



## Small conversion — significant improvement

*In July, Mor-Gran-Sou Electric Cooperative line crews converted a half-mile stretch of three-phase distribution line from overhead to underground. In this month's local pages, learn why some compromised cottonwoods were causing problems — and how the necessary conversion will increase system reliability and eliminate future power outages.*

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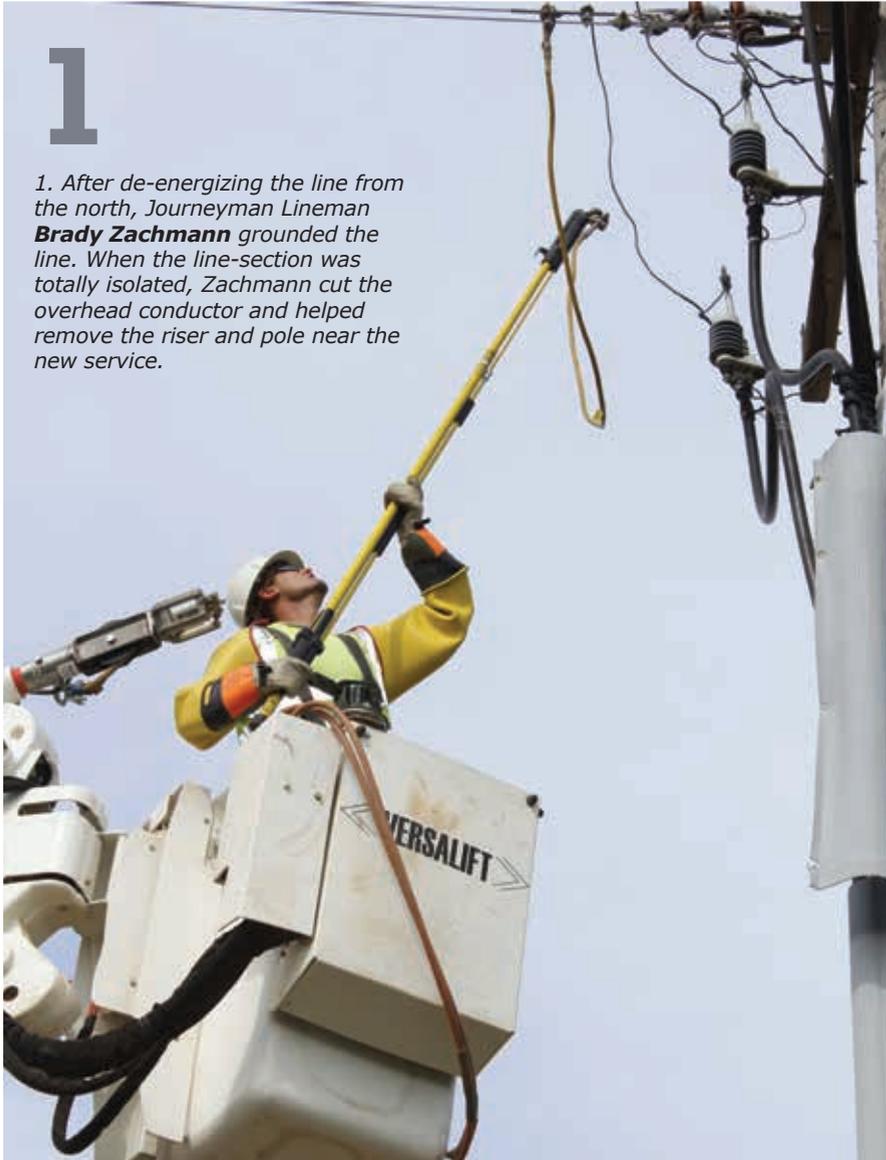
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*Journeyman Lineman  
**Brady Zachmann**  
(left) and Leadman  
**Jason Jahner***



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1. After de-energizing the line from the north, Journeyman Lineman **Brady Zachmann** grounded the line. When the line-section was totally isolated, Zachmann cut the overhead conductor and helped remove the riser and pole near the new service.



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2. Journeyman Lineman **Brady Zachmann** prepared the powerline cable for the overhead-to-underground conversion. This included removing the jacket (the protective outer covering), and terminating and sealing the cable.



# Line conversion increases system reliability

STORY AND PHOTOS BY CARMEN DEVNEY

A relatively small powerline conversion from overhead to underground will make a significant improvement in Mor-Gran-Sou Electric Cooperative's distribution system south of Mandan. On windy days, compromised cottonwoods have been toppling and taking down overhead power lines south of Fort Lincoln State Park, causing disruptions in service and extra work for our linemen.

In June, Mor-Gran-Sou line crews converted a half-mile section of three-phase distribution line from overhead to underground, and added a new service. From trenching the underground cable to retiring the overhead line, the project took about a week.

Mor-Gran-Sou's General Foreman Doug Nagel says the cooperative regularly trims trees for safety, as well as to protect the system and minimize disruptions in service. Even with regular maintenance, this grove of cottonwoods has been causing problems for quite some time, due to their age and size.

"When they are 60, 70, 80 feet tall, when they come down, they take everything down," he says.

While putting in underground power cable is costly, Nagel says the investment will increase system reliability and eliminate future power outages. ■



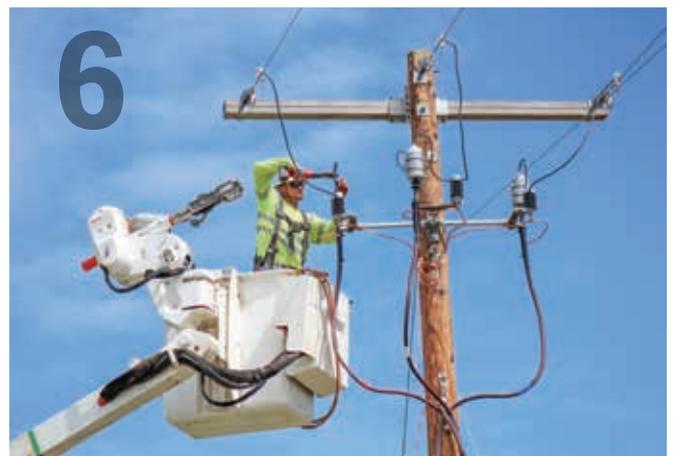
3. Once prepared, the cable will be enclosed in a locked vault. Trenched four feet below the earth's surface, the new cable runs south for a little more than half a mile. Cottonwood trees have been damaging the overhead power lines during windy conditions over the years. The new underground cable will improve reliability to the area. Here, General Foreman **Doug Nagel** connects cable in the vault.



4. Where the underground powerline meets the overhead distribution to the south, another line crew prepares the cable. Journeyman Lineman **Blake Reis** removed the jacket, cleaned the cable and added a terminator.



5. Once the underground cable was fed up the pole and connected to the de-energized overhead system, Leadman **Jason Jahner** used a hydraulic compression tool to attach the equipment grounds. Then he applied U-Guard™ to protect the cable from the elements.



6. Journeyman Lineman **Brady Zachmann** crimped the terminator and added cover-up. When the new overhead to underground transition is complete, all energized parts will have insulated cover-up to protect birds and other wildlife from being electrocuted and possibly causing a power outage.



# Plan to attend your annual meeting



PHOTO BY CARMEN DEVNEY

Members register and visit at the 2015 annual meeting.

Mor-Gran-Sou Electric Cooperative's annual meeting will be held on Friday, July 15, at Prairie Knights Casino and Resort. The address is 7932 Hwy. 24, Fort Yates.

**Please note meeting schedule:**

3:30-5:30 p.m. CT

– Registration

5:30 p.m. CT – Business meeting call to order, election of candidates

6:00 p.m. CT – Business meeting recessed; annual meeting banquet served

7:00 p.m. CT – Business meeting reconvenes.

**We wish to stress that on July 15th, when the meeting is called to order at 5:30 pm CT, no further ballots will be distributed at the registration table.** However, meal tickets will be available until 6 p.m. Please plan on being here in time to vote. ■

## Julie Armijo: learning and growing at Mor-Gran-Sou

**M**or-Gran-Sou Electric Cooperative announces the promotion of Julie Armijo, former member services clerk, who started serving as the co-op's member services representative II in April. Julie works in Flasher.

Julie represents the cooperative at educational events and trade shows, promote youth opportunities and electrical safety, and meets with members. Following some restructuring in the office, Julie has become more involved in working with service orders, delinquent accounts, some billing and more.

"I enjoy learning as part of my job," she recently said. "If I can learn something new every day, I'm a happier person."

Julie and her husband Quejay live in Carson. They like to spend as much time outdoors as possible, fishing and camping. Julie also likes to bake. Together, the couple has four grown children who live in Wyoming, Alabama and Glen Ullin. They like to visit when time allows.

Mor-Gran-Sou congratulates Julie Armijo on her well-deserved promotion. ■





**Wayne Peltier** (left), and **Paul Sukut**

## Message from Basin Electric Power Cooperative

BY CHIEF EXECUTIVE OFFICER AND GENERAL MANAGER  
PAUL SUKUT AND BOARD PRESIDENT WAYNE PELTIER

**(Editor's note: Basin Electric Power Cooperative supplies much of the power distributed to Mor-Gran-Sou consumers throughout the tri-county area. We asked Paul Sukut and Wayne Peltier to update our members on what is happening at Basin Electric.)**

No matter what Basin Electric faces – be it poorly considered regulations, commodity price fluctuations, member load growth or an evolution in the way we do business, having a specific and clearly defined purpose – our members – ensures these issues will never cloud our judgment.

In 2015, Basin Electric's board refocused its commitment to that purpose. In reviewing our Statement of Ideals and Objectives, our mission statement, our board policies and our long-term structure, the board and staff worked to clearly define the cooperative's course. Three external elements were key considerations in setting the plan: living in a carbon-constrained world; dealing with rapidly evolving technology, particularly in the form of distributed generation; and mitigating the risks of commodity prices.

In a year like 2015, where Basin Electric marked a number of defining milestones, having transparent goals was vital.

In October, we completed integration into Southwest Power Pool (SPP) after years of study and evaluation with the membership.

While this was a complicated and challenging move for all parties, we were guided by doing the right thing for the members.

We also made the pivotal decision to buy out of the Rural Utilities Service (RUS). Though our support for RUS and the valuable role it plays in rural America remains strong, a number of factors weighed into Basin Electric's decision, and ultimately, buying out of RUS was prudent for the cooperative.

It was a positive experience. As the finance team met with investors to procure debt previously held by RUS, the cooperative's long-term wholesale power supply contracts with members and its favorable creditworthiness played vital roles in raising \$1.5 billion, nearly double the original goal of \$800 million: the largest generation and transmission cooperative U.S. private placement transaction to date.

In May, Western Fuels Association and Basin Electric, as the operating agent for the six participants of the Missouri Basin Power Project, which owns the Laramie River Station in Wheatland, Wyo., reached a settlement with BNSF Railway on a rate case dating back to 2004.

Additionally, we're pleased with how

Basin Electric's Our Power, My Safety initiative is continuing to grow across the cooperative's facilities. It's an initiative of continuous improvement and instilling safety as part of the co-op culture.

Unfortunately, 2015 wasn't all positive. The Environmental Protection Agency's final Clean Power Plan rule, which limits carbon dioxide emissions from existing stationary power sources, was a mighty blow with eight of the 12 states hit hardest in Basin Electric's service territory. Quite simply, this rule is a threat to our members, but we're working through the process – legally, legislatively and publically. Our legal efforts are paying off. In February, the Supreme Court granted a Stay of the rule, which halts implementation of the rule until litigation is concluded.

It's a challenge, but we've faced them before and there will be others in the future. As long as we remain true to our values, our mission and our guiding force – our members – Basin Electric will continue to be a strong, stable cooperative for many years. ■



Bob Harris

## Message from Western Area Power Administration

UGP guarantees reliable hydropower to customers,  
adapts to industry changes

BY SENIOR VICE PRESIDENT AND  
UPPER GREAT PLAINS REGIONAL MANAGER BOB HARRIS

**[EDITOR'S NOTE: Western Area Power Administration (Western) supplies a portion of the power distributed to Mor-Gran-Sou consumers throughout the tri-county area. We asked Bob Harris to update our members on what is happening at Western.]**

We are living in amazing times in the energy business. The changes in technology, the innovation in markets and the shifting sands of electricity production present us with challenges and opportunities not seen in the last 50 years. This year is particularly exciting for Upper Great Plains (UGP) as we finish our 2021 Power Marketing Initiative long-term power and associated interconnection/facility contracts and transition to the Southwest Power Pool.

Our promise to our customers is to be collaborative and transparent. We constantly make significant efforts to be open and inclusive of all of you. We will continue to engage our customers and stakeholders with our operational choices and capital planning efforts.

In line with this philosophy is our recent launch of The Source at [www.wapa.gov](http://www.wapa.gov). The Source reflects our ongoing commitment to customers to provide one-stop shopping for operational data and financial information. We recognize the need to have easily accessible information. With this new tool, we are well positioned to deliver the information requested.

When you go to The Source, you will notice that Western has a new logo. The need to modernize our 19-year-old logo was past due. Today's changing energy landscape creates both opportunities for and

challenges to the grid. We use smart phones and iPads to do our jobs. Yet, our longest-running logo was not scalable for mobile devices. Providing easily accessible information is becoming increasingly important as we compete for attention on the Internet and for new talent over mobile devices.

The updated logo, created by our graphics team, in-house at no additional cost, maintains Western's iconic electric bolt, which is central to our symbol, carries forward our commitments and maintains our core identity. We are modernizing our identity without completely changing it. The blue represents water's ability to provide reliable energy and the green symbolizes our vast 15-state footprint and our role as environmental stewards.

### **2021 PMI guarantees reliable hydropower to customers**

The 2021 PMI extended the current marketing plan with changes to a few marketing principles, including the institution of 30-year contract terms and occasional resource pools. The longer contract terms will provide our customers stability in their power portfolios to meet their customers' needs well into the future. The up-to 1-percent resource pools, drawn from existing allocations every 10 years, will ensure the most widespread use of the public hydropower resource.

We completed the 2021 Power

Marketing Initiative in November 2011, and spent a few years revising and standardizing our power and interconnection/facility contracts to help our customers better understand their allocations and services.

Western and Mor-Gran-Sou executed the new contracts in September 2015, which will guarantee their members access to clean, renewable, reliable, low-cost hydropower through 2050.

Overall, the firm power rates have been stable since 2010. The 2015 minor rate adjustment modified the drought adder and base rate components with no change to the overall rate. A decrease to the drought adder is projected for January 2017, and based on current conditions, the drought debt along with its associated interest cost could be paid off as early as 2018. This highlights how responsible system planning and spending, done in partnership with our customers, can support stable rates while maintaining system health and reliability.

That said, the firm power rate is greatly influenced by water conditions. We are currently expecting a slightly-below-normal water year, according to hydrology reports from the U.S. Army Corps of Engineers and Bureau of Reclamation. The mountain snowpack peaked in early April, which is about two weeks earlier than normal. The snowpack peaked at 95 percent of average above Fort Peck



and 89 percent of average in the reach between Garrison and Fort Peck. Much of the low elevation snowpack has melted; however, the middle-to-high elevation snowpack is declining slowly. Conditions will continue to be monitored throughout the year.

### **Transition to SPP**

After more than 20 years of operational studies with the other Integrated System owners, Upper Great Plains joined the Southwest Power Pool starting Oct. 1, 2015, making Western the first federal power marketing administration to become a full RTO member. At midnight on Oct. 1, UGP, Basin Electric Power Cooperative and Heartland Consumers Power District successfully transferred functional control of their jointly planned, operated and owned transmission facilities known as the Integrated Transmission System to SPP and began operating in the regional transmission organization. All transmission service over UGP's federal transmission lines in both the Eastern and Western Interconnection is sold by SPP under the SPP tariff. UGP's balancing area in the Eastern Interconnection merged with the SPP balancing area. Also on Oct. 1, UGP's generation and customer load in the Eastern Interconnection was integrated into the SPP Integrated Marketplace, which is a full day-ahead and real-time balancing energy

and ancillary services market. This was the final step in achieving full membership in the RTO.

Transition teams continue to work through the follow-up details of the change. Thanks to their diligent work, the change was transparent to most customers. Going to SPP allowed UGP avoid increased costs that would have occurred had the region stayed independent and will have no impact on firm electric service rates or delivery. UGP continues to be the transmission operator, responsible for delivery of its contractual obligation to each customer load.

With the transfer of functional control of the Integrated Transmission System to SPP, UGP's Transmission System Planning transitioned under the SPP rules of FERC Order 1000. SPP also registered as the Planning Coordinator for UGP's facilities in both the Eastern and Western interconnections and UGP as the Transmission Planner to coordinate with SPP in planning for the future needs of the UGP's transmission system. SPP oversees the Generator Interconnection Studies; Aggregate Transmission Service Studies; Integrated Transmission Planning, SPP TPL Compliance Assessments and the model development process to ensure effectiveness, consistency, and to plan the transmission needed to maintain reliability, provide economic benefits and achieve public

policy goals to the SPP region in both the near and long-term.

### **System upgrades near Mor-Gran-Sou**

UGP's linemen, electricians, electronic communications craftsmen, meter and relay employees and others do an outstanding job of keeping the lights on in dangerous environments and sometimes harsh conditions. Of all UGP's accomplishments, our safety record makes me the most proud. Nothing is more important to me than knowing my employees return home safely each day.

This past fall/winter, UGP crews replaced a power transformer and a power circuit breaker and added oil containment in the Devaul Substation. The equipment had reached the end of its useful life. This work will ensure reliable power delivery and reduce the risk of an environmental spill close to the Heart River. This fall we will continue replacing structures on the last of four phases of the 42-mile-long Heskett-to-Devaul 69-kilovolt transmission line.

2016 is shaping up to be an important year for UGP, and all of us at UGP greatly appreciate the support from Mor-Gran-Sou and the other Pick-Sloan customers. Together, we will create a successful and relevant future for Western, UGP and its customers. ■



# MOR-GRAN-SOU ELECTRIC COOPERATIVE

## board meeting highlights



### Meeting date: May 27, 2016

- Approved the April 27, 2016 regular Board meeting minutes
- Approved a work order inventory and a special equipment inventory
- Approved a capital credit refund for an age 80 and over application
- Reviewed and accepted the April financial report
- Heard Co-General Managers/Chief Executive Officers' update and reports from meetings attended
- Heard update on Innovative Energy Alliance, LLC (IEA)
- Heard updates on all entities of WDUS Holdings LLC
- Reviewed director's and attorney's expenses report for April
- Heard director reports and held discussion on meetings attended
- Reviewed department reports
- Confirmed attendance at various upcoming events
- Held Executive Session

### Upcoming regular board meeting dates:

July 15 at Prairie Knights Casino & Resort, Room 802, Fort Yates at 2 p.m. CT  
 Aug. 31 in the NDAREC board room in Mandan at 9 a.m. CT

Members are welcome to attend the board meetings at any time. Please contact Mor-Gran-Sou at ctermes@morgransou.com, or call 800-750-8212 or 701-597-3301 to confirm the meeting date and location if you wish to attend.

To place an item on the agenda, please contact Board Chair Leland "Judge" Barth or Co-General Manager/Chief Executive Officer Donald Franklund at least one week in advance.

Members may obtain a copy of approved Board minutes by completing and returning the "Request for Information or Data" form. You can find this form at [www.morgransou.com](http://www.morgransou.com), or call the office for a copy.

## JULY 27 KX/CO-OP DAY at the N.D. State Fair

The KX/Co-op Day at the N.D. State Fair will be held July 27 in Minot. If you plan to attend the fair on July 27, please stop by the Flasher office or the Mandan Service Center (2816 37th St. N.W.) and pick up reduced-price tickets for \$1 off gate admission, a free breakfast served near the Commercial II Building on the fairgrounds, \$5 off unlimited-ride wristbands for carnival rides, \$1 off the Ranch Rodeo admission and a free ice cream social at the KX/co-op tent.

To print your own tickets, go to <http://ndstatefair.com/>. Under "Plan" click on "Coupons and Promotions." Scroll down to KX-Co-op Day July 27 and click on the photo.

## HEAD WEST FOR LESS!

More than 10 Touchstone Energy® Cooperatives in North Dakota have joined forces to make vacationing in North Dakota more affordable for families, including Mor-Gran-Sou Electric Cooperative. This summer, head west to Medora, where electric cooperative members are eligible for a **15-percent discount** in association with:

- Tickets to the Medora Musical
  - A Pitchfork Steak Fondue
  - Lodging at the Bunkhouse Motel, Badlands Motel or Rough Riders Hotel
  - Bully Pulpit Golf Course
- Mor-Gran-Sou members, if you travel to beautiful Medora anytime this summer, call 1-800-MEDORA-1 for reservations and use the code TOUCH2016 to receive your 15-percent savings. Members also receive 20 percent off at the Cowboy Hall of Fame by providing the discount code TOUCH2016 at the door. ■



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#### OFFICERS AND DIRECTORS

Chair..... Leland "Judge" Barth  
 Vice Chair..... Casey Wells  
 Secretary-Treasurer..... Pam Geiger  
 Directors ..... Mark Doll,  
 Vernard Frederick, Lance Froelich,  
 Chad Harrison, Bob J. Leingang,  
 Bonnie Tomac

#### MANAGEMENT

Co-General Mgr./CEO..... Chris Baumgartner  
 Co-General Mgr./CEO..... Donald A. Franklund

[www.morgransou.com](http://www.morgransou.com)

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