the least polluting and least expensive option for providing baseload power that allows for greater renewable energy integration.

The Minnesota Public Utilities Commission will soon begin reviewing integrated resource plans of Xcel Energy and Minnesota Power. Both propose investments in gas plants. Xcel, the state's largest investor-owned utility, wants to build a \$1 billion

natural gas plant in Becker to replace the state's largest coal facility, which will close by 2030.

Minnesota Power is a lead investor in the Nemadji Trail Energy Center gas plant in Superior, Wisconsin. The plant remains tied up in Minnesota in a Supreme Court case.

The article notes that other Minnesota utilities, including Rochester Public Utilities, have also expressed interest in building natural gas plants to complement wind and solar investments.

Turn Key	Self Perform
Aerial/Underground Construction	Power/Gas/Wind Distribution Services
Urban and Rural Construction	Trenching; Joint and Single Trench
Fiber Splicing/Testing	Pole Replacement
Project Management	Wireless Network Services
Horizontal Directional Boring	Material Procurement/Warehousing & Logistics

Larry Sanders 320-589-5317 www.telcomconstruction.com Corporate Office 320-558-9485
Character - Capital - Capacity

RADIODETECTION

RD8100® and RD7100®

Optimum precision for damage prevention

811
Know what's below. Call before you dig.

Your partner in damage prevention

For more information call: 320.274.7223

FS3 INC
9030 64th Street NW
Annandale, MN 55302
WWW.FS3INC.BIZ

Solar electric price higher than average

The federal Energy Information Administration (EIA) reported Oct. 9 that in 2019, the average U.S. wholesale price for electricity generated by solar photovoltaic (PV) technology was significantly higher than average wholesale prices for electricity from other technologies. The weighted average wholesale price for solar PV-generated electricity was \$83 per megawatt-hour (MWh) in 2019, more than double the price paid to producers for electricity generated by wind, fossil fuels, or nuclear.

About one-third of all U.S. solar PV capacity is located in California, where the average wholesale electricity price across all technologies was \$74/MWh in 2019, more than double the national average of \$36/MWh.

SOLUTIONS FOR ELECTRIC GENERATION

We'll deliver reliable, competitively-priced natural gas service for all your projects.

Contact Russ Wagner today.
612-321-5003
800-234-5800, ext. 5003
Russell.Wagner@CenterPointEnergy.com

Always There.®

©2014 CenterPoint Energy 143677

ENERGY is your **BUSINESS**

Our energy is focused on your supply chain.

For more than 60 years, our employee-owners have supported you by providing the products you need and the services you've come to expect.

Your success is our priority. Contact us today.

40-169 (2016-12) borderstates.com | 800.676.5834

Professional Services Directory

Bits &
Pieces



Accountants and Consultants

ADVISORY | OUTSOURCING | AUDIT AND TAX

888-529-2648 | CLAAconnect.com

Northern MN Doug Host Mary Reed Miranda Wendlandt	Southern MN Craig Popenhagen Laura Buechner	Minneapolis Chris Knopik Michelle Hoffman
---	--	--

©2019 CliftonLarsonAllen LLP

Engineers and Engineering Firms

Providing water engineering and related services to help clients achieve success.

Maple Grove | Moorhead | Lake of the Woods
www.ae2s.com

Xcel Energy plans to invest nearly \$1.4 billion in additional wind and solar projects totaling roughly 5 gigawatts (GW) between the end of 2020 and the second quarter of 2021, officials said Oct. 29 in an investors quarterly earnings call.

The company wind investment plan, which spans multiple states, includes 2.878 GW owned and in-service projects, plus 1.591 GW of projects under development, with regulatory decision expected by the end of 2020.

The Public Service Commission of Wisconsin approved a Superior Water, Light & Power's community solar garden plan, with construction of the Superior Solar array set to begin in spring 2021.

The 470-kilowatt array will be constructed adjacent to Heritage Park in Superior.

Superior Water, Light and Power Co., a wholly owned subsidiary of ALLETE Inc., sells electricity, water and natural gas to customers in Superior, Wisconsin, and adjacent areas.

Radio Iowa reported Oct. 20 that MidAmerican Energy is inspecting more than 40 wind turbines after the second case of a blade coming off a turbine at the MidAmerican Beaver Creek Wind Farm.

A company spokesperson reportedly said this followed a similar problem in September. Each problem occurred on the same model turbine, with the same type of lightning system, that channels lightning from a strike near a wind turbine blade to ground.

The company shut down 46 turbines, to check blades and systems.

Utility Dive reported Oct. 29 that MidAmerican is working with wind turbine manufacturer Vestas to understand the "root cause" of four blade failures that have forced it to temporarily idle some generation over the past year.

MidAmerican reportedly has approximately 3,000 Iowa turbines. According to the American Wind Energy Association (AWEA), there are over 60,000 operating wind turbines in the United States today and no member of the public has ever been injured by a turbine.

Attorneys

Proudly representing municipal clients

800 Nicollet Mall, Suite 2600
Minneapolis, MN 55402
(t) 612-338-2525 (f) 612-339-2386
www.mcgrannshea.com

1875 Eye Street, NW
Suite 700
Washington, DC 20006
www.spiegelmd.com

Phone: 202.879.4000
Fax: 202.393.2866
info@spiegelmd.com

One size fits all – doesn't. And neither do our solutions.

Real People. Real Solutions.
Bolton-Menk.com

Trusted. Professional. Solutions.

Electrical Power • GIS
Streets • Sewer • Drainage
Water • Airports

Rock Rapids
& Sioux City, IA
Sioux Falls, SD
800-446-2531

dgr.com

Computer and Software

IT solutions for the smart utility

Professional Computer Solutions, LLC
www.pcs-csa.com / Toll free 888.843.3106

Central Service Association
Toll free 877.842.5962 / www.csa1.com

David A. Berg, PE – Principal

15213 Danbury Ave W
Rosemount, MN 55068
(612)850-2305
www.davebergconsulting.com

Cost of Service Studies
Utility Rate Design
Contract Negotiations
Utility Education
Expert Testimony
Feasibility Studies

dave@davebergconsulting.com
"Dedicated to providing personal service to consumer-owned utilities"

Electrical Equipment and Suppliers

TRANSFORMERS
DISTRIBUTION AND SUBSTATION

T&R ELECTRIC

Modern Remold Facilities
More than 61 Acres Inventory
Prompt Delivery - Coast to Coast

CALL TOLL FREE
800-943-7723
FAX 605-533-1301
E-Mail: info@tr.com
Internet: www.tr.com

EASA

BUY - SELL - RENT

Complete Outdoor
Revolutions
Circuit Breakers
Regulators
and Switchgear

Building a Better World for All of Us®

Engineers | Architects | Planners | Scientists
800.325.2055 • sehinc.com

Apprentice Lineworker Training

Our experienced instructor—James Monroe—provides on-site instruction.

Call MMUA Director of Training and Safety Mike Willetts at 612-802-8474 for more information.

Report released on California power outages

from APPA

A report on recent California power outages found the state's resource planning targets "have not evolved to keep pace with climate change-induced extreme weather events, and that energy market practices did not perform as intended" during an August heat wave.

A review of the Aug. 14 and 15 outages was conducted by the California Independent System Operator (CAISO), the California Public Utilities Commission (CPUC), and California Energy Commission (CEC).

The preliminary analysis said there were three broad categories of factors that contributed to the outages:

- The extreme heat across the western U.S. pushed demand for electricity beyond resource planning targets.

- Because resource planning targets have not kept pace with the transitions in the energy mix, there were not sufficient resources to meet demand in the early evening hours.

- Some practices in CAISO's day-ahead energy market exacerbated supply challenges.

The report said California's resource adequacy requirements were developed around peak demand.

Instead of a single peak, California is now experiencing "multiple critical periods during the day."

The report identified "net peak demand" as a second critical period, which is defined as peak load less solar and wind generation.

Net peak demand occurs later in the day than peak demand, when solar power resources are fading in the evening and can be exacerbated if the day's heat is not replaced by cooling evening and night temperatures.

At the same time, generation fired by natural gas, which can fill evening supply shortfalls, is declining in California. Instead, the state has relied on "the tremendous growth in utility-scale renewable generation" to help reduce reliance on natural gas.

During the heat storm, however, the state's natural gas fleet experienced 1,400 MW to 2,000 MW of forced outages, mostly because of the extreme heat. There were no substitutes in place for almost 400 MW of planned gas generator outages.

The report also identified energy market practices as

Professional Services Directory

Equipment Manufacturers, Suppliers, Service

PRODUCTS you NEED
SERVICE you EXPECT

Where you need us, when you need us, with 11 Minnesota locations to serve you.

Contact us today.

BSE **BORDER STATES**
Supply Chain Solutions™

borderstates.com | 1.800.676.5834

#10-1224 (2016-12)

FS3 INC. **SUPPLY**

SALES SERVICE **UTILITY CONSTRUCTION**

MATERIALS & EQUIPMENT

TOOLS & SAFETY PRODUCTS

9030 64th Street NW (320) 274-7223
PO Box 989 FAX (320) 274-7205
Annandale MN 55302 WWW.FS3INC.BIZ

Equipment and Supplies

RESCO

SUPPLYING THE COOPERATIVE ADVANTAGE

Quality products and superior service from one of the Midwest's largest full-line distributors of high-voltage electrical products.

800.346.3330 | info@resco1.com | resco1.com
4100 30th Ave. S, Moorhead, MN

Enterprise Software Solutions

Designed for Utilities

NISC National Information Solutions Cooperative® www.NISC.coop

Generation Services and Equipment

energis
HIGH VOLTAGE RESOURCES®

Servicing You Locally in Minnesota with NETA Accredited Technicians

"Servicing everything inside the substation fence"

ENERGISINC.COM
800.928.6960

a contributing factor to the August outages. Specifically, load serving entities under-scheduled their demand for energy, particularly during

the net demand peak time, giving a false signal that there were more internal resources available for export from the state.

Generation Services and Equipment

ZIEGLER **CAT**
Power Systems

Proven Power Solutions
Sales. Service. Rental.
888.320.4292

Management & Professional Consultants

AVANT ENERGY

220 South Sixth Street Suite 1300
Minneapolis, MN 55402

TEL 612.349.6868
FAX 612.349.6108
Info@AvantEnergy.com



Meter Services and Systems

INTRODUCING **Adaptiv** Advanced Metering Infrastructure

Learn More Now!

Lisa Fennell
Sales Director
(612) 963-6867
lisa.fennell@nighthawkcontrol.com

NIGHTHAWK
NIGHTHAWKCONTROL.COM

Service Provider

Osмосе

Making your grid as STRONG as the COMMUNITIES it serves

Wood	Overhead	Products
Steel	Engineering	Joint Use
Contact Voltage	Analytics	Storm Support

770-631-6995 | poleinfo@osmosе.com | osmosе.com

Training & Education

NORTHWEST LINEMAN COLLEGE

NEW PROGRAMS AVAILABLE

ELECTRICAL LINEMAN PROGRAM	TELECOMMUNICATIONS LINEMAN PROGRAM	GAS DISTRIBUTION PROGRAM
✓ \$73,000 AVERAGE WAGE ¹	✓ \$63,000 AVERAGE WAGE ²	✓ \$66,000 AVERAGE WAGE ³
✓ 15 WEEK PROGRAM	✓ 7 WEEK PROGRAM	✓ 7 WEEK PROGRAM

LINEMAN.EDU | (888) LINEMAN

1 www.bls.gov/oes/current/oes499051.htm | 2 www.bls.gov/oes/2017/may/oes499052.htm
3 www.bls.gov/oes/2017/may/oes472152.htm

Upcoming Events

Transformer School & Pre-Conference

December 15-18 at the MMUA Training Center, Marshall

Transformer School and the optional Pre-Conference offer the ultimate combination of classroom and hands-on instruction designed to increase understanding of the inner workings of a transformer, appropriate installations and applications for maximum reliability.



With his lineworker background, our Instructor, Scott Meinecke, has a knack for explaining complicated principals so that they are understandable.

Scott has a true passion for the craft and has been training on this topic for more than 25 years!

The pre-conference is intended to serve as a basic

or refresher course on the basics of single-phase transformer connections and theory. The course includes classroom and hands-on instruction on topics such as safe work practices, transformer theory, basic calculations, connections, sizing, and troubleshooting.

Transformer School Overview

Three-Phase Transformer Connections

The Transformer School's three-phase course will start with the basics of transformers, including turns ratios, polarities, calculations, connections, and troubleshooting. Participants will learn about the basic three-phase systems with some basic phasor diagrams and explain the relationship of the phasor to the transformer itself.

Register by Nov. 14 for the best rate! Deadline to register is Nov. 23.

Hands-on learning at its best! For more information, see the 'Events' calendar at www.mmua.org

Electrical Distribution Design Workshop

An ONLINE Educational Program - January 11-14, 2021

No matter how large or small your electric utility, it is important to understand and apply engineering principles that underlie distribution system planning, design, construction and maintenance. Safety is at stake (for the public, for your customers, and for your workers) as well as the ability of the system to deliver adequate and reliable service.



This four-part interactive course will be held online. The program is intended for:

- Electrical Managers and Superintendents
- Technicians
- Crew Leaders and Crew Members
- Engineering Staff
- And anyone else routinely involved with the electrical distribution system

- Medium Voltage Underground Cable
- Underground Distribution Grounding
- Underground Lightning Protection
- Underground Distribution Inspection & Maintenance

Major topics to be covered include:

- Review of Alternating Current (AC) Electricity
- Three-Phase AC Electricity
- Introduction to Customer Load Estimation
- Distribution Transformers

The Workshop will be taught by John Miner. John is a registered professional engineer, accomplished executive manager, and educator with over 45 years of experience in the electric utility industry.

John is a frequent presenter at MMUA workshops and formerly was General Manager of Rochester Public Utilities and Chief Operating Officer for the Austin, Texas, Electric Utility Dept. He has been a course instructor for APPA for 30 years.

Registration fee increases \$50 on December 4, 2020. Registration deadline: December 14, 2020 or when full.

Emergency Preparedness and Restoration Conference

January 26-27, River's Edge Convention Center, St. Cloud

Training, exercising and planning provides an opportunity to collaborate—whether it's with your utility or with your local or statewide responders. These valuable activities can help you identify shortcomings, anticipate problems, and proactively address potential consequences that an emergency may bring about.

Join other city and utility professionals at this worthwhile conference where you will engage in open-forum and roundtable discussions, share ideas and gain valuable insight to improve your effectiveness in a crisis, and collaborate with MMUA to help improve consistency across the membership.

See the MMUA online Events Calendar for more!

