

## Operation Round Up gives back

As of June, the Operation Round Up (ORU) Trust has granted over \$40,000 to nonprofit and community organizations in Lower Yellowstone Rural Electric Cooperative's service territory. The funds collected each month from our members rounding their electric

bill to the nearest dollar have helped enrich the lives of our community members.

The application deadline is Sept. 15. Go to [www.lyrec.coop](http://www.lyrec.coop) for additional information or to download an application. ■



Operation Round Up Trustee **Jan Bloesser** presents **Jessica Newman** with a check for \$500 to help with the cost of supplies for the youth enrichment program held at the Mondak Heritage Center.



**Dawn Rehbein** accepts a check for \$1,000 from the Operation Round Up Trust to help purchase a countertop fryer for the Richland County Youth Hockey Club's fair booth.



**Jan Bloesser** presents a check for \$2,000 to **Janine Danielson** that will be used to replace playground equipment and resurface the playground area at the Fairview School.



LYREC's Member Service Manager **Jami Propp** presents Sidney Volunteer Fire Department Chief **Adam Smith** with a check for \$2,000. Basin Electric Power Cooperative matched the donation through its Charitable Giving Program. The funds will be used to help purchase the needed equipment for the fire department.

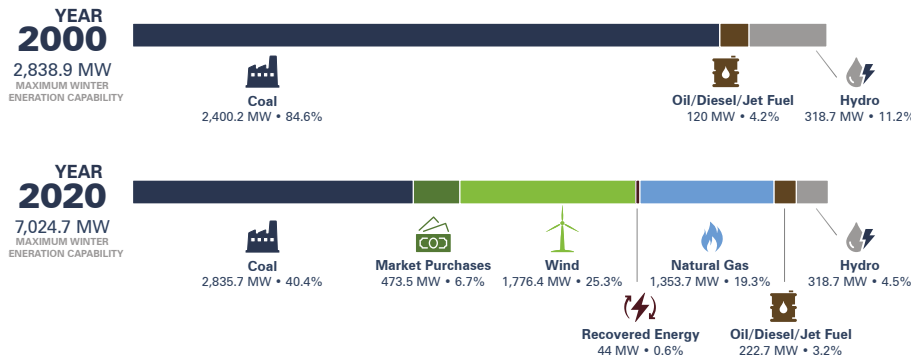
# MULTIPLE OPTIONS FOR MULTIPLE CONDITIONS

## All-of-the-above generation approach is right choice for reliable, affordable power

by Angela Magstadt

### GENERATION CAPABILITY

Basin Electric takes a responsible approach through a diverse energy supply and growth that manages risks to our customers. In the last decade, Basin Electric has grown almost 50% and 80% of that load growth was met with wind, natural gas, and market purchases. We take advantage of the benefits of renewables while maintaining baseload that ensures the reliability our members expect. The bar graph below shows added diversity over the past 20 years.



Note: Megawatts based on most recent capability test completed as of Dec. 31, 2020.

The power Basin Electric Power Cooperative uses to serve its member load obligations comes from many different sources, including coal, renewables, natural gas, water (hydroelectricity), oil and recovered energy. Basin Electric also purchases power from the market. Because this resource portfolio is so diverse, the co-op’s power supply is very reliable – if one source isn’t producing, there are other options available to fill the gaps.

This winter was a prime example of why an all-of-the-above energy strategy is so important. In mid-February, extreme cold temperatures stretched from North Dakota to Texas. During a time when Basin Electric and many of its members were experiencing extremely high member demand, cold weather shut down many gas producers and many wind turbines

were not running due to either cold weather or the fact that the wind was not blowing in some areas.

During situations like this, it is advantageous for Basin Electric and its members to continue to diversify its generation mix to meet the load growth not only with wind, natural gas and market purchases, but also coal generation. Coal-based generation is considered more reliable, because it is the only power generation where several days of generation fuel is stored onsite.

Winter isn’t the only time when diverse generation resources are important. In the spring and fall when wind is the most prevalent and member loads are typically lower, Basin Electric’s operations team takes this opportunity to perform scheduled maintenance outages on its coal-based facilities, which often worked hard during

the winter months. While not all the coal-based facilities are down at the same time, if demand increases and additional power is needed, Basin Electric’s marketing team can either purchase power from the market or start the gas peaking plants, which are able to come online in 10 to 15 minutes.

Next to winter, summer sees the highest use of electricity, because, as we’ve seen in these last few months, temperatures are high and members turn on their air conditioners to stay comfortable and their irrigation systems to support crop growth. For that reason, outages at Basin Electric’s coal plants are scheduled to be completed by the summer months, and again, coal provides 24/7 generation.

In addition to the diverse mix of generation resources, the location of these resources is another important aspect of an all-of-the-above energy strategy.

“Our coal-based facilities are built near mines, and they always have a coal pile next to the plants so supply is never interrupted. And, our gas plants are built either on the Northern Border Pipeline or in the Bakken, so the supply of natural gas is right there, as well,” says Tom Christensen, senior vice president of Basin Electric’s Transmission, Engineering and Construction Department. “Urban areas typically require significant amounts of natural gas for residential and commercial use in addition to power generation, which sometimes is an issue when weather gets really cold, so having gas plants built right on top of the supply is a good thing.”

## Transmission is an essential piece of the puzzle

Being a member of regional transmission organizations Southwest Power Pool (SPP) and MISO also allows Basin Electric to purchase power from other members in different regions. The 2,500 miles of extensive transmission infrastructure that has been built over the years makes this possible.

“You can have all the generation in the world, but without the transmission to get it from point A to point B, it’s not going to get from the plant to the member at the end of the line where it is needed,” Christensen says. “We have strategically placed transmission system maintenance shops with the staff and equipment necessary to react to transmission issues as soon as they arise.”

## Power from the market

Another benefit of membership in SPP and MISO is that there are times when power is cheaper on the market than what it costs to dispatch coal and gas units.

“However, it’s important to remember that the market is very volatile, and while it may be cheaper to purchase power off the market now, that won’t always be the case,” says Dave Raatz, senior vice president of Basin Electric’s Asset Management, Resource Planning and Rates Department. “The best way for us to keep our rates as low as possible is to rely on both our owned resources, which are the backbone of our system, and power from the market. Stability comes with our resource base.”

# Capital credits

This year, Lower Yellowstone Rural Electric Cooperative (LYREC) returned \$930,000 in retired capital credits to our members. Capital credits come from margins, or money leftover at the end of the year after all operating costs and expenses have been paid. The margins are allocated to each member’s capital credit account based on how much electricity the member purchases. The allocated margins are retained and used by LYREC for operating capital, which reduces the amount the cooperative needs to borrow.

In June, the bills were credited for active members. Checks were mailed to former members. However, some were returned for insufficient addresses. If you have contact information for anyone listed below, please call our office at 406-488-1602.

Carlsen, Phyllis..... Sidney, Mont.  
 Demangelaere, Barb ..... Sidney, Mont.  
 Duvall, Kristie ..... Baltimore, Md.  
 Fila Mar Energy Services..... Houston, Texas  
 Fulton, Robert G. .... Fairview, Mont.  
 Iversen, R.C..... Sidney, Mont.  
 Marathon Oil Co. .... Tulsa, Okla.  
 McGregor, Amy..... Wheat Ridge, Colo.  
 Mendenhall, Greg & Theresa ..... Miles City, Mont.

## Load management connects the dots

With the numerous generation facilities, the different weather and maintenance scenarios, and different needs during different seasons, how does Basin Electric know what to produce, when to produce and what to buy?

“Load management is an essential tool that supports our all-of-the-above strategy,” Raatz says. “The generation resources can’t just produce the same amount of energy flat across the clock. We have to match what is needed with what we produce and purchase.”

Basin Electric’s load forecasts are planned well in advance of when the needs actually happen. The resource planning team plans for normal weather conditions for each season, while taking into consideration plant outages and other factors, then works with Basin Electric’s marketing team to help fill the gaps, whether that means dispatching the co-op’s gas plants, buying power from the market or selling excess power it is not using on the market.

Most people don’t realize what it takes to maintain reliability on the power grid. They just want the lights to come on when they flip the switch, or their cellphone to charge when they plug it in.

“Most people take electricity for granted, which really is a good thing, because it means we’re doing our job,” Raatz says. “An all-of-the-above approach provides the redundancies necessary to make sure our members have the reliability they need at the lowest possible cost.” ■

Myers, Marie..... Sidney, Mont.  
 Nabors Well Service ..... Sidney, Mont.  
 Orion Energy Partners LP ..... Denver, Colo.  
 Rademacher, Justin ..... Williston, N.D.  
 Rehbein, Josh ..... Sidney, Mont.  
 Severson, Vickie..... Huntley, Mont.  
 Thiel, Charles..... Bozeman, Mont.  
 Ulberg, Darwyn ..... Hot Springs, S.D.

# Today's Member Program seeks attendees

**L**ower Yellowstone Rural Electric Cooperative (LYREC) extends an invitation to the Today's Member Program that will be held in Great Falls, Mont., Oct. 5-6. This program is held in conjunction with the Montana Electric Cooperatives' Association (MECA) annual meeting. The registration deadline for the Today's Member Program is Sept. 10.

The Today's Member Program is an educational opportunity for members to learn about the history, operations and some of

the issues that affect cooperative members, along with the future of electric cooperatives. If you choose to attend, it requires a two-day commitment. LYREC will pay for the conference fees, hotel rooms, meals and mileage for the meeting.

This program is an important piece of what electric cooperatives are about - educating their members. If you are interested in learning more about this educational opportunity, please contact Jami at 406-488-1602. ■

# Stay safe in the field!

**A**griculture is the backbone of our country, and our livelihood greatly depends on the crops provided by American farmers. In addition to being one of the most labor-intensive professions, farming is also considered one of the most dangerous jobs in the U.S.

The hard work and exhaustive labor are tough, but rushing the job to save time can be extremely dangerous - even deadly - when farming near electrical equipment. ■



## Operating report

Year to date:	June 2019	June 2020
Total miles energized	2,104	2,127
Total number of meters	6,202	6,217
Kilowatt-hours sold	132,016,872	134,914,451
Revenue	\$13,863,787	\$14,249,097
Total expenses	\$13,608,592	\$13,686,509
Operating margins	\$759,674	\$1,360,735



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### TRUSTEES

Allen Thiessen .....	President
Greg Rauschendorfer .....	Vice President
John Redman .....	Secretary/Treasurer
Colin Gartner .....	Trustee
Dennis Schmierer .....	Trustee
Dennis Nelson .....	Trustee
Jim Vitt .....	Trustee

### EMPLOYEES

Jason Brothen .....	General Manager
Brenda Bond .....	Chief Financial Officer
Jami Propp .....	Member Service Manager
Kyle Kavanagh .....	IT Coordinator
Margo Zadow .....	Billing Coordinator
Pam Wilcoxon .....	Plant Accountant
Tiffani Hentges .....	Customer Service Representative
Melissa Buckley .....	Customer Service Representative
Chris Hillesland .....	Chief Operations Officer
Rich Gorde .....	Journeyman Lineman
Eric McPherson .....	System Controller
Kevin Goff .....	Operations Assistant
Kelly Keysor .....	Operations Manager
Aaron Eide .....	Journeyman Lineman
Bryan Franck .....	Journeyman Lineman
Jesse Obergfell .....	Journeyman Lineman
Blade Jankovsky .....	Journeyman Lineman
Tanner Roth .....	Journeyman Lineman
Ryder Peterson .....	Journeyman Lineman
Cole Jankovsky .....	Journeyman Lineman
Lee Delp .....	Journeyman Lineman
Preston Long .....	Apprentice Lineman
Brandon Mueller .....	Master Electrician
Mike Eberling .....	Mechanic
Dan Gieser .....	EMS
Lee Alvstad .....	Mechanic/EMS
Richard Tremblay .....	EMS
Bo Kindopp .....	GIS/Easement Technician
Corey Candee .....	Chief Information Officer
Jeremy Reese .....	Information Technology Technician
Edwin Gatzke .....	Line Locator/Groundsman
Justin King .....	Warehouse Supervisor

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