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ELECTRIC COOPERATIVE

PHOTO BY CARMEN DEVNEY

Inspired by innovation. Driven by service.

Roughrider Electric Cooperative linemen are well into the construction season ... building new services, doing substation and system improvements, converting some overhead power lines to underground and more ... to continue giving our members safe, reliable and affordable electric service.

Lineman **Andrew McFarland** watches the position of buckets and booms from the ground for safety, as Linemen **Brock Swensrud** (left bucket) and **Dion Gefre** (right bucket) install a new cross-arm to hang electronic breakers. This innovative technology will protect the line and de-energize it in the event of a fault or problem on the line. For a closer look, turn to C8.

What's inside:

- Thanks for attending your annual meeting!
- Power supplier updates
- Head west for less
- Meeting minutes, and more

Summer safety on the farm

Overhead power lines are necessary to deliver electricity to hardworking farmers and ranchers, but those same power lines can also be deadly if not treated with respect. While you need to focus on the field and your machinery, Roughrider Electric Cooperative urges you to also watch for electrical hazards around the farm or ranch.

Here, Roughrider Electric offers some tips for electrical safety this summer:

Be safe using irrigation equipment

Irrigation systems are important to farms. However, they carry many risks that farmers should know how to manage. Safe Electricity has the following information for farmers to keep in mind.

- Do not raise irrigation pipes into the air near power lines. Look up and be aware of your surroundings. Position irrigation pipes at least 15 feet away from power lines.
- Remember, water and electricity are a dangerous mix. Do not allow irrigation water nozzles to spray onto power lines. A water stream hitting a power line could energize the entire system.
- Take some time to survey your surroundings before moving equipment. Always know the location of nearby electrical lines when working with irrigation equipment.
- Make sure that irrigation system wiring is properly grounded. Before the start of each irrigation season, have a qualified electrician check the pump and wiring.
- If an irrigation pipe comes into contact with a power line, never try to remove it yourself.
 Stay away from it and call Roughrider Electric Cooperative for help.

Follow these other tips

Regardless of what technology is used on the farm, keep the following electrical safety guidelines in mind:

- Use a spotter when operating large machinery near lines. A driver's vantage point from the cab may not be sufficient.
- Keep equipment at least 10 feet from lines, at all times, in all directions.
- Look up and use care when raising any equipment such as ladders, front-end loaders or augers.
- Inspect the height of the farm equipment to determine clearance.
- Always remember to lower extensions to the lowest setting when moving loads.
- Never attempt to move a power line out of the way or raise it for clearance.
- If a power line is sagging or low, contact Roughrider Electric Cooperative.



The Roughrider Electric Cooperative directors, co-general managers and employees thank you, our member-owners, for attending the annual meeting of the membership held June 5 at Trinity High School in Dickinson. This year's theme was, "Inspired by innovation. Driven by service." We appreciate the interest and support you continue to show in your electric cooperative!

Members in attendance enjoyed a roast beef dinner, listened to various cooperative updates, and fulfilled the second cooperative principle — democratic member control — by voting to fill the board positions held Callen Schoch, Bruce Darcy and William Retterath.

To learn the voting results and meeting highlights, read about Roughrider's annual meeting in the July local community pages of the *North Dakota Living* magazine.

Report from THE BOARD OF DIRECTORS APRIL 26, 2019

When, where and who: The Board of Directors met in Hazen April 26.

Agenda: The Board reviewed, added to and approved the meeting agenda.

Minutes of the previous meeting: The Board reviewed and approved the minutes of the March 22, 2019, meeting.

Consent Agenda: The Board reviewed, discussed and approved the Consent Agenda, including proposed membership applications, service connects and assignments, proposed cancellations of membership and requests for retirement of capital credit accounts.

Co-General Managers' report: Don Franklund and Travis Kupper presented the Co-General Managers' report.

Upper Missouri Power Cooperative manager presentation: Upper Missouri's Manager Claire Vigesaa attended this portion of the Board meeting to provide a presentation on Upper Missouri.

Lance Rambousek – Audit report: Mr. Rambousek provided the Board with Brady Martz's Independent Auditor's report. The board approved the audit report for fiscal year ending 2018 as submitted.

Substation control contract: Mr. Bentz reported that bids were solicited for the equipment needed for the Raider Switchyard, Long Butte, Red Trail and Richardton Substation control buildings.

Operations and Construction report: Mr. Bentz referred the Board to his written report. Roughrider completed its Rural Utilities Service audit. The auditor will submit a letter to the Chairman of the Board with his recommendations. Roughrider will then submit its response. Members Services/Key Accounts report: Mr. Hibl referred the Board to his written report. Mr. Hibl reported that he attended Red Trail's annual meeting, and they reported on their carbon capture project.

Past meetings: Attendees at meetings over the past month reported to the Board concerning matters of importance discussed at the meetings.

Upcoming meetings: The next Board meeting was set for 9 a.m. MDT on May, 24, 2019, at Roughrider's office in Dickinson, North Dakota.

Other business: The Board entered into Executive Session. Upon exiting Executive Session, there being no other business, upon motion made, seconded and unanimously carried, the meeting adjourned. ■

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A message from Roughrider Electric's power supplier: **Upper Missouri Power Cooperative**

BY CLAIRE VIGESAA, GENERAL MANAGER

(Editor's note: Upper Missouri Power Cooperative supplies 100 percent of the power distributed to Roughrider Electric Cooperative members. That power is generated by Basin Electric Power Cooperative and Western Area Power Administration. We asked Claire Vigesaa to update our members on what is happening at Upper Missouri.)

pper Missouri Power Cooperative (Upper Missouri) was organized in 1957 to serve transmission needs of electric cooperatives in eastern Montana and western North Dakota. Today, Upper Missouri provides service to 11 distribution cooperatives; six in eastern Montana and five in western North Dakota, including Roughrider Electric Cooperative. The 11 membersystems serve 76,658 meters to farms, ranches, homes and businesses in 37 counties, representing 54,762 square miles. Our service area spans east to west from Hysham, Mont., to the Missouri River near Washburn, and from the Canadian border to the South Dakota/Montana borders. We serve an area equal in size to the states of Iowa or New York.

Upper Missouri, when formed, served primarily rural farms and ranches. While still serving the legacy members, over the course of history Upper Missouri has enjoyed phenomenal growth due to energy production expansion, including coal development for power plant production, Dakota Gasification Company, and more recently, finding our territory in the center of a world-class oil and gas play. Upper Missouri is now a 1,366-megawatt system, requiring generation equal to the output of Antelope Valley Station and one full unit of Leland Olds Station!

Upper Missouri, like Roughrider, is governed by a cooperative member, a trustee from each of the 11 member-systems. Bill Retterath, Center, represents you and serves on the Upper Missouri board. The board of trustees meet monthly to discuss power-supply issues.

Upper Missouri sources power from two major power suppliers: Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (Basin Electric). The majority and increasing percentage of power supply is sourced from Basin Electric. In 2018 it was 96.2 percent.

Upper Missouri has 188 delivery points, serves as the Southwest Power Pool (SPP) meter agent and is a transmission owner in Midcontinent Independent System Operator (MISO).

The primary function of Upper Missouri is to aggregate power supply on behalf of its 11 member-systems. This requires a sophisticated metering and data collection system. In addition to securing the meter data for the monthly power billing, meters are read every two seconds to provide data to the regional transmission organization, SPP. SPP uses this data to determine generation needs for every moment of the day. Upper Missouri, as the meter agent, plays a critical role in providing high-value data; enabling efficient power-supply planning and operation across the region; keeping your electric grid

secure and stable.

Upper Missouri owns several joint-use substations in the region, but contracts the maintenance and operations out to Montana-Dakota Utilities, and contracts with Roughrider for the maintenance at Charlie Creek Station. Upper Missouri also coordinates North American Electric Reliability Corporation compliance activities, assuring that assets are in tip-top shape and cyber-secure.

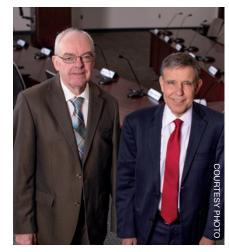
Upper Missouri staff represent and advocate on behalf of its 11 member-systems and their memberconsumers. Areas of advocacy include power supply: Basin Electric and the Midwest Electric Consumers Association (protecting hydro public-power resources). Upper Missouri staff are also involved in advocacy at the Public Service Commission, state Legislature, the U.S. Congress and industry association activities.

Our industry is facing a lot of changes due to farm consolidations, industrial development and technology advances. We don't look like our grandparent's cooperative anymore, and we expect even more significant changes as battery storage and other electric technology matures. While we don't have all the answers today, our cooperatives are diligently positioning themselves to be the premier energy provider for their member-owners. Count on us to keep your electric system affordable and reliable.

On behalf of the Upper Missouri Power Cooperative board of trustees and staff, we congratulate Roughrider Electric Cooperative on a very good year.

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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 generates the majority of the power purchased by Upper Missouri Power Cooperative and transmitted to Roughrider Electric Cooperative members. We asked Paul Sukut and Wayne Peltier to update our members on what is happening at Basin Electric.)

e are so proud of this cooperative. Understand, this was not an easy year for Basin Electric. We know clarity in focus is important; especially now.

As we look forward, the decisions we made in 2018 are helping lead us into 2019 stronger, more efficient, and ready to tackle what's next.

Our directors are holding ongoing

strategic planning meetings to set a path forward for the cooperative. They take precious time, in addition to their Basin Electric, Class A, and distribution cooperative board meetings to set a guiding goal for our workforce to head toward. The board has set 'Stability' as that goal, and three pillars meant to lead us there: member and employee focus, operational effectiveness/continuous improvement, and strategic direction/the forward look. Within these three pillars, we've developed the strategic objectives for 2019 and beyond. We know it's important that each employee can answer the question, "What can I do today that helps Basin Electric in its goal to be more stable?"

The reduction in force was one of the most difficult decisions we've had to make in our careers. As our senior staff gathered to talk through our options - how we would make sure employees were treated fairly, and how we would continue the work that is the mission of Basin Electric — it was clear that no one treated this lightly. Our forecasts showed a leaner workforce would save the cooperative millions of dollars. In fact, it was the last large step we could feasibly take to make sure we remain strong and hold solid 'A' ratings with the ratings agencies.

We knew it was the best decision, and the cooperative is better for it. Since then, our employees have pulled together in ways we didn't anticipate. We are all taking a hard look at doing business differently, and those new ideas will pay us back for years to come.

The reduction in force helped us also make some hard decisions on how we would look at operating the Great Plains Synfuels Plant, and all of our facilities, differently. It's a culture shift from maintaining a high availability and full load 100 percent of the time, to running them as we always have when it comes to safety and efficiency, but with an eye on the market. It will take us awhile to get there, but our staff knows this is vitally important.

Basin Electric is changing the way we do business, and we are so grateful for the knowledge and tenacity of our employees. We have a workforce that is efficient, productive, well-rounded and resolute.

The way we generate and deliver electricity and the way our membership uses electricity will evolve as technology advances. Our load forecast shows much of the membership continuing to grow, while nearly one-fifth of our distribution cooperatives are holding steady or shrinking a bit, thanks to energy-efficient technology used in homes. Our employees keep us on the leading edge of providing the best service to our membership, and we appreciate their dedication to Basin Electric and the cooperative business model.

We have a lot to be optimistic about, and our employees have accepted the challenge for innovation and growth, and are using it to shine. We are thankful for their dedication and loyalty, and know we have come through this year thankful for the opportunity to continue to serve our members.

The year hasn't been easy. But in looking to our future, we swell with pride. ■



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Upholding our legacy while investing in our future

BY SENIOR VICE PRESIDENT AND UPPER GREAT PLAINS REGIONAL MANAGER JODY SUNDSTED

(Editor's note: Western Area Power Administration also generates power purchased by Roughrider Electric Cooperative. We asked Jody Sunsted to update our members on what is happening at WAPA.)

The world in which we live in is becoming increasingly connected through technology and a desire for instantaneous information. This connectivity is affecting the electric grid as well, as it becomes more integrated with diverse generation and storage resources, supports an influx of new electrical devices including vehicles, and accommodates new technology such as artificial intelligence.

Working with our customers, we have created an enduring and successful legacy of providing hydropower and related services. Now we are looking toward the connected future and ensuring we are investing appropriately to preserve and strengthen our value for customers, neighboring utilities and the nation.

This year, WAPA recommitted its pledge to customers to be agile, integrated, responsive, engaged and resilient in the face of historic industry change. In January, we published the refreshed Tactical Action Plan, which identifies our priorities and activities for the next two to three years under Strategic Roadmap 2024. As stated in the TAP, we will continue to look toward the future of markets in the Western Interconnection, drawing on the successes and lessons from transitioning the Integrated System into Southwest Power Pool in

2015. We will also mature our asset management, security and workforce planning initiatives to ensure WAPA remains relevant and resilient in the future.

Last year, we expanded upon transparency efforts by posting 10 years' worth of operational and financial information to The Source website. We provided this information based on multiple conversations with our customers and other stakeholders. The site and our additional transparency efforts were recently awarded a Corporate Social Responsibility award by a prominent international public relations organization and a Gears of Government award by the Department of Energy.

Strong water years drive increased benefits

Upper Great Plains had an exceptional water year in 2018. Snowpack in the mountains above the reservoirs was more than 150 percent of average and runoff was high, resulting in the third-highest water year in the past 120 years. Annual generation was about 24 percent higher than the previous year, increasing energy sales by more than 45 percent and allowing surplus sales into SPP's higher-priced market. The excellent conditions also reduced the region's purchase-power needs. The cumulative result of the surplus sales and reduced purchase power was a net market revenue of more than \$48 million.

Being able to sell excess generation into SPP and purchase energy from the market to meet contractual commitments has helped to keep



WAPA's costs low and its firm power rates stable. UGP's composite rate for the Pick-Sloan Missouri Basin Program was reduced to 24.29 mils per kilowatt-hour in 2018. We expect this rate to hold steady for a few years though we study our costs on an annual basis to support WAPA's mission.

The 2019 hydrology predictions from the Army Corps of Engineers continue to be positive despite a dry spring across much of North Dakota. The amount of runoff in March was four times higher than average — a new record — and the Corps is expecting the calendar year runoff to be 151 percent of average. At this time, we anticipate a water year slightly above average at about 11.9 million megawatt-hours.

Maintaining transmission assets

UGP is investing heavily in our transmission assets so we can continue delivering reliable and secure power to our electric cooperative customers. Last year, upgrades and replacements

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occurred at eight substations serving North Dakota cooperatives, including replacing a damaged piece of equipment at Custer Trail Substation. These activities extended the service life of the substation equipment, lessened environmental impact and supported growing communities. We also rebuilt 10 miles of the 230-kilovolt Jamestown-Grand Forks transmission line, extending the life of this critical transmission line.

Several projects are underway this year, including replacing 17 structures on the Heskett-Devaul 69-kilovolt transmission line. We will also add optical groundwire on the new structures, enhancing our communications with substations and situational awareness. We expect to complete upgrades and replacements at 11 substations, replace more than 60 transmission structures and re-conductor the Mandan-to-Ward 230-kV transmission line.

Strengthening our security posture

In today's world, maintaining the poles and wires is no longer sufficient to protect our electricity supply. Those wishing to harm America and its economy have decided the grid is a prime target for potential attack, either through physical action or cyber vulnerabilities.

We are also investing in grid resilience, physical security and cybersecurity to safeguard our valuable assets and improve the resilience of the entire system. In January 2019, WAPA initiated a new risk-based, graduated protectionlevel methodology to better align resources to asset criticality. By proportionately assigning resources to our most critical assets instead of a one-size-fits-all approach, we expect to realize more than \$1 million in savings over the next several years while providing the most effective protection to our extensive assets.

This is an exciting time to be part of the energy industry. Through this change, we remain committed to sustaining and increasing the value of WAPA in this dynamic energy frontier. Working together with customers, we will keep pace with industry change, invest in a connected energy future, strengthen grid resilience, optimize our operations and maintain affordable costs for customers. We look forward to continuing our partnership with you, our customers, to create a successful future supporting the rural electric cooperatives and the communities they serve.



In partnership with the Theodore Roosevelt Medora Foundation, more than 10 Touchstone Energy Cooperatives in North Dakota have joined forces to make vacationing in North Dakota more affordable for families, including Roughrider Electric Cooperative. This summer, head west to Medora, where electric cooperative members are eligible for a 15-percent discount off the following reservations:

- Tickets to the Medora Musical
 Pitchfork Steak Fondue
- ✓ Bully Pulpit Golf Course

- Lodging at any of the following:
- ✓ Badlands Motel
- ✓ Elkhorn Quarters
- ✓ Rough Riders Hotel

Members also receive 20 percent off at the Cowboy Hall of Fame by providing the discount code **Touch2019** at the door.

Roughrider members, if you are traveling to beautiful Medora this summer, call 1-800-MEDORA-1 to provide the discount code **Touch2019**, make reservations and receive your savings.



Roughrider will be closed to honor the July 4th holiday

Roughrider line crews will be available in case of an emergency outage on Thursday, July 4.

Happy Father's Day Sunday, June 16

"Life is short. Take time to appreciate and capture simple pleasures."

Erin Huntimer, hobbyist photographer and member of Roughrider Electric Cooperative, Hannov

Members, this is **your** magazine. Would you like to contribute to Roughrider's local pages of *North Dakota Living*? To submit a high-resolution photo, email cdevney@iea.coop along with membership information.



www.roughriderelectric.com

HAZEN OFFICE 701-748-2293 or 800-748-5533 800 Highway Dr., Hazen, ND 58545 7:30 a.m. – 4:00 p.m. CST Monday-Friday

Payments may be deposited in the deposit box by Roughrider Electric's main office entrance or in the drop boxes located at Krause's Super Valu in Hazen or Bronson's Super Valu in Beulah.

> DICKINSON OFFICE 701-483-5111 or 800-627-8470 P.O. Box 1038, 2156 4th Ave. E. Dickinson, ND 58602 7 a.m. – 4 p.m. MST Monday-Friday

Payments may be deposited in the deposit box west of Roughrider Electric's main office entrance or in the drop boxes located at Dickinson City Hall, or the west and south locations of Family Fare supermarkets.

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