

BASIN TODAY

BASIN ELECTRIC POWER COOPERATIVE

| FALL 2023

**KEEPING THE
LIGHTS ON IN
RURAL AMERICA**



The Member Strong Panel at the 2023 Basin Electric Annual Meeting featured four Class C members from across the cooperative's service area. Pictured are Aaron Ruschy, vice president of Operations and Engineering at Iowa Lakes Electric in Estherville, Iowa; Brian Mills, CEO of Powder River Energy in Sundance, Wyoming; and Jason Brothen, CEO of Mid-Yellowstone Electric in Hysham, Montana, and Lower Yellowstone Electric in Sidney, Montana. Jordan Lamb, CEO of Oahe Electric in Blunt, South Dakota, not pictured, was also on the panel. Watch the Member Strong Panel and other presentations at basinelectric.com/about-us/annual-meeting.



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ON THE COVER

This view of the Northern Lights was captured by Vic Simmons at Curlew Lake north of New Underwood, South Dakota. Simmons recently retired in 2021 after serving as CEO and general manager of Basin Electric Class A member Rushmore Electric Power Cooperative for over 20 years. He was awarded the Cooperative Spirit Award at Basin Electric's 2023 Annual Meeting on Aug. 16.

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TODD BRICKHOUSE



POWER OF MEETING MEMBERS EYE TO EYE

This is my first Basin Today column as Basin Electric's interim chief executive officer, and I'd like to begin with thank you's. To our Board, for your counsel, encouragement, and candor – thank you. To Team Basin, there is not enough room in this column to express my full appreciation for the hard work you do – thank you. To our members, you are never shy about expressing what Basin Electric is doing well and where we can improve, and you always keep us focused on the member at the end of the line – thank you.

On a personal note, it was an eventful summer for the Brickhouses. As many of you know, my wife, Teg, and our daughters, Cara and May, stayed in Virginia during my first year at Basin Electric so Cara could finish her senior year in high school and Teg could wrap things up with her dental practice. In July, we sold our house in Virginia and got settled in a new home here in Bismarck. During the week of Basin Electric's Annual Meeting, Cara started her freshman year in college, and May started her junior year in high school. We are enjoying the adventure.

During my 15 months at Basin Electric, I've had a chance to meet many of our employees, and what I see in our people every day fills my cup. I've always felt that if you can do meaningful work with people you care about, then the glass starts off at least 75% full every day. We're fortunate with the work we get to do here and our great teammates.

It was a busy summer at Basin Electric. A number of generating facilities wrapped up their spring outages in time to serve summer loads. Others, including Dakota Gas, were busy preparing for their fall outages. While our management team was busy coordinating all this activity,

we were also fortunate to have a number of meetings with members.

In late June, we met with district managers. Doug Hardy, as chair of the Bylaws Committee — a committee comprised of member managers and directors — reviewed Bylaw matters in advance of Annual Meeting, including the Rate Stability Fund, commodity, and rate topics.

I extend my thanks to Corn Belt Power Cooperative, our Class A member, for hosting our July joint board meeting in Okoboji, Iowa. It was helpful to have a board to board, co-op to co-op discussion regarding the important decisions and tasks in front of our cooperatives. Then in the evenings, we ate terrific onion rings (just ask your Corn Belt Power colleagues) and clinked our glasses, learning more about this area of Basin Electric's service territory. It is the relationships that are formed and nurtured during meetings like this that show us the 'why' of what we do every day; we can learn who each other truly are in those areas outside of work.

These members told us about their perspectives on various rates, what makes up their load profiles, and the challenges they face as new potential members are deciding where to locate their businesses and facilities. They also told us about their kids, pets, and where they've taken their favorite vacations.

In July, our team hosted the Member Managers Conference in South Dakota. We value these meetings because they allow our team to present on the important initiatives we are working on for the cooperative family, and it's an

opportunity for managers to ask frank questions among colleagues and provide us direct feedback on our efforts.

Providing reliable and affordable electricity in a safe and environmentally responsible manner is a noble calling, and doing so on behalf of member-owners elevates our sense of purpose and drive. It was wonderful to celebrate our shared mission with our members and teammates at this year's Annual Meeting.

Basin Electric's Annual Meeting is an event unlike most others in our nation. Our cooperative spans nine states covering about a half-million square miles, so our Annual Meeting is an opportunity for our far-flung cooperative family to come together, engage, and find common ground on a large number of substantive issues. Someone described our Annual Meeting to me as a "gratifying spectacle." I appreciate this description because it elicits a chuckle and allows everyone to find their own thread of truth in the statement. For those of you who were able to join us, we are grateful for the time you invested to attend.

By the time you are reading this, we will have hosted our fall District Managers meeting and will be preparing for a similar meeting in December as well as our Member Managers Conference in February. We look forward to seeing you and wish you a wonderful holiday season.



TODD T. BRICKHOUSE
Interim CEO and general manager

Basin Electric reaches new all-time member billing peak in August

Basin Electric set a new all-time high member billing peak.

J.P. Maddock, Basin Electric manager of Regional Transmission Organization and Delivery Services, said final billing determinants completed for August 2023 show Basin Electric hit a new all-time-high member billing peak of 4,689 megawatts (MW), surpassing the December 2022 all-time member billing peak by about 10 MW. This summer’s all-time peak is about 300 MW higher than last summer’s peak.

It’s more common for Basin Electric to set all-time peaks in the winter rather than summer, according to Maddock, but with the changing load profile across the cooperative footprint, summer all-time billing peaks will likely become more common.

 <https://bit.ly/Aug23-peak>



Concrete being poured near Dry Fork Station.

Construction begins on carbon capture pilot project at Wyoming ITC

Membrane Technology and Research (MTR), a tenant at the Wyoming Integrated Test Center located at Basin Electric’s Dry Fork Station, has begun construction on its large-scale carbon capture pilot project, part of a program through the U.S. Department of Energy.

MTR’s project had three large concrete pours from Sept. 13-15 amounting to a combined 1,870 cubic yards, or 188 truckloads of concrete.

MTR is on schedule to have construction complete late spring of 2024. Commissioning will be held during the summer, and testing will begin in the fall of 2024. Testing is set to conclude by the end of summer 2025.

 <https://bit.ly/MTR-construction-begins>

Basin Electric takes next step in exploration of new West-side electricity market

Basin Electric has signed an agreement with the Southwest Power Pool (SPP) to continue the process of exploring membership in a West-side regional transmission organization (RTO). Basin Electric is one of seven western utilities to sign the agreement, including Class A member Tri-State Generation and Transmission Association.

Other western entities have a deadline of Mar. 1, 2024 to signal their interest in participating in the market by March 2027. Basin Electric has until early 2026 to make a final decision about joining the new RTO.

 <https://bit.ly/BE-SPP-West>

Directors approve Basin Electric and subsidiary financial forecasts for 2024-2033

The Basin Electric board of directors approved the 10-year financial forecast for 2024-2033 at its August meeting.

On a consolidated basis, the forecast includes spending of \$5.6 billion for capital expenditures over the 10-year period. Margin sensitivity analysis indicates a consolidated margin of \$150 million is required to maintain certain targeted financial metrics. “We set that target so we can maintain financial ratios that support ‘A’ credit ratings. The estimated impact on rates is rate increases starting in 2026. A consolidated margin necessitates member rate increases starting in 2026,” Darla Jensen, Basin Electric manager of financial reporting and planning, said.

 <https://bit.ly/24-33-FF>

Basin Electric participates in event commemorating first-ever large-scale solar purchase

Basin Electric participated in National Grid Renewables’ “Solar Does Good” community event July 27 in New Underwood, South Dakota. The event was held at the site of the future Wild Springs Solar, a 128-megawatt solar project of which Basin Electric will purchase 114 MW of its output, marking the first time in Basin Electric’s history that the cooperative will purchase large-scale solar generation to serve its members.



The Wild Springs Solar project covers roughly 2,000 acres.

Wild Springs Solar, which is owned and operated by National Grid Renewables, is located in the service area of Basin Electric Class C member West River Electric Association. Construction of the project began in January and it is scheduled to begin operation in the spring of 2024. Once completed, it will be the largest solar project in South Dakota.

 <https://bit.ly/Solar-does-good-event>

space for technology developers to evaluate their technologies using actual coal-based flue gas from an operating coal-fired power plant, Dry Fork Station.

“We believe and advocate for an all-of-the-above energy strategy, which means utilizing all fuels that are practical, affordable, and reliable,” said Chris Baumgartner, Basin Electric senior vice president of Member & External Relations. “At the cooperative, we have integrated many technologies over the years — we have incorporated renewables, more natural gas, and we continue to use hydro where it’s applicable. But we always come back to the use of coal and how important it is to continue to provide reliable energy for our members. Providing reliable, affordable energy helps millions of people. It changes and enhances lives; that’s the business that we’re in.”

 <https://bit.ly/CCUS-research>

Carbon capture research technology completed at Integrated Test Center

JCOAL and its partner Kawasaki Heavy Industries, along with representatives from University of Wyoming, Wyoming Integrated Test Center (ITC), and Basin Electric, held a ceremony Oct. 9 to mark the construction completion of their solid sorbent capture technology at the ITC adjacent to Basin Electric’s Dry Fork Station near Gillette.

One of only a few facilities in the world, the ITC is a carbon capture and utilization test center that provides



Ribbon-cutting for the new carbon capture technology facility.

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A groundbreaking ceremony for Pioneer Generation Station Phase IV was held on Sept. 11. Pictured at the ceremony are, from left, Travis Fucich, Burns & McDonnell project executive and engineering director; Jeremy Mahowald, Upper Missouri Power Cooperative general manager; Todd Brickhouse, Basin Electric interim chief executive officer and general manager; North Dakota Lt. Gov. Tammy Miller; Gavin McCollam, Basin Electric senior vice president and chief operating officer; and Chris Baumgartner, Basin Electric senior vice president of Member and External Relations.



INVESTMENT FROM THE GROUND UP BASIN ELECTRIC BREAKS GROUND ON GENERATION FACILITY TO POWER A GROWING MEMBERSHIP

By Tracie Bettenhausen

As a commitment to the delivery of reliable and affordable electricity, Basin Electric is building about 580 megawatts (MW) of natural gas generation near the existing Pioneer Generation Station northwest of Williston, North Dakota. The project is referred to as Pioneer Generation Station Phase IV (PGSIV), and it's Basin Electric's largest single-site electric generation project to be built in North Dakota in 40 years.

The natural gas-fueled, dispatchable generation facility is an important component to Basin Electric's all-of-the-above energy portfolio, which uses natural gas, coal, wind, recovered energy, fuel oil, market purchases, and soon solar, to serve its growing membership.

The project represents an investment of about \$800 million.

Todd Brickhouse, Basin Electric interim chief executive officer and general manager, says the five cooperatives who serve the Bakken region have invested more than \$1.1 billion over the past decade to ensure reliable, affordable power in this region. "Similarly, Basin Electric has invested just over \$1.1 billion in the region over the last 15 years. If you look at what is being built at Pioneer Generation Station and include the major transmission infrastructure we are currently planning to build, Basin Electric will invest another \$1.3 billion in the Bakken region in the next few years," Brickhouse says. "Projects of this scale couldn't be accomplished without the cooperation of citizens who surround these localities. We thank the landowners who endure construction in this region every day as we complete these vitally important projects."

INVESTMENT IN RELIABILITY



580 MEGAWATTS (MW)

Serves nearly 500,000 homes



110 MW TOTAL

Six reciprocating engines



235 MW EACH

Two simple-cycle combustion turbines



15 MILES

345-kilovolt transmission line

Construction began on the facility addition in March. Burns & McDonnell is the engineering, procurement, and construction lead on the project. More than 150 contract workers are on site, and there will be 250 workers on site during the peak of construction.

The reciprocating engines and one combustion turbine will be operational earlier in 2025, followed by the second combustion turbine. When operational, the facility will have employees on site 24 hours a day.

Gavin McCollam, Basin Electric senior vice president and chief operating officer, says Basin Electric intends to keep its promise of being a good neighbor as this generation facility grows. “The people who live and work in this area are our members, and it’s our obligation to be good neighbors,” McCollam says. “When this project is complete, the entire Pioneer Generation Station site, with more than 800 MW of dispatchable generation, will be the largest natural gas-based plant in a radius that is bounded by Milwaukee, Wisconsin, to the east;

BUILDING A STABLE FOUNDATION

Though the official ceremony for groundbreaking was in September, ground was truly broken at PGSIV in March.

“We dug down about six feet to the floor of what we call the ‘bathtub,’ which is basically bottom of foundation, bottom of pipe, and then built up from there,” says Darrell Slavick, Basin Electric construction coordinator on the project.

Auger cast piles were installed to a depth of 45 to 65 feet, which will support the weight of turbines that weigh several hundred thousand pounds. After underground work include piping, duct banks, and conduit is installed, trenches are filled in. “Finishing that work adds a level of safety because until that work is complete, you have those hazards, and work around the safety fencing and maintaining that fencing in the wind and rain,” Slavick says. “It’s good to get the trenches filled and everyone working on good, stable ground.”

Work in the late summer and fall has been focused on the steel structure and getting it enclosed with sheeting. “That gives crews a place to work in the winter when the cold and wind come around, so we have a good, sustainable place to keep working,” he says.

The Wartsila reciprocating engines began arriving onsite in early November after taking a trip from Finland, coming through the Duluth, Minnesota, port and then traveling by rail to Williston. The engines will be re-assembled on site throughout fall and early winter.

Watch video online to see what it means to be “making shadows” on site.



<https://bit.ly/PGSbuild>



This structure is the engine hall, which will house the reciprocating engines; the concrete piers in the foreground will support the exhaust system for the reciprocating engines.

Denver, Colorado to the south; Salt Lake City, Utah to the southwest; and the Pacific Ocean to the west; a proud addition to the Basin Electric fleet, and a crown jewel of natural gas-based generation.”

Load forecasts show member cooperatives in the Bakken region will require more electricity by 2025. According to the 2023 Basin Electric Member Load Forecast, 92% of Basin Electric’s distribution cooperative members are growing. In western North Dakota and eastern Montana, that growth is due to economic development related to oil and gas, and the ancillary services that go along with this progress.

Jeremy Mahowald, Upper Missouri Power Cooperative general manager, says Upper Missouri Power, a Basin Electric Class A member, receives 97% of its power from Basin Electric. “Within our footprint is mostly agriculture, but we also serve the Bakken which is very energy-intensive. Our electricity needs are day and night, every day of the year, and our power needs continue to grow,” Mahowald says. “It’s critical that we have facilities like Pioneer Generation Station Phase IV to support our region. ... The grid stability we get with a facility like Pioneer really can’t be beat.”

PSST! GUESS WHAT EMPLOYEES ARE SAYING ABOUT BASIN...

Basin Electric’s employees are our most important asset. That’s why we work hard to retain our employees and attract new talent.

Why do long-term and new employees continue to choose Basin Electric? Find out on our LiveWire blog!

 <https://bit.ly/LiveWireBlog>

ENERGIZING EDUCATION

AT BISMARCK STATE COLLEGE AND MITCHELL TECHNICAL COLLEGE

By Jenifer Gray


With the surge of economic and technological development, along with a growing population, energy demands are expected to increase by 50% over the next 25 years. Basin Electric is committed to providing reliable and affordable electricity to its members for many years to come, so ensuring there is a workforce that can carry out that task is critical. As a result, the cooperative works in partnership with two of the top colleges in its service area, Bismarck (North Dakota) State College and Mitchell (South Dakota) Technical College, to provide cutting-edge programs in the field of energy generation, maintenance, transmission, and many areas in between, allowing them to attract and fill the need for the skilled professionals that will ensure the cooperative will continue to grow and thrive.

A leader in polytechnic education

The energy industry plays an important role in the economy of Basin Electric's service area by providing thousands of jobs in its nine-state area. Bismarck State's National Energy Center of Excellence (NECE) provides the education and training necessary to meet the needs of this ever-growing industry both in North Dakota and across the country.

Troy Tweeten, Basin Electric senior vice president of Operations and a representative on the Bismarck State Polytechnic Business and Industry Leadership Team, says, "BSC plays a big role in developing energy programs to meet the needs of the electrical energy and oil and gas industries in North Dakota and beyond."

The NECE at Bismarck State offers a wide range of in-demand, hands-on energy programs including everything from Power Generation Technology to a Lineworker program. The Power Generation Technology program prepares students for jobs in power generating facilities, providing them with the foundation they need to understand equipment and plant operations. The Electrical Transmission Systems Technology program



Mike Puetz, director of MTC's Power Line program, shows a student how to properly use a handline. This program is among the first programs campus-wide to reach its enrollment capacity each year and consistently has a waitlist of hopeful students.



The Lineworker program at Bismarck State College is taught at the NDAREC training center northwest of Mandan, North Dakota. It is the only program of its kind in North Dakota.

prepares students to keep the transmission of electricity reliable and affordable for consumers and teaches them how to restore power through directions given to field crews.

The Energy Service and Renewable Technician program teaches students the fundamentals of the renewable energy sector. This program teaches technical processes through hands-on activities and theory. Graduates are prepared to work on solar and wind projects, as well as other areas of renewable energy.

The NECE also has a Nuclear Power Technology program approved by the Nuclear Energy Institute, which encourages safe utilization and development of nuclear energy. Students learn the skills required for many positions in the nuclear industry and includes access to a full-fidelity nuclear simulator developed specifically for Bismarck State.

The Lineworker program at the NECE is the only one of its kind in North Dakota and trains students to become skilled lineworkers. The program is taught at the North Dakota Association of Rural Electric Cooperatives (NDAREC) training center northwest of Mandan, North Dakota, where students get hands-on training

in all facets of power line construction and equipment operation and maintenance.

“BSC has designed our programming and curriculum in a structure that allows for responsive, timely updates and adjustments to meet the changes happening within the energy sector,” says Alicia Uhde, Bismarck State Dean of Automation, Energy, and Advanced Technologies. “This ensures that students are learning relevant and up-to-date skills.”

Courses are taught on campus, online, or a combination of both. Depending on the program, a limited number of students can enroll each semester.

Hands-on training on cutting-edge technology

Mitchell Tech is known for its commitment to providing high-quality energy education. With an emphasis on hands-on training, cutting-edge technology, and industry partnerships, Mitchell Tech offers a range of programs that prepare students for successful careers in the energy industry. “Our major goal is to supply companies with quality workers,” says Mike Puetz, director of Mitchell Tech’s Power Line program. “The fact that 80% of all workers in the energy field in South Dakota are graduates of Mitchell Tech is a good indicator that we are meeting that goal.”

Mitchell Tech offers the only Power Line program in South Dakota, which teaches students the application and theory of the distribution and transmission of electrical power. “MTC was one of the very first schools in the country to offer a power line program,” Puetz says. “When it opened in 1975, there were 32 students and two instructors. This year, six instructors are providing instruction to 115 students, with students learning in both controlled and variable climates.” Part of the program requires students to complete outside lab work, including the installation of transformers and metering for overhead and underground distribution systems. The program is among the first programs campuswide to reach its enrollment capacity each year and consistently has a waitlist of hopeful students.

Mitchell Tech also has a Wind Turbine Technology program that teaches students the basics of turbines, hydraulics, and electronic networks which allow systems to communicate. Mitchell Tech is one of the few schools in the nation to have an operational 1.5-megawatt wind

turbine. Students are able to get hands-on experience as they climb the turbine, which is located at Crow Lake Wind Project near White Lake, South Dakota. Crow Lake Wind is a Basin Electric-owned wind project and the largest wind project owned solely by a cooperative in the United States.

Other energy programs offered at Mitchell Tech include Electrical Utilities and Substation Technology, with access to a live electrical substation to provide hands-on training and experience with the same type of equipment a student might encounter in the field, a Natural Gas Technology program, and a Utility Technician program. All programs are taught by instructors who have real-world experience in their fields and can offer the latest and most valuable training available.

Looking to the future, Mitchell Tech has plans for an underground component of the Power Line program. "We're hoping to construct a 34,000-square-foot building that will include a 23,500-square-foot indoor underground lab, where students can practice their trenching and wire-pulling skills without having to contend with ground warmers during the coldest months of the year," Puetz says.

Building relationships and providing support

Basin Electric understands the importance of these programs and works hard to foster relationships and provide support for them. "Basin Electric is

an instrumental partner in the success of BSC programming," Uhde says. "They've supported us through donations and scholarships, job shadowing, internships, and job opportunities, and by sharing their industry expertise and networking; Basin Electric plays an important role in the success of these programs."

At Mitchell Tech, Basin Electric shows its commitment and appreciation of the Energy Division by the number of employees they hire from its pool of graduates. "These relationships are mutually beneficial," Puetz says.

Energy programs play a crucial role in preparing students for rewarding careers in the energy industry. The programs offer a diverse range of options, from traditional fossil fuel generation to cutting-edge renewable energy technologies. "The future of energy production is evolving as our nation's energy needs grow and its interest in green energy expands," Puetz says. What sets the NECE and MTC apart is their commitment to hands-on training, industry collaboration, and safety, ensuring that graduates are well-prepared to meet the ever-changing challenges of the energy industry.

As the energy landscape continues to evolve and electricity needs across the country grow, the demand for skilled professionals in this field is as important as ever and will never go away. Energy programs at NECE and Mitchell Tech not only provide students with a strong foundation but also contribute to the workforce, helping to power the nation's future.



The Power Generation Technology program at Bismarck State's National Energy Center of Excellence prepares students for jobs in power generating facilities, providing them with the foundation they need to understand equipment and plant operations.

CHANGES APPROVED TO BYLAWS, RESOLUTIONS AT 2023 ANNUAL MEETING

By Angela Magstadt

A change to Basin Electric's bylaws was approved at the 2023 Annual Meeting of the Membership.

The amendment decreases the amount Basin Electric can hold as deferred revenue from \$500 million (which was a temporary amount set during the 2022 Annual Meeting) to \$415 million and requires that deferred revenues must now be used within a period of seven years (decreased from 10 years) after the revenue is initially collected and deposited.

The Bylaw Review Committee, which is made up of one manager and one director from each district, reviews proposed amendments to the bylaws and provides recommendations to the membership. The committee met virtually in May to discuss the amendment. Members of the committee also re-elected Doug Hardy, CEO of Central Montana Electric Power Cooperative, as chairperson at that time. The committee met again in June and voted to recommend the revision to the membership. Basin Electric members voted to approve the bylaw change on Aug. 16.

"The rate stability fund was one of the topics discussed during our annual visits with ratings agencies in New York early this year," said Basin Electric Board President Wayne Peltier at the Annual Meeting. "They see the fund and the long-term all-requirements contracts we have with our members as major strengths, and as a result the

agencies reaffirmed our ratings. In fact, Moody's went one step further and upgraded our outlook from stable to positive. Why does this matter? It helps lower the cost of borrowing money, which makes building generation and transmission more affordable for our cooperative family."

The membership also approved minor edits and updates to the cooperative's resolutions at the Annual Meeting. The edits were recommended for approval by members of Basin Electric's Resolutions Committee at their meeting on June 8. The committee also re-elected David Sigloh, director from Upper Missouri Power Cooperative, as its chairperson at that time. The committee met again in August prior to the Annual Meeting to address any additional resolutions members brought forth, but there were none.

The Resolutions Committee is made up of directors from each of Basin Electric's districts and a member of the co-op's board of directors.

"The resolutions and bylaws committees perform an essential role, regularly reviewing the documents that govern and direct the cooperative's activities," says Chris Baumgartner, Basin Electric senior vice president of Member and External Relations. "They are another prime example of how Basin Electric engages with its members to ensure that all voices are heard."

2023 RESOLUTIONS COMMITTEE



Pictured are members of Basin Electric's Resolutions Committee, including: Dwight Rossow, Mark Brehm, Philip Habeck, David Hansen, Gary Bachman, Louis C. Reed, David Sigloh, Dave Onken, Tom Wagner, and Doug Hardy.

- Gary Bachman**, East River Electric Power Cooperative
- David Hansen**, L & O Power Cooperative
- Mark Brehm**, Central Power Electric Cooperative
- Louis C. Reed**, Northwest Iowa Power Cooperative
- Barbara Walz**, Tri-State Generation & Transmission Association
- Alan Johnstone**, Central Montana Electric Power Cooperative
- Dwight Rossow**, Rushmore Electric Power Cooperative
- David Sigloh**, Chair, Upper Missouri Power Cooperative
- Deborah Erickson**, District 9
- Philip Habeck**, Members 1st Power Cooperative
- Dave Onken**, Corn Belt Power Cooperative
- Tom Wagner**, Basin Electric

2023 BYLAW REVIEW COMMITTEE

- James Ryken and Bob Sahr**
East River Electric Power Cooperative
- David Hansen and Curt Dieren**
L & O Power Cooperative
- Mark Brehm and Tom Meland**
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Tri-State Generation & Transmission Association
- Russ Bloom and Doug Hardy**
Central Montana Electric Power Cooperative

- Dwight Rossow and Kory Hammerbeck**
Rushmore Electric Power Cooperative
- David Sigloh and Jeremy Mahowald**
Upper Missouri Power Cooperative
- Casey Wells and Kevin Mikkelsen**
District 9
- Jim Collins and Bill Mertz**
Members 1st Power Cooperative
- Dave Onken and Ken Kuyper**
Corn Belt Power Cooperative



Pictured are members of Basin Electric's Bylaw Review Committee, including: Louis C. Reed, Dave Onken, Ken Kuyper, Doug Hardy, Kory Hammerbeck, Jim Collins, David Sigloh, David Hansen, Bob Sahr, Kevin Mikkelsen, Matt Washburn, and Bill Mertz.

Torben Baumann, production manager for HiPer Ceramics, stands in the company's Spirit Lake location that produces materials used for prosthetics, such as hip implants.



FROM GERMANY TO IOWA

IOWA LAKES ELECTRIC MEMBER IS PLEASED WITH THE CO-OP'S RELIABILITY AND AFFORDABILITY

By Angela Magstadt

About five years ago, Torben Baumann and his wife, Betti, moved over 4,500 miles from Germany to Spirit Lake, Iowa, with their young son. "We moved here with, I think, two suitcases – nothing else – and into my wife's grandma's basement for the first year," Torben Baumann says.

The Baumanns moved to Iowa to start the second location of HiPer Ceramics, a business Betti's parents started in Germany in 1995. Back then, the business exclusively produced ceramic parts for industrial applications. "Whenever you want to use parts in an environment that is either in a high-temperature or corrosive environment, advanced technical ceramics is the material of choice because of its superiority over metals in those situations," Baumann says. His parents-in-law later formed HiPer Medical, which uses advanced technical ceramics in the manufacturing and development of ceramic parts to use in prosthetics like hip implants.

HiPer Ceramics' Spirit Lake location produces the materials for those implants. "Currently, we're making

the ceramic powders that are used at our German plant to process the finished product," Baumann says. "And, we're planning on expanding the business, having some more steps of the whole process here in the United States."

One might ask why a business would move halfway across the world to set up shop. And why Iowa? Baumann says there are quite a few reasons. One is that Betti's family is from Iowa, so there are social structures there. And, since it is a family-operated business, having extended family to talk to and help out was a big factor.

Personal reasons played a big part in their decision to make Iowa the location for the American branch of HiPer Ceramics, but the move was ultimately made due to the increases in cost and the decreasing reliability of electricity in Germany over time. Baumann says high-quality, reliable electricity is a necessity for the business, and Germany's decision to transition away from nuclear and coal to rely almost solely on renewables and natural gas has caused major reliability issues.

“The plant in Germany is currently experiencing spikes in frequency and voltage that cause sensitive electronics to shut down in the middle of the process, causing a lot of damage, and we’re wasting a lot of material because of it,” Baumann says. “It is mainly caused by the lack of thermal power plants at this point, because we need large rotating mass and a lot of inertia to keep the frequency and the voltage level free of spikes. These spikes are causing many problems in Europe.”

Since Baumann has moved to Iowa, natural gas prices across Europe have become volatile due to the war in Ukraine, and the cost of electricity has been up to three times more in Germany than he is paying in Iowa. He says the electricity the plant receives from Basin Electric Class C member Iowa Lakes Electric Cooperative is both reliable and affordable, and he is pleased with the service he receives.

In addition to the reliability and affordable cost, Baumann says he’s been very happy with the degree of personal relationships and support his business gets from Iowa Lakes Electric, saying Jed Skogerboe, Iowa Lakes Electric’s manager of Business and Community Development, has always been very responsive and helpful and even introduced his family to the community.

“We work closely with our members to understand the issues that are important to them,” Skogerboe says. “For HiPer Ceramics, it is ‘no blinks.’ If there is a blink during the manufacturing of raw material to be shipped to the parent company in Germany it creates a significant monetary loss, approaching six-figures. Reliability is key for this member.”

Five years and another son and daughter later, Baumann says he and his family are happy to be in Iowa. “It’s a nice area. Germany is pretty much the size of Iowa and Minnesota combined, while having a population of 84 million. Iowa and Minnesota combined have, I think, under 9 million, so there’s a lot less people in the same space. That’s a big difference,” he says. “Not many people in Europe think about the Midwest or Iowa as the place to go, but there is a certain way of life that we really enjoy. This is a great community with friendly people with good work ethics. We’re happy to be here.”

IOWA LAKES ELECTRIC AT A GLANCE



Began as four independent co-ops about 85 years ago



Headquartered in Estherville, Iowa



Serves over 13,000 farms, homes, businesses, and industries in northwest Iowa



Diverse load consists of 63% commercial industrial and 37% residential, including businesses such as:

- » Manufacturing
- » Poultry including eggs and turkeys
- » Pork and byproduct processing
- » Ethanol
- » Food processing
- » Medical
- » Limestone quarry and processing
- » A manufacturer of convenience store foods including pizza crusts (more than 1 million every month) and sandwiches
- » A medical manufacturing company
- » A “residential” account that looks like a dairy farm, but with neighboring garage space and underground tunnels where they produced munitions during World War II



Antelope Valley Station often receives large shipments, so warehouseperson Julie Amsden uses a forklift to unload those items and move them to their proper place.



HOW WE SERVE... WITH THE WAREHOUSE TEAM

By Kalli Senske

When you think about the essential roles needed to keep a plant running, a few jobs might pop in your head. Perhaps an electrician or welder, or maybe a mechanic, coalman, or engineer.

One important role that shouldn't be overlooked is a warehouseperson.

Warehouses that contain parts and products necessary for the facilities to run are located at many of Basin Electric's larger generation facilities and several of its transmission outposts. The warehouse at Antelope Valley Station is one such location that fulfills requests for every tool, part, or product used at the facility. Mechanics, electricians, even contractors – every person in the entire workforce goes to the warehouse to get whatever they need to do their job.

"Everything needs maintenance, especially when parts are moving 24 hours a day. Someone might come to us and need parts to repair a motor or pump," Julie Amsden, a warehouseperson at Antelope Valley Station, says. "We also hand out a lot of tools, like slings and chains. And it seems like every day we're giving out a gasket or two. It's like a huge store."

The warehouse even distributes items you may not think about, like cleaning supplies and toilet paper.

The tool room window at the Antelope Valley Station warehouse is where everyone comes to pick up the materials they need to successfully do their work.

"The four of us in the warehouse rotate jobs – sometimes we receive inventory and sometimes we work at the

window. Working at the window is my favorite because I get to give people their parts so they can keep the plant running," Amsden says. "It's a customer service role, really. I fill their work orders so they can get back out to the plant faster. I like getting to see everyone, smile, and tell them to have a good day."

When it comes to deciding what to keep on hand, the warehouse team relies on input from the maintenance planners.

"They (planners) know what jobs are coming up or when there's going to be an outage, so they put in a material request. Then the Procurement team at Headquarters approves that, and the items start getting delivered to us," Amsden says.

The warehouse receives shipments all day long. When a shipment arrives, the team verifies they received the correct products and inspects them for any damage. Everything has a specific location, so items are put away and then entered into the computer system so there's an accurate inventory of what is on hand.

"We also manually count all of the items each year to make sure what the computer says is accurate, because someone might have borrowed something and it wasn't returned. Things like that can happen, and with everything coming and going, we want to make sure stock is available to fill orders," Amsden says.

The Audit team from Headquarters also audits the warehouse as a second measure of keeping the inventory count accurate.

After the new shipment has been entered into the system, it's time to start unloading. "A lot of it needs to be unloaded with a forklift, and we're careful to make sure we're using the right equipment to lift it because we receive some huge materials. If the items are really big, we'll have the mechanics or electricians come help load it. Some large items are even loaded in the location where they're headed instead of coming to the warehouse, like lube oil coolers, rotors for turbines, and generators that are loaded on the turbine floor or track bay," Amsden says.

A particularly busy time for shipments is during outages when even more freight is received, so team members from other areas may lend a hand to get everything unloaded, sorted, and put where it belongs.

Amsden added that on top of receiving items, her team also ships items, like a motor that needs to be sent away for repair.

Having so many items to store takes up a significant amount of space. Antelope Valley Station has four warehouse buildings that are full, and Amsden says they could probably fill a fifth. Other items, like six- and 12-inch pipes, are stored in designated areas outside.

The warehouse is typically open from 7 a.m. to 3:30 p.m. Monday through Friday with extra hours put in during an outage, but the team also pitches in when something important occurs that could affect reliability at the plant, even if it's during off-hours.

"If something happens after 3:30 or on the weekends, they'll just call and one of us will come open the store to get them their parts, and we'll stay as long as needed," Amsden says.

When this happens, a warehouseperson may come to the plant for something quick, but other times it takes much longer.

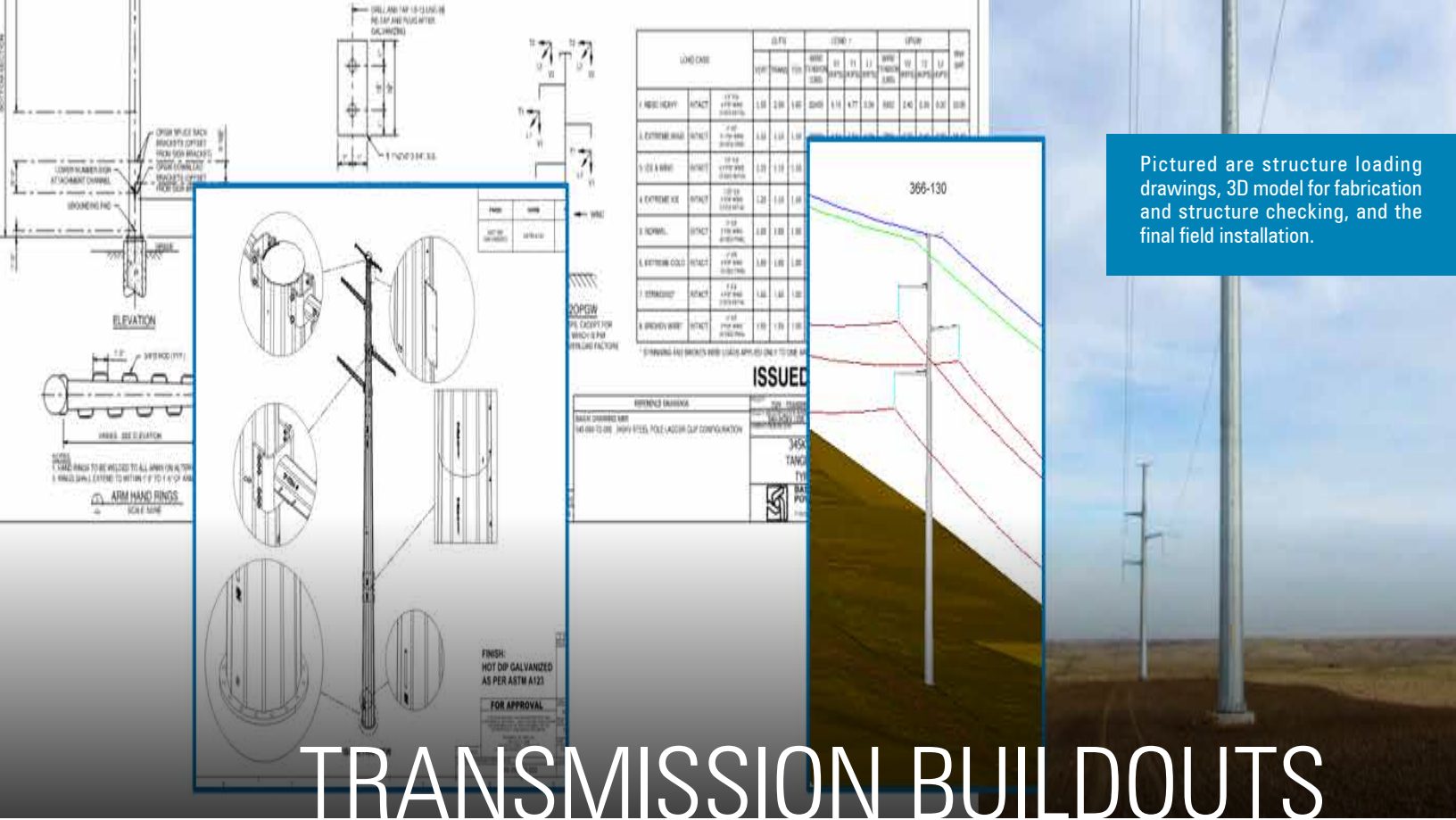
"We could get called out here on a Saturday and just need to get a part for the electricians, then wait while they do their job in case they need something else, and then go home. Other times, we get called out and are here all day or even all night," Amsden says. "It could be something simple like a gauge not working, but if it's something like a feeder belt or bottom ash problem, it could be a really big deal. It might even need to continue through the next morning with another crew. And we need to be here to make sure they can get the parts they need to get the job done safely and keep the plant reliable."

The warehouses at Basin Electric's generation facilities play an important role for the facilities and for the entire Basin Electric membership.

"Without the right equipment, our team at AVS (Antelope Valley Station) couldn't do their jobs and wouldn't be able to provide the reliable power that the plant generates," Amsden says. "We have to keep power going to the members, and we're a huge part of making that happen."

Learn about the ways other employees at Basin Electric serve our members in the "How We Serve" series.

 <https://bit.ly/LiveWireBlog>



Pictured are structure loading drawings, 3D model for fabrication and structure checking, and the final field installation.

TRANSMISSION BUILDOUTS ENSURE CONTINUED RELIABILITY

By Jenifer Gray

The demand for electricity is constantly changing, with peaks and valleys occurring throughout the day. Transmission lines play a pivotal role in getting electricity from where it's generated to where it's used. Without a well-connected and robust transmission network, electricity can't efficiently flow to where it is needed most.

As energy needs continue to grow in Basin Electric's service area, so does the need for additional generation and transmission resources. Building generation and transmission infrastructure is crucial for a variety of reasons, and it plays a vital role in ensuring a reliable, efficient, and sustainable electric system.

To meet its growing needs, Basin Electric is on track to energize nearly 350 miles of high-voltage transmission line by the end of 2027, which means several transmission projects are either being constructed or are scheduled for construction. "Currently, Basin Electric has a large high-voltage transmission buildout in North Dakota, and we are working closely with our right-of-way (ROW)

and permitting group on transmission line routing and design," says Bobby Nasset, Basin Electric supervisor of Civil Engineering.

Once a transmission project is defined with a start and end point, map databases of the project area are created. The design team develops preliminary alignments that meet state routing requirements, avoiding things like homes, existing utilities, cultural areas, and wetlands.

"The straightest and shortest line is the most economical as long as the terrain works for a power line," says Shane Vasbinder, Basin Electric senior civil engineer. "Every time we have to add angles or length, the costs go up." The design team then works with landowners to develop routes that minimize impact to their operations.

With each new project comes challenges. "One design challenge I worked on for these lines is the new Southwest Power Pool electrical loading requirement," Vasbinder says. "At the 345-kV voltage, transmission lines are now required to have at least 3000 amps. Due

to this, we had to evaluate new conductors that could meet the power delivery requirements.”

It takes many hours and manpower to construct a transmission line from start to finish, and nothing gets built without a plan. “You need a design to get the permits, to get the ROW, to create the construction drawings, to order material, and to get the line constructed,” Vasbinder says.

To get an idea of what goes into each project, Nasset shares a detailed update on the cooperative’s current high-voltage transmission projects.

Roundup-to-Kummer Ridge

Roundup-to-Kummer Ridge is a 345-kilovolt (kV) transmission project needed to support load growth in western North Dakota. “We have a handful of remaining landowner negotiations to complete easement acquisition,” Nasset says. “The design is complete, and we have submitted an Environmental Assessment to the Bureau of Indian Affairs for the segment of the line that crosses Fort Berthold Indian Reservation Trust land. We have ordered steel pole structures and conductor and are currently reviewing fabrication details for the project to facilitate early summer delivery.” The project team has met with the United States Fish and Wildlife Service to discuss the construction plan and sequence and how to mitigate and reduce any impacts to several endangered species, including the northern long-eared bat and the Dakota skipper butterfly. All survey permissions have been acquired, and staff are working on utility crossing agreements. The North Dakota Public Service Commission (PSC) application will be submitted this fall.

Transmission for Pioneer Generation Station Phase IV

Pioneer Generation Station (PGS) Phase IV will generate about 580 megawatts (MW) of natural gas generation near the existing Pioneer Generation Station northwest of Williston, North Dakota. In addition to the generation portion of this project, it includes 15 miles of 345-kV transmission line. “We are finishing up on ROW acquisition for the 14-mile transmission line,” Nasset says. “The PSC permit for the generation side of the project was received in February. For the 345-kV PGS-to-Judson transmission line, our plan is to issue the PSC permit application this fall. All material has been ordered and we bid construction in September, with the contract award expected in November or December.”

Leland Olds Station-to-Tande

Leland Olds Station-to-Tande is a 345-kV, 175-mile transmission project needed to enhance transmission load-serving capability in North Dakota and to mitigate regional reliability constraints. The project includes a new 345/115-kV substation and the reconstruction of the existing Leland Olds Station 345-kV substation. Basin Electric continues to meet with landowners to discuss routing options and has developed a preferred route. The next step will be to begin ROW acquisition and negotiations with landowners. “We expect the route to have several modifications as we finish up the detailed design and landowner coordination,” Nasset says. “Biological and archeological surveys are ongoing to facilitate the final design and permitting.” The project goal is to submit a PSC application late next spring to support the project schedule, which is scheduled to start construction in early 2025 and energize by November 2026.

Tande- and Wheelock-to-Saskatchewan

The Tande- and Wheelock-to-Saskatchewan projects consist of two 230-kV transmission lines that are needed to enhance the export and import capabilities between the United States and Canada. This cross-border energy exchange can provide access to a wider range of energy resources, enhance energy security, and improve grid stability. “The project team continues to meet monthly with SaskPower for coordination at the border crossing for the transmission lines,” Nasset says. “We have preliminary routes and alternatives for both circuits, Tande-to-Saskatchewan and Wheelock-to-Saskatchewan.” The project team has been working on assembling an application for the Presidential Permit to the U.S. Department of Energy (DOE) for the border crossing permit, which will start the federal permitting process. “We met with the DOE at the end of the September to review the draft application,” Nasset says. The project is scheduled to begin construction in 2026 and energize in October 2027.

Building additional generation and transmission infrastructure is essential for maintaining a reliable, efficient, and sustainable generation and transmission system. These buildouts serve as the backbone of the energy distribution system, ensuring electricity remains accessible, stable, and reliable for the evolving needs of Basin Electric’s membership.



Basin Electric linemen Erick Nelson, Bryce Leavitt, and Lance Ottmar prepare to be lifted to an energized 345-kV transmission line as part of this fall's live line training.

FORMING A BOND

BASIN ELECTRIC LINeworkERS FORM BONDS ON ENERGIZED TRANSMISSION LINES AND WITH EACH OTHER DURING LIVE LINE TRAINING

By Angela Magstadt

Like cars and houses, transmission lines require routine maintenance to keep them in good working order. But when was the last time your electric co-op sent you a notice that your electricity would be turned off so lineworkers could perform that maintenance? If you can't remember, it's not because maintenance doesn't happen – it's because much of it is done while the lines are still energized.

Basin Electric's high-voltage transmission lines carry up to 345,000 volts of electricity. The thought of working on lines with that much electricity flowing through them is impressive — even more so when one compares that to the time they put their tongue on a nine-volt battery when they were a kid.

While lineworkers are heroes in the electric industry, they are still human, so performing work on energized lines requires special tools, a protective suit, and a whole lot of training. All this is done so they can safely do the work that allows us to light our homes and charge our phones without giving a second thought to where our electricity is coming from.

Every spring and fall, Basin Electric's Transmission System Maintenance (TSM) crews from across the co-op's service area get together for live line training, a week-long, hands-on training where lineworkers learn and refine the techniques necessary to safely perform hot stick (insulated fiberglass tools) and barehand work on energized power lines. All Basin Electric lineworkers, no matter if they've been on the job for a week or are approaching retirement, are required to participate.

"It's a great way for crews to get together because they're all so spread out," says Vince Smith, Basin Electric transmission line superintendent. "There are 10 crews from eight outpost locations spread across four states that gather for this training. Some of the crews work on wood structures and some on steel structures, and we have people who have been doing this for 25 years and others who have never held a hot stick or done barehand work. It's a chance for newer linemen to learn from our veteran linemen and a way for longtime linemen to learn new and sometimes more efficient ways of doing things. These trainings are good for everyone and essential for the safety of our linemen."

Every day of the training begins with a safety briefing where the crews go over the tasks they'll complete that day. They then travel out to the job site where they set up and have a more thorough safety meeting. The lead lineman calls into dispatch to let them know what crews are doing and where, so they can put appropriate safety measures in place. They test the trucks and go through the procedures they'll follow for the tasks they'll perform. Then they do the work – whether it's changing out the spacers that help prevent galloping transmission lines, replacing insulators that keep the electrons on the lines, or even practicing how to rescue an injured lineman off the structures.

"Everything we do out here is for safety," Smith says. "Getting familiar with the techniques and proper tooling, training new linemen, and refining skills for those who are more seasoned. We strive to do everything we can when power lines are energized because that means reliability for our members."

"Training like this is a good thing for new guys like me," says Carter Scanson, a journeyman-lineman at Basin Electric's Menoken, North Dakota, TSM outpost. "I've done hot line work before, but it was on 7,200 volts, and the line we're working on today is 345,000 volts so it's a lot different. It's nice to get everyone together and have the more experienced guys show us the correct and safest way to do things."

Scanson says one of the most important things he's learned is the importance of communication. "You've got to constantly be talking," he says. "Everyone has to know your next step. If you come out and watch us

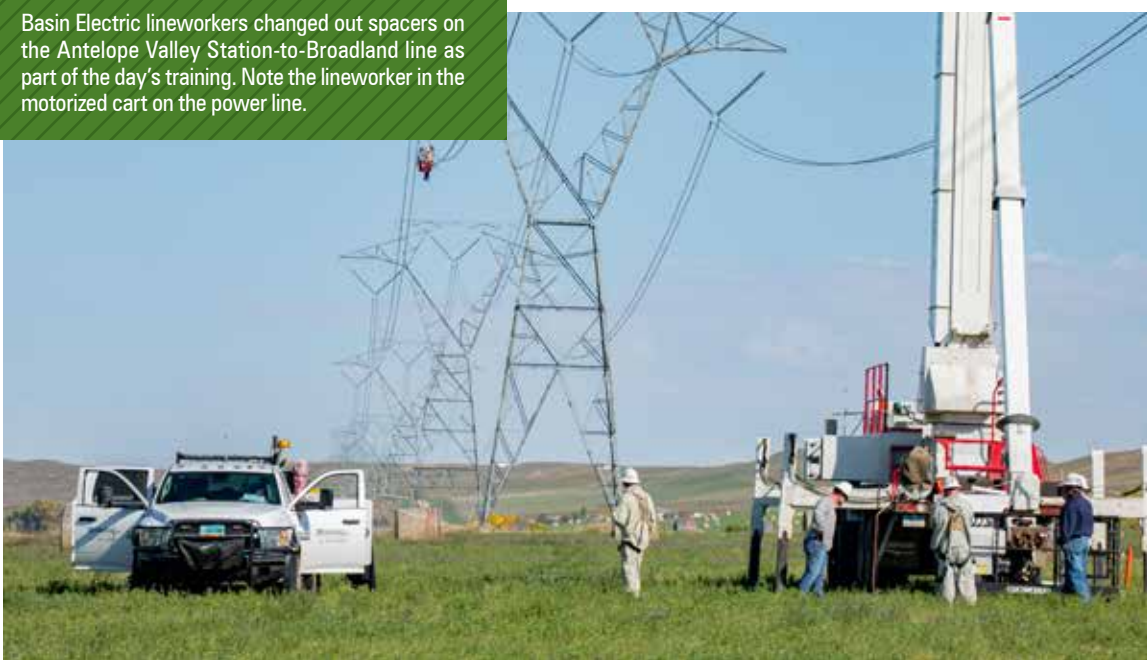
work, you'll constantly hear us say, 'I'm doing this now, I'm doing that now,' and the others will always respond, saying 'sounds good,' or something like that so we know they heard us. This is dangerous work and being on the same page elevates the safety a lot."

Casey Blotske, lead lineman at Basin Electric's Logan, North Dakota, TSM outpost says the camaraderie they build is another essential part of the training. "We get to work with each other, learn from each other, and develop the relationships that are essential in this type of career," he says. "It helps us build trust in each other, which is important because everyone's lives are in each other's hands at any given moment. We are more than co-workers, it's a brotherhood."

Blotske says the training helps cross-train employees on the different types of tools and structures because there are times when they need to help out in other areas, and then they can just jump right in.

"The best days (of my job) are coming to work on days like today," Blotske says while looking up at the other linemen as they are lifted in a bucket truck, arms raised holding the rod that will create a bond with the energized line, protecting them from 345 kilovolts of electricity. "The worst days are when a line falls down and you know you ain't going home for a day, or two, or a week. Last summer I was away from home between three and five weeks because of storms — but I live out in a rural area and I know what it's like to lose power. And I know when the power goes out, I'm gonna get called out to work. But that's the job — no one wants to be without power and it's our job to make sure they don't have to."

Basin Electric lineworkers changed out spacers on the Antelope Valley Station-to-Broadland line as part of the day's training. Note the lineworker in the motorized cart on the power line.





Basin Electric's executive leadership team announced the cooperative's new mission statement and values during an all-employee meeting on Aug. 29.

BASIN ELECTRIC'S STRATEGIC ROADMAP MEETS MEMBER NEEDS, TODAY AND TOMORROW

By Lindsey Chumley

Basin Electric's strategic roadmap meets member needs, today and tomorrow.

In the energy industry, one thing is certain – change. Basin Electric aims to not just adapt to change, but to anticipate it to ensure the cooperative's future aligns with the ever-evolving needs of its members. Basin Electric dedicated the past year to strategically planning for the future, keeping its commitment to serving its members at the heart of the plan.

In November 2022, the Basin Electric senior leadership team and board of directors began their effort to revamp the cooperative's strategic plan. Basin Electric brought in ScottMadden Management Consultants to assist in refining the process. The efforts included acceptance of a new mission statement and employee values in June, which were assembled with the help of the cooperative's BE Leaders group, a cross-sectional team of employees.

"We are united as a team as we pursue this new mission statement and values. They provide a unifying sense of purpose and speak to what we're trying to accomplish for our members," Todd Brickhouse, Basin Electric interim CEO and general manager, says. "As Basin Electric makes its way forward, the mission and values

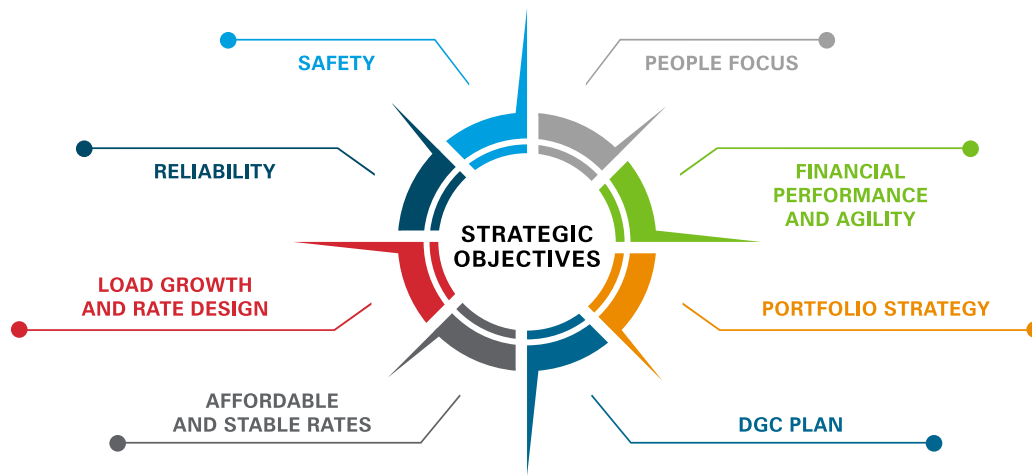
will serve as a reminder that a cooperative is owned by its members and it is, therefore, a responsibility of the cooperative to provide them with the power they need at a reasonable cost."

Andy Buntrock, Basin Electric vice president of strategic planning and communications, says, "We have made incredible progress implementing the new mission statement and employee values. They are not just words on paper, they are the compass guiding our cooperative's actions, fostering a culture of unity and purpose."

Another important part of this year's strategic planning efforts included the development of three cooperative-wide goals for 2023 – safety, reliability, and affordability.

Brickhouse shares the importance of setting these goals. "As the largest generation and transmission cooperative in the country and one of the largest electric utilities, we have an obligation to ourselves, to our members, and to our industry to do things safely, reliably, and affordably," he says.

At the Basin Electric Annual Meeting and Members-Only Meeting in August, staff spoke about the measurement and management of each of the goals.



The strategic objectives will be accomplished through department initiatives.

In addition to the new mission statement, values, and cooperative-wide goals, strategic planning efforts included several strategic planning sessions with directors, the senior leadership team, and other staff presenters. The most recent meeting was held in June at Basin Electric’s Headquarters in Bismarck, North Dakota. The next meeting is scheduled for November.

Buntrock says Basin Electric hosts these meetings to have ongoing conversations as the utility industry evolves, disseminate timely information, and ensure transparency with the membership.

For 2024, directors and the senior leadership team have named “Foundation for the Future” as the overall goal with the strategic objectives including: safety, reliability,

load growth and rate design, affordable and stable rates, people focus, financial performance and agility, portfolio strategy, and DGC plan. These objectives will be met through initiatives developed by each individual department.

While strategic planning is never complete, Buntrock says with the strategic planning accomplishments this year, Basin Electric’s path forward is clearly defined. “Our values are who we are, our mission is our shared purpose, our objectives are affordable and stable rates, we are getting the work done, and our goal is what we’re striving for together,” he says. “This past year has set the stage for a bright future, grounded in our commitment to our cooperative’s mission and values.”

MISSION STATEMENT

We are a safe, environmentally responsible cooperative that provides reliable, affordable power, products, and services to sustain the quality of life for our member-owners across rural America.

VALUES

COMMUNITY: Serving our neighbors.

INTEGRITY: Doing the right thing. Always.

RELIABILITY: Keeping the lights on.

TEAMWORK: Working together for the success of our members.

SAFETY: Driving our culture.

ADAPTABILITY: Supporting our members, today and into the future.



Many people supported Senske during the race. His wife, Mandy (pictured), met him every 10 miles with water and food.

CONQUERING THE MAAH DAAH HEY TRAIL

By Jenifer Gray

“There are so many things possible in this world, and you can do anything if you put the work in,” says Sean Senske, electrical and instrumentation field technician at Dakota Gas.

Senske has always loved the outdoors and enjoys hunting, fishing, and other adventure activities. He’s done a number of solo backpack hunts, and being outdoors is second nature to him. When Senske became interested in ultramarathoning, a footrace longer than a traditional marathon of 26 miles, he found he had a strong desire to complete one of his own. “I found out about ultras a few years ago and always thought it would be really cool to accomplish one; it was really interesting and intriguing to me,” Senske says. “I wanted to prove to myself I could do it and I wanted to show my kids that anything is possible.”

Senske’s next step was to decide where and when he’d complete an ultramarathon. “I knew about the Maah

Daah Hey trail and the mountain biking that went on, but I didn’t know there was a trail run on it. I started searching ultramarathons in North Dakota and found out about the actual race series on the trail last year,” Senske says.

Located in western North Dakota, the Maah Daah Hey trail is a 144-mile trail system that weaves its way through some of the state’s most beautiful landscapes. The terrain ranges from grassy flats and ridges to steep buttes, river bottoms, and wooded draws.

On July 29, the organization put on a 108.1-mile race starting at the CCC Campground located 15 miles south of Watford City, North Dakota, and ending in Medora, North Dakota. The race started at 6 a.m., and participants ran, jogged, and/or walked until they were finished.

Senske signed up and marked the time off on his calendar. When people found out what he was doing, they were

excited to help. His wife, Mandy, took their F250 with a pickup box camper and met him every 10 miles or so with water and food. She also brought extra gear, clothing, socks, shoes, and first aid items. Friends Ashley Baker and Noah DuBord volunteered as pacers. They met Senske at mile 48 and took turns running alongside him on the trail, providing encouragement and the extra push he needed to keep going. His mom, Kim, and kids, twins Hollis and River (9), and Baker (6), drove out each day to watch him along the route.

Although Senske didn't do anything special to prepare for the race, his years of working out five days a week helped him feel confident that he could complete it. "I followed my normal workout program," Senske says. "Two weeks before the race, I did low-impact training like biking, rowing, and swimming, along with a small amount of incline interval running. The week of the race, I did mobility and stretching and 10-20 minutes of intense interval training each day."

Senske and Mandy ran into Jared Borlaug, shift supervisor at Antelope Valley Station, over the 4th of July weekend and started talking about the race. "I don't think either one of us knew the other one was running the race until that point" Senske says. Borlaug, who began running in 2016, had a friend who was just getting into ultramarathons at that time. "A year after I started running, I paced/crewed him on his Maah Daah Hey 100-mile run, and after that I was hooked," Borlaug says. "The trail is one of my favorite places to run, so when the timing of the race lined up with my schedule, I knew I would run it."

Because Borlaug had already run the trail, Senske asked him for some insight and tips on what to expect for the race. "I didn't have any experience with how my body might feel or how hydration and fueling would go," Senske says. "The longest I had ever run was nine miles to and from work." Borlaug advised Senske on salt intake, support vehicles, race route, and nutrition. "Sean and I talked about the course and what to expect," Borlaug says. "Our wives are good friends, so they communicated quite a bit on various things too."

The first 48 miles of the race went well, and then a thunderstorm hit. "The trail turned to gumbo," Senske says. "I was sliding down hills, and my shoes felt like they each weighed 10 pounds. It took a lot of extra energy to get through it, so I ended up walking for about 20 miles."



Friends volunteered as pacers for Senske, taking turns running alongside him, and his mom and kids drove out each day to watch him along the 108-mile route.

There was a creek crossing in the last quarter of the race, which was normally dry, but after the storm there was a flash flood, and the water was waist high in some places. "The mud was the biggest challenge of the race," Senske says.

The last 16 miles of the race were tough on Senske. "I liked proving that I could finish without any special training, but I wouldn't recommend it to anyone," he says. "My legs and feet were shot and ready to shut down, and I had a really hard time walking over the next few days, and I didn't feel well for the first week afterwards."

Mentally, Senske says he loved it. "You're surrounded by extremely nice, happy, and positive people; however, physically, I could have used some big mile training days a few months in advance to better prepare my body for the race."

Although the race was difficult and pushed Senske to his limits, he's happy that he accomplished what he set out to do. In the end he says, "How hard can something be if you're really excited to try it?"

Senske finished the race in 32 hours and placed seventh overall, and second place in the over-40 age group.

Borlaug finished the race in 25 hours and placed second overall.

KUDOS



Dvorak named Area Director for District 42 Toastmasters

Amanda Dvorak, Basin Electric records coordinator II, was named as the new Toastmasters area director for District 42. Dvorak will oversee Toastmasters clubs in the Bismarck, North Dakota, area, visiting the clubs twice a year and writing reports about how their club is performing. Toastmasters empowers individuals to become more effective communicators and leaders by providing a supportive and positive learning experience in which members are empowered to develop communication and leadership skills, resulting in greater self-confidence and personal growth.



Hieb named among top 20 professionals under 40 by Bismarck Mandan Chamber

Kayla Hieb, Basin Electric vice president of Human Resources, was selected by the Bismarck Mandan Chamber EDC as one of the 2023 top 20 professionals in Bismarck-Mandan under age 40. The inaugural list is the Chamber's way of spotlighting the incredible, young talent found throughout the business community. Hieb was selected for her leadership, professional development, and commitment to the community.



Laverdure receives award from Faces of Coal; recognized as member of Bismarck Mandan Chamber EDC inaugural Empowering Women in Business program

Erin Laverdure, Basin Electric project coordination representative, received the Faces of North Dakota Coal "Man in the Arena Award" for her work spearheading the development of Energy Capital Cooperative Child Care in Hazen, North Dakota. Laverdure worked to build a coalition of employers to pool resources and open the largest childcare center in the county. The non-profit facility is licensed for 77 children and serves families in the heart of North Dakota's coal country. Laverdure was also recognized by the Bismarck-Mandan Chamber EDC as a member of the inaugural Empowering Women in Business program. The mission of the program is to bring women together to discuss what it means to be a woman in business and to explore what it means to be a leader in the business world.



Michlitsch receives NRECA Rising Star Award

Tony Michlitsch, Leland Olds Station plant superintendent, is one of 20 stand-out cooperative employees to win the National Rural Electric Cooperative Association (NRECA) Rising Star Award for his work ethic, community support efforts, and dedication to helping Leland Olds Station provide reliable electricity to members.

EMPLOYEES RECEIVE DEGREES

The following Basin Electric and Dakota Gasification Company employees earned degrees from accredited institutions of higher learning over the past year.



Pete Grossman, electrical and instrumentation field technician at the Great Plains Synfuels Plant, earned an associate's degree in power generation. He graduated from Bismarck (North Dakota) State College in August 2022.



Courtney Reiswig, senior administrative assistant at Headquarters, earned a bachelor's degree in business. She graduated from Dickinson (North Dakota) State University in December 2022.



Sammy Zehren, support center representative I at Headquarters, earned a bachelor's degree in cybersecurity and information technology. She graduated from Bismarck (North Dakota) State College in January 2023.



Robin Gowen, drafts person II at Headquarters, earned a bachelor's degree in business administration. She graduated from University of Mary in Bismarck, North Dakota, in April 2023.



Mitch Estabrook, electrical and instrumentation field technician at the Great Plains Synfuels Plant, earned a bachelor's degree in energy management. He graduated from Bismarck (North Dakota) State College in May 2023.



Paul Mindeman, senior energy systems administrator at Headquarters, earned a bachelor's degree in electrical engineering. He graduated from University of North Dakota in Grand Forks in May 2023.



Alex Kopp, process operations field technician at the Great Plains Synfuels Plant, earned a bachelor's degree in occupational safety and health. He graduated from Columbia Southern University in Orange Beach, Alabama, in August 2023.

RETIREES



Sally Green, hardware technician at Laramie River Station, retired on July 28 after nine years with the cooperative.

"It's been a heck of a ride!" Green says.

In retirement, she plans to enjoy the next chapter of her life.



Bryce Reynolds, maintenance field technician at Dakota Gas, retired on Aug. 15 after 22 years with the cooperative. The Beulah, North Dakota, native says, "I feel lucky to have had this job.

It's a good company to work for." In retirement, he plans to spend time at the lake.



Bryce Harring, mechanical engineer at Leland Olds Station, retired on Sept. 22 after 29 years with the cooperative.

"Bryce was very dedicated and thorough," says Jonah Peterson, electrical engineer III at Leland Olds Station. "He didn't ignore things if he saw something that wasn't right. Bryce was honest and willing to share what he knew about plant operations. I enjoyed his sense of humor."

In retirement, the Petersburg, North Dakota, native intends to move closer to relatives and revisit a few hobbies that have been set aside over the years.

NEW EMPLOYEES



Holden Murphy began working at the Williston (North Dakota) Transmission System Maintenance outpost as an apprentice substation electrician on March 27. Originally from Cabot, Arkansas, he was previously employed by National Conductor Constructors based in Brainerd, Minnesota.



Molly Glassheim, began working at Headquarters as an accounting analyst I on May 22. She is originally from Kenmare, North Dakota.



Jadon Jester, from Wheatland, Wyoming, began working as a laborer at Laramie River Station on May 22. He was previously the owner of Dawn Electric in Wheatland.



Anthony Johnson began working at Laramie River Station as a laborer on May 22. Originally from Wheatland, Wyoming, he was previously employed by Laramie Peak Motors in Wheatland as a master technician. He has a master certification in suspension systems and engine drivability and repair.



Justin Lardy, process operations field technician, began working at the Great Plains Synfuels Plant on May 30. Originally from Dickinson, North Dakota, he was previously employed by North Dakota Energy Services as an operator in Dickinson.



James Wenning began working at the Great Plains Synfuels Plant as a protection services specialist II on May 30. Originally from Beulah, North Dakota, he was previously employed as a sergeant for the Beulah Police Department.



Nick Eriksmoen began working at the Great Plains Synfuels Plant on June 5 as a process operations field technician. He is originally from Bismarck, North Dakota.



Josh Jump, a Wyoming native, began working at Dry Fork Station as a utility operator on June 5. He was previously employed by Wyoming Machinery Company as a diesel technician in Gillette. He is a U.S. Army veteran.



Brittani Reim began working at Headquarters as a member revenue specialist II on June 5. Originally from Dazey and Bismarck, North Dakota, she was previously employed by the North Dakota State Auditor's Office as a quality assurance auditor.



Austin Roth, electrical and instrumentation field technician, began working at the Great Plains Synfuels Plant on June 5. Originally from Hazen, North Dakota, he was previously employed by Weber Electric in Washburn, North Dakota, as an apprentice electrician.



Josh Rust began working at the Great Plains Synfuels Plant as a process operations field technician on June 5. He is originally from Mercer, North Dakota.



Jason Schafer, from Mandan, North Dakota, began working at Headquarters on June 5 as a drug and alcohol program specialist. He was previously employed by Bismarck (North Dakota) Public Schools as a transportation director.



Rob Zins began working at Headquarters on June 5 as a service dispatcher. Originally from Bismarck, North Dakota, he was previously employed by CHI St. Alexius Health in Bismarck as an inventory manager. He received a bachelor's degree in business administration from North Dakota State University in Fargo.



Sarah Scherm, originally from Alamosa, Colorado, began working at Headquarters on June 8 as Basin Electric's vice president and treasurer. She was previously employed by Tri-State Generation and Transmission Association in Westminster, Colorado, as a senior manager in financial planning and analysis. She received a master's degree in business administration from the University of Colorado in Boulder, and a bachelor's degree in business administration from Colorado State University in Fort Collins.



Sarah Jangula began working at Headquarters as an executive administrative assistant on June 16. From Bismarck and Linton, North Dakota, she was previously employed by the Bank of North Dakota as an executive assistant. She received a bachelor's degree in business from the University of Mary in Bismarck, North Dakota.



Jonathan Boateng began working as an energy market analyst I at Headquarters on June 19. He was previously employed by the University of North Dakota in Grand Forks as a graduate teaching assistant. He received a master's degree in mathematics from the University of North Dakota. He is originally from Ghana.



Tanner Borlaug began working at Antelope Valley Station as a laborer on June 19. Originally from Hazen, North Dakota, he was previously employed by Western Steel Builders as a home builder in Hazen.



Turner Grumbo, originally from Washburn, North Dakota, began working at the Great Plains Synfuels Plant on June 19 as an electrical and instrumentation field technician. He was previously employed by NextEra Energy in Wilton, North Dakota, as a wind technician. He has an associate's degree in instrumentation and control, and a certificate in electronics.



Dalton Hegemann began working as a laborer at Antelope Valley Station on June 19. Originally from Beulah, North Dakota, he was previously employed by Kasco Marine in Prescott, Wisconsin. He received an associate's degree in applied science from Bismarck (North Dakota) State College.



Matthew Jund began working as a laborer at Antelope Valley Station on June 19. He is originally from Anamoose, North Dakota, and he received an associate's degree in power generation technology from Bismarck (North Dakota) State College.



David Kolschefski began working at the Great Plains Synfuels Plant as a process operations field technician on June 19. Originally from Beulah, North Dakota, he was previously employed by Colter Energy in Minot, North Dakota, as a field supervisor.



Shelby Kruckenberg, from Beulah, North Dakota, began working at Antelope Valley Station on June 19 as a laborer. She is currently working towards an associate's degree in process plant technology from Bismarck (North Dakota) State College.



Drew Kugel began working as an electrician II at Leland Olds Station on June 19. Originally from Hettinger, North Dakota, he was previously employed by Energy Tech Systems in Bismarck, North Dakota, as a foreman and electrician.



Tyler Maher began working at Antelope Valley Station as a laborer on June 19. Originally from Hettinger, North Dakota, he was previously employed by the United States Air Force as a supervisor.

NEW EMPLOYEES



Lori Miller, from Bismarck, North Dakota, began working at Headquarters as an executive account manager on June 19. She was previously employed by Coca-Cola Bottling Company in Bismarck as the vice president of sales and sales operations. She has a bachelor's degree in business management.



Dominic Parks began working as a laborer at Antelope Valley Station on June 19. Originally from Watford City, North Dakota, he was previously employed by Silver Fox Pipeline in Watford City as a laborer. He has an associate's degree in process technology.



Kyler Pazdernik, electrical and instrumentation field technician, began working at the Great Plains Synfuels Plant on June 19. Originally from Mandan, North Dakota, he was previously employed by Petro-hunt LLC in Killdeer, North Dakota, as an electrical and instrumentation technician.



Troy Ressler, originally from Bismarck, North Dakota, began working at Headquarters on June 19 as a member revenue specialist II. He was previously employed by MDU Resources as a financial analyst. He received a bachelor's degree in accounting from North Dakota State University in Fargo.



Brian Robbins began working at Laramie River Station as a shift supervisor on June 26. Originally from Crown Point, Indiana, he was previously employed by Northern Indiana Public Service Company as an instrumentation and control maintenance supervisor. He is a U.S. Navy veteran, and he received an associate's degree from Ivy Tech Community College in Indiana.



Luke Anderson began working at the Menoken (North Dakota) Transmission System Maintenance outpost as an electrical engineer I on July 17. Originally from Wahpeton, North Dakota, he was previously employed by Ulteig in Fargo, North Dakota, as a power systems intern. He received a bachelor's degree in electrical engineering from the University of North Dakota in Grand Forks.



Justin Barclay began working at the Great Plains Synfuels Plant as an electrical and instrumentation field technician on July 17. He is originally from New Salem, North Dakota.



Savannah Haugen from Mandan, North Dakota, began working at Headquarters on July 17 as a learning and development specialist I. She was previously employed by Edgewood Healthcare as a business office director in the Bismarck/Mandan, North Dakota, area. She received a bachelor's degree in human development and family science from North Dakota State University in Fargo.



Carly Perez, service dispatcher, began working at Headquarters on July 17. Originally from Martinez, California, she was previously employed by the City of Bismarck, North Dakota, as a communications specialist. She also worked as an emergency dispatcher for six years in California, and she has a bachelor's degree in criminal justice.



Jackie Lannoye began working as an accounting analyst II at Headquarters on July 31. Originally from Mohall, North Dakota, she was previously employed by MDU Construction Services Group in Bismarck, North Dakota, as a financial analyst. She received a bachelor's degree in accounting with a minor in theology from the University of Mary in Bismarck.



Jordan Engelhardt began working at the Great Plains Synfuels Plant as a process operations field technician on Aug. 7. He is originally from Garrison, North Dakota, and received an associate's degree in process plant technology.



Brett Rockneberg, from Valley City, North Dakota, began working at the Great Plains Synfuels Plant on Aug. 7 as a process operations field technician. He was previously employed by Red Trail Energy as a maintenance technician in Richardton, North Dakota.



Sawyer Barth, electrical and instrumentation and controls technician, began working at Deer Creek Station on Aug. 14. Originally from Belle Fourche, South Dakota, he was previously employed by 3M Company as a mechanical systems specialist. He received an associate's degree in energy technologies and digital electronics.



Zachary McGee began working at Laramie River Station on Aug. 14 as a lab technician II. He was previously employed by HF Sinclair in Cheyenne, Wyoming, as a chemist. He received a bachelor's degree in biology and criminal justice from Midland University in Fremont, Nebraska.



Jason Taliaferro began working at Laramie River Station as a mechanic/welder II on Aug. 14. Originally from Maryland and Wyoming, he was previously employed by Boilermakers Local 101 as a dispatcher, trainer, recruiter, and boiler welder.



Elisha Groves, from Gillette, Wyoming, began working at Dry Fork Station as a utility operator on Aug. 21.



Steve Morgado began working at Dry Fork Station as a utility operator on Aug. 21. Originally from Gillette, Wyoming, he was previously employed by Arch Coal as a welder in Wright, Wyoming.



Jeffrey Crane, instrument technician II, began working at Laramie River Station on Aug. 28. Originally from Scottsbluff, Nebraska, he was previously employed by Western Sugar Company in Scottsbluff as an instrument technician.



Joshua Henwood, from Douglas, Wyoming, began working at Laramie River Station as an electrician II on Aug. 28. He was previously employed by Peabody Energy North Antelope in Wright, Wyoming, as an electrician. He received an associate's degree in industrial electricity from Gillette (Wyoming) College, and a bachelor's degree in history from Black Hills State University in Spearfish, South Dakota.



Jordan Taylor began working at Laramie River Station as a mechanic/welder II on Aug. 28. Originally from Wheatland, Wyoming, he was previously employed by Taylor Unlimited as a contractor.



Scott Keller, electrical and instrumentation field technician, began working at the Great Plains Synfuels Plant on Aug. 28. Originally from Bismarck, North Dakota, he was previously employed with Magnum Electric as a journeyman-foreman.



Blaine Ayers began working as an instrument technician II at Laramie River Station on Sept. 11. Originally from Guernsey, Wyoming, he previously worked for Suncor Energy as a senior security advisor.

NEW EMPLOYEES



Bryan Burkett, electrician II, began working at Laramie River Station on Sept. 11. He previously worked for Sturgeon Electric as a journeyman-electrician.



Jared Fischer, account manager, began working at Headquarters on Sept. 11. Previously, he worked as an area sales manager for Titan Machinery. Fischer earned a bachelor's degree in business management from North Dakota State University in Fargo.



Enrique Gonzalez, process operations field technician, began working at the Great Plains Synfuels Plant on Sept. 11. Previously, he worked at Ethos Energy Group as a control room operator.



Ryan Hall began working as a journeyman-lineman at the Beulah (North Dakota) Transmission System Maintenance outpost on Sept. 11. The Pikeville, Kentucky, native previously worked as a journeyman-lineman for IBEW.



Deb Hausauer began working at Headquarters as a senior administrative assistant on Sept. 11. Originally from Mercer, North Dakota, Hausauer earned an associate's degree in business management and accounting and is a certified notary public. She previously worked as a temporary auditor for the State of North Dakota.



Lexi Iglehart, process operations field technician, began working at the Great Plains Synfuels Plant on Sept. 11. Originally from Garrison, North Dakota, she previously worked as a plant operator at Rainbow Energy. Iglehart earned an associate's degree in power plant technology from Bismarck (North Dakota) State College.



Osama Bani Omar began working at Leland Olds Station as a mechanical engineer I on Sept. 11.



Amy Rushing, service dispatcher, began working at Headquarters on Sept. 11. Rushing is originally from Sacramento, California, and previously worked as an optician at Eyemart Express.



Colton Scharf began working at Headquarters as a network security analyst I on Sept. 11.

SERVICE AWARDS



Tim Forsch
45 years
Electrical supervisor
Leland Olds Station



Mark Foss
45 years
General counsel, SVP
Headquarters/Dakota Gasification Company



Mark Blood
40 years
Process operations field technician
Dakota Gasification Company



Sandy Denis
40 years
Enterprise application architect II
Headquarters



Wes Klein
40 years
Scrubber operator
Antelope Valley Station



Claude O'Berry
40 years
Pipeline superintendent
Dakota Gasification Company



Dennis Barclay
25 years
Protection Services supervisor
Dakota Gasification Company



Terry Doll
25 years
Lab shift supervisor
Dakota Gasification Company



Jay Grasl
25 years
Maintenance field technician
Dakota Gasification Company



Sabrina Hojian
25 years
Network security analyst II
Headquarters



Dennis Horning
25 years
Process operations field technician
Dakota Gasification Company



Ryan Anderson
20 years
Aviation manager
Headquarters



Joel Bobb
20 years
Network security analyst II
Headquarters



Jason Brekke
20 years
Senior GIS analyst
Headquarters



Todd Day
20 years
Lead mechanic
Laramie River Station



Nicholas Hersch
20 years
Process operations field technician
Dakota Gasification Company



Germain Krueger
20 years
IT project manager I
Headquarters



Anthony Lucero
20 years
Lead mechanic
Laramie River Station



Aaron Marquardt
20 years
Fertilizer section manager
Dakota Gasification Company



Diane Nieuwsma
20 years
Service dispatcher
Headquarters



Karen Plum
20 years
Income tax administrator
Headquarters



Matt Schramm
20 years
IT portfolio administrator II
Headquarters



Jeremy Severson
20 years
Vice president of Transmission
Headquarters



Todd Steffan
20 years
Maintenance field technician
Dakota Gasification Company



Shawn Stelter
20 years
Process operations shift superintendent
Dakota Gasification Company



Chris Wilmes
20 years
Senior enterprise application administrator
Headquarters




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