Your Touchstone Energy® Cooperative

ROUGHRIDER NEWS

ELECTRIC COOPERATIVE

JUNE 2017

PHOTO BY CARMEN DEVNEY

What's inside:

This summer, Roughrider Electric Cooperative line crews and contractors are updating aging infrastructure and converting some overhead power lines to underground. In this month's local pages, learn about some of the projects including this one in the oil fields — and how your co-op is striving to provide the most reliable electric system at the most affordable cost.

ROUGHRIDER
ELECTRIC COOPERATIVE
Your Touchstone Energy® Cooperative

Providing the most reliable system at the most affordable cost

STORY AND PHOTOS BY CARMEN DEVNEY

*From left: 3C lineman **Josh Carson**, Roughrider lineman **Andrew McFarland** and 3C lineman **Ty Krehlik**.*

In 2016, Roughrider Electric Cooperative conducted a Member Satisfaction Survey – and if you received a call, we thank you for participating. The survey was designed to measure the members' satisfaction and assess how well Roughrider Electric is serving its members. Through the survey it was found that overall member satisfaction is directly related to the reliability and affordability of the services we provide – and that reliable service is of great importance to our member-owners.

That's why your local Touchstone Energy® Cooperative creates short- and long-range work plans, and budgets to replace aging infrastructure. The weather contributes to wear and tear on our electric distribution and transmission system, and compromised power lines and poles may not be as reliable as when they were first built.

Age contributes to the decline, as well. Just as eyesight becomes less sharp over time, older infrastructure may not perform as well, and it eventually needs to be updated or replaced.

This summer, Roughrider Electric

When Roughrider plans a project that requires the linemen to de-energize the lines for a short period of time, the cooperative will notify affected members of the planned power outage either by an automated phone call message or by linemen going door-to-door, depending on the size of the outage. This gives consumers time to turn off electronics. When possible, system improvements are worked hot, or the power is backfed through a well-looped system to avoid disrupting power to the members.

Cooperative line crews will be converting overhead power lines to underground in several parts of our service area, including:

1. **Highway and interstate overhead crossings.** This will eliminate the need to de-energize an overhead line when a home or tank is moved.
2. **Oil fields.** While the industry has slowed, work continues. Underground cable was initially trenched in some areas in the 1970s, and it needs to be updated before it faults and causes an outage.

*Roughrider employees, from left: Staking Engineer **Jerry Krebs**, Line Superintendent **Tim Ridl** and General Foreman **Bryan Braun** assess a line conversion project in a subdivision in Dickinson. Built in the 1970s as both overhead and underground, the cable is aging and trees have grown around the overhead lines. To update the system and reduce future power outages, all the cable will be updated underground.*

Roughrider hires contractors on occasion to help with special projects. This summer, contractors are replacing underground cable in the oil fields. Just as a consumer would compare prices while shopping for a new car, Roughrider requests bids from contractors to get the best value for the members' investment. And just as Roughrider employees work to serve our member-owners with accountability and integrity, we expect our contract employees to do the same.

To ensure the safety of linemen and residents, much preparation occurs prior to working on an underground project, including calling 811. Knowing what's below, and staking existing utilities lines, is a law that helps keep everyone safe.

3. **Subdivisions around Dickinson.** Several subdivisions were developed in the 1970s using a combination of overhead and underground lines. Based on the age of the cable and mature trees now framing the overhead infrastructure, updating and converting to underground will increase reliability.
4. **Old, unused lines.** Line crews are retiring power lines that have existed for decades but are not currently being used. It takes time and money to patrol the system and make repairs when necessary, and unused infrastructure is a liability to Roughrider because it doesn't generate income. The owners of the meters are welcome to pay a $30/month line-retention fee, and Roughrider will continue to patrol for age, damage and clearance. If there is no plan to use the line, and no one is willing to pay for it to be maintained, it will eventually be retired.

"Jason Bentz (manager of operations,) Don Franklund and Chris Baumgartner (co-general managers) and the IEA (Innovative Energy Alliance) have been excellent about striving for reliable service," says Roughrider Line Superintendent Tim Ridl. "We want to make sure that on our part as a cooperative, we're providing the most reliable system that we can, at the most affordable cost to the consumer."

The cable that will be used for some of these projects is leftover material from the oil fields. The short footages can't be repurposed for new, larger projects, but will work nicely for the short spans needed in the subdivisions and overhead crossings.

Underground cable has its benefits. It can't be compromised by frost and ice, and when Mother Nature strikes, there are no damaged poles to replace.

It also costs more and presents other challenges. Underground lines give no warning prior to quitting, and faults are harder to find and take longer to fix; especially when the ground is frozen.

"It's a balancing act; how much we can do, and when and where it makes the most sense," Ridl says. "It costs money to have good infrastructure. We spread it out over the years, so it keeps the costs down and rates in line." ■

OVERHEAD VERSUS UNDERGROUND POWER LINES:

a balance of reliability and affordability

BY KIRSTI CRAIG

Have you ever been out of power after a storm wreaked havoc in your area? What is better ... underground line that occasionally faults or overhead line that is more susceptible to the elements?

Roughrider Electric Cooperative, like all power distributors, delivers electricity to our members either through overhead or underground power lines. Both types of lines have pros and cons.

When we build new line to an area, a number of factors determine whether to use overhead or underground line. It's our job as your electric cooperative to ensure that we choose the safest and most efficient method of construction. Balancing reliability and affordability is always our top priority.

Underground line is aesthetically pleasing to landowners, making it an attractive option. Farmers appreciate not having to work around poles in their field;

UNDERGROUND CABLE:

- Is aesthetically pleasing.
- Not susceptible to damage during winter ice storms.
- Sometimes takes longer to repair.
- Prone to faults after the first fault occurs.

- SUSCEPTIBLE TO DAMAGE DURING WINTER ICE STORMS AND SUMMER WIND STORMS.
- DIFFICULT TO REPAIR DURING WINTER'S EXTREME CONDITIONS.
- HAS A LONG LIFESPAN WHEN PROPERLY MAINTAINED.

homeowners often prefer their yards to not include electrical poles.

"Our membership generally prefers underground cable installation to overhead," Operations Manager Jason Bentz says. "The cooperative is here to serve our members, so we do our best to abide by their wishes."

While the lifespan of underground lines in the past has been significantly shorter than overhead line, new technology is constantly improving it.

"The first overhead electrical cable was installed some 60 years ago," Bentz says. "While most of that system has been replaced and upgraded through the years, in some areas of the nation with a milder climate, those lines are still intact.

"Roughrider's first underground cable was installed more than 30 years ago. Underground line from that time period needs to be replaced. After 20 to 30 years, the first type of cable used is shot. However, we expect today's underground electrical line will last at least 50 years or more."

Nationally, most underground lines are found in subdivisions. However, in federally protected rural areas like the National Grasslands around Theodore Roosevelt National Park, all electrical cable is installed underground — a requirement of the National Forest Service.

One of the more difficult aspects of working with underground cable comes into play when a fault occurs in the line. Pinpointing and repairing the broken cable is usually more time-intensive than finding problems on an overhead line, which can often be spotted by lineworkers from the cabs of their trucks as they drive down a line. And once a fault occurs on an underground line, it is more likely to fault in the future, requiring it to be replaced sooner than later.

Overhead line is usually faster and easier to install, making it

the best method when building long stretches of line. However, it requires more right-of-way maintenance. Trees and shrubs must be trimmed so they don't obstruct the lines overhead.

Overhead lines are usually more susceptible to damage during storms, though lightning can also reach and cause problems to underground cable.

So what is the best option? It all depends. As always, your local Touchstone Energy® Cooperative looks at cost and reliability when deciding the method to use in its projects. ■

Sources: NDAREC

ROUGHRIDER ELECTRIC COOPERATIVE
Your Touchstone Energy® Cooperative
Annual Meeting 2017

Members, thanks for attending YOUR annual meeting!

The Roughrider Electric Cooperative directors, co-general managers and employees thank you, our member-owners, for planning to attend the 70th annual meeting of the membership that will be held June 7 at Dickinson Trinity High School. This year's theme is, "Members — the Foundation of the Future." We appreciate the interest and support you continue to show in your electric cooperative!

Members in attendance will enjoy a delicious dinner, listen to various cooperative updates, and fulfill the second cooperative principle — democratic member control — by voting to fill the board positions held by Arnold Kainz in the West District, Greg Steckler in the Central District, and Dan Price in the East District.

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. ■

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:

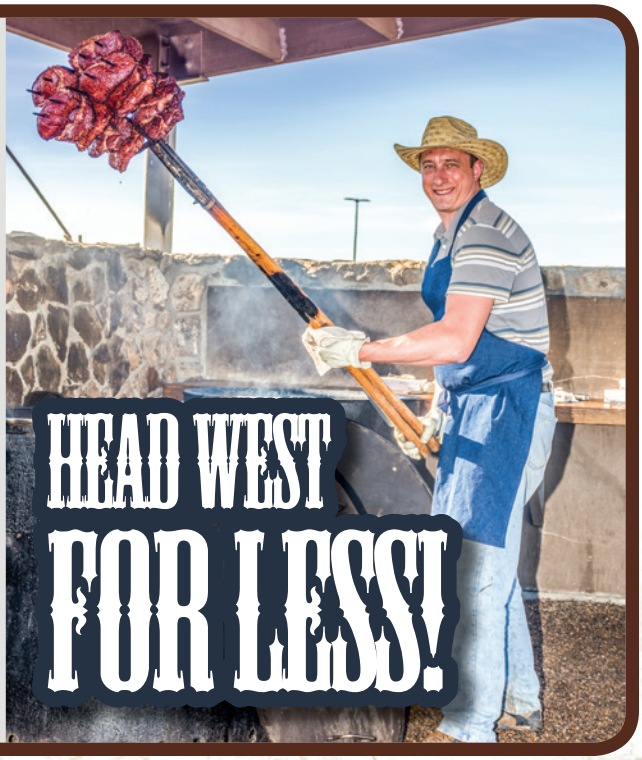
Tickets to the Medora Musical
Pitchfork Steak Fondue
Bully Pulpit Golf Course

Lodging at any of the following:
✓ Bunkhouse Motel
✓ Badlands Motel
✓ Rough Riders Hotel

Members also receive 20 percent off at the Cowboy Hall of Fame by providing the discount code (Touch2017) at the door. Advanced reservations are not available.

Hotel rooms book fast, so please reserve your rooms as soon as possible.

Call **1-800-MEDORA-1** for reservations and provide the discount code (Touch2017) to receive your savings.



Report from

THE BOARD OF DIRECTORS
APRIL 28, 2017

When, where and who: The Board of Director met in Hazen April 28.

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 31, 2017, meeting.

Co-General Managers' report: Chris Baumgartner and Don Franklund presented the managers' report.

Roughrider is undergoing safety testing to determine that a consistent safety message is being communicated from management to staff.

Mr. Franklund reported on the all-employee meeting.

Lance Rambousek – Audit report: Mr. Rambousek provided the Board with Brady Martz & Associates, P.C.'s independent auditor's report.

Acceptance of Beulah franchise: Ms. Grosz reviewed with the Board the franchise issued by the Beulah City Commission.

Members Services/Key Account report: Mr. Hibl referred the Board to his written report. In addition to his report, he notified the Board that he had published the scholarship winners. Basin Electric Power Cooperative notified him that Roughrider employee Russ Goodwin was chosen by Basin Electric to receive an additional $1,000 scholarship.

Upcoming meetings: The next Board meeting was set for 9 a.m. MT on May 26, 2017, at Roughrider's office in Dickinson, North Dakota.

Other business: There being no other business, upon motion made, seconded and unanimously carried, the meeting adjourned. ■

Roughrider Electric Cooperative offers members CONSERVATION AND ENERGY EFFICIENCIES INCENTIVES

Roughrider Electric Cooperative is continuing the conservation and energy-efficiency program through 2016. The incentives help you, the member, become more energy efficient.

The program for 2017 will include ground-source heat pumps and air-source heat pumps.

Members must buy and install qualifying systems between Jan. 1, 2017 and Dec. 31, 2017. The program for the heat pumps is for new installation or for replacement of a conventional heating system.

Roughrider Electric Cooperative personnel will check the installation, and get the appropriate documentation and receipts. Once completed and approved, Roughrider Electric Cooperative will send a check directly to the member to help cover the purchase cost.

A maximum dollar amount has been set aside for the incentive program. The program will close when we meet this amount. Roughrider Electric reserves the right to cancel the program without further notice. One rebate allowed per member.

For more information, please contact Brad Quenette, director of member services, at 800-748-5533 or email bquenette@roughriderelectric.com.

Ground-Source Heat Pumps:	**$150 per ton with a maximum rebate of $600**		
Required minimum efficiency	**CLOSED LOOP:**	**EER >= 14.1**	**COP >= 3.3**
	OPEN LOOP:	**EER >= 16.2**	**COP >= 3.6**
Air-Source Heat Pumps:	**$100 per ton with a maximum rebate of $400**		
Required minimum efficiency	**HSPF >= 8.2**	**EER >= 12**	**SEER >= 14.5**

Roughrider will be closed to honor the July 4th holiday

Line crews will be available in case of an emergency outage on Tuesday, July 4.

ROUGHRIDER
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www.roughriderelectric.com

HAZEN OFFICE
701-748-2293 or 800-748-5533
800 Highway Dr., Hazen, ND 58545
7:00 a.m. – 3:30 p.m. CST Monday-Friday
(Summer Hours Memorial Day through Labor Day.)

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
(Summer Hours Memorial Day through Labor Day.)

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 north and south locations of Family Fare supermarkets.

OFFICERS AND DIRECTORS

Roger Kudrna, President; Dickinson 483-8377
Darell Herman, Vice President; Beulah 873-4371
Troy Sailer, Secretary; Golden Valley 948-2427
Bruce Darcy, Treasurer; Golden Valley.....983-4222
William Retterath; Center.....794-8729
Arnold Kainz; Dickinson.....483-8207
Dan Price; Hensler 794-3779
Greg Steckler; Dunn Center.....548-8122
Callen Schoch; New England 579-4395

MANAGEMENT

Don Franklund .....Co-General Manager/CEO
Chris Baumgartner.....Co-General Manager/CEO

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