



New transformer installed at Burt Switching Station

Flip the switch and the light comes on. The thought seems easy enough, but much more goes into supplying electricity to a home and/or business. As hundreds of generation stations work across the Southwest Power Pool footprint creating electricity, thousands of miles of transmission and distribution lines are delivering that power to homes.

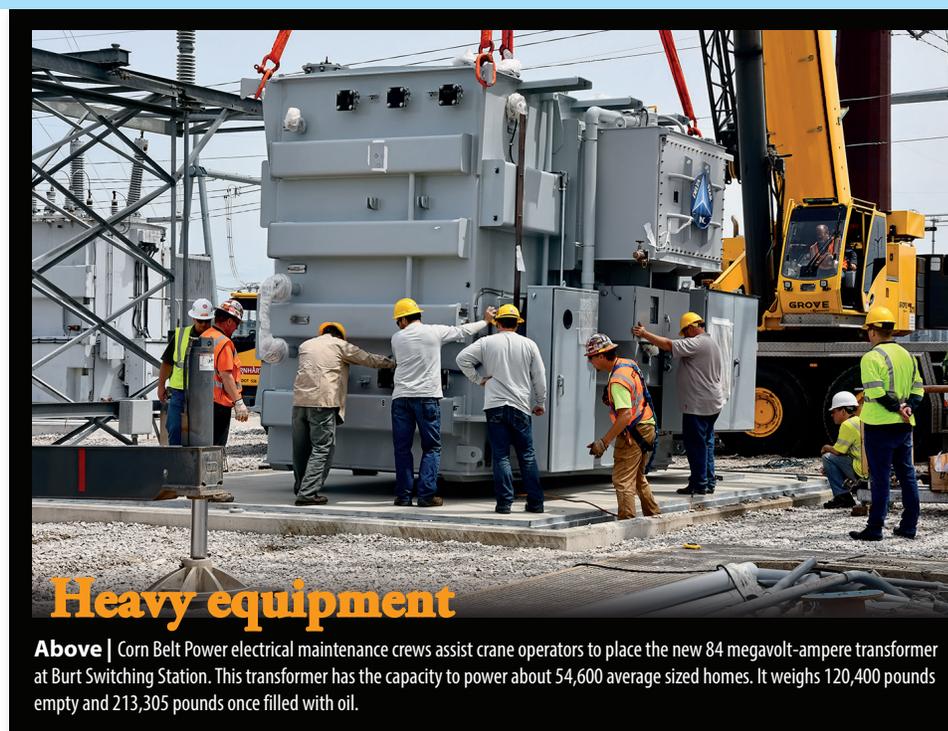
Before power arrives to a distribution system's power lines, it goes through transformers on Corn Belt Power's system. In June, Corn Belt Power upgraded its transformer inside the Burt Switching Station (Burt).

Replacing a transformer on a transmission system is no easy task. Delta Star began manufacturing the new 84 megavolt-ampere Burt transformer in May of 2019. The new transformer weighs more than 120,000 pounds empty. When filled with more than 9,000 gallons of oil, the transformer weighs 213,305 pounds.

"Ordering, manufacturing and shipping a transformer is quite a process," said Mike Finnegan, system electrical superintendent, Corn Belt Power. "Typically it takes up to eight weeks to finalize construction plans. Once we get final approval, it can take anywhere from 20 weeks to one year to manufacture the transformer."

Corn Belt Power studies its system and loads to determine transformer need.

"We use a program called Power Systems Simulator for Engineers," said Tyler Baxter, engineer III, Corn Belt Power. "To begin with, we run five and 10 year summer peak models. We then run models on potential line outages, we call them 'contingencies.' We do this to ensure that no combination of line outages on our system could possibly



Heavy equipment

Above | Corn Belt Power electrical maintenance crews assist crane operators to place the new 84 megavolt-ampere transformer at Burt Switching Station. This transformer has the capacity to power about 54,600 average sized homes. It weighs 120,400 pounds empty and 213,305 pounds once filled with oil.

overload a new transformer. We do several calculations before finally determining size."

The old transformer at Burt wasn't replaced due to age or damage, rather it was replaced because of load growth on the Corn Belt Power system.

"We noticed the transformer started to show signs that it could overload," said Baxter. "Modeling suggested we needed to upgrade the existing transformer."

Once Corn Belt Power determines a location needs a new transformer, a contract bidding process takes place. After the contract is awarded, it's a waiting game for the new transformer to be manufactured. While manufacturing is the most important aspect of the process, the transformer still needs to make its way to Corn Belt Power's

service territory.

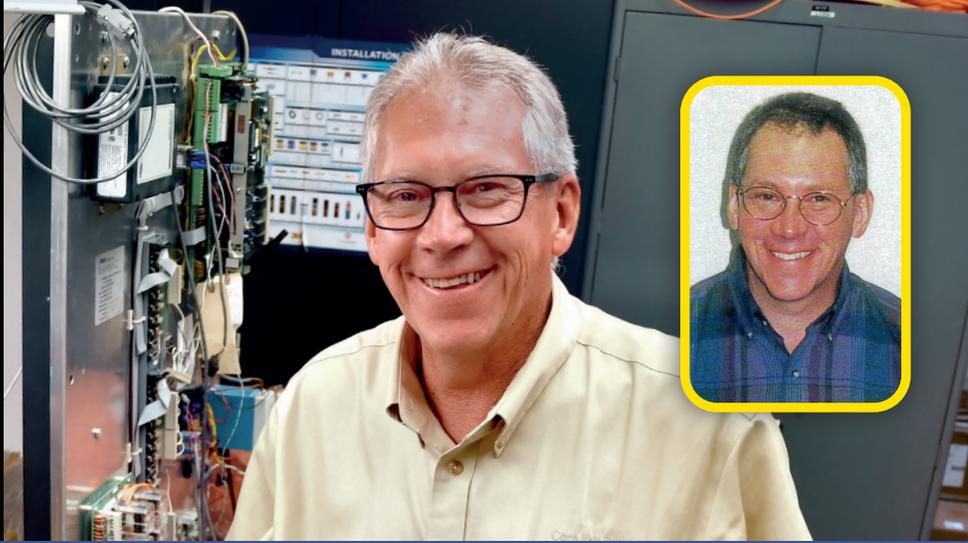
"It's no easy task shipping a piece of equipment that's so heavy," said Finnegan. "It took 20 days to ship from Canada to our Burt location, outside of Algona."

The transformer left Canada on May 8 and encountered the following obstacles:

- Shortly after leaving Canada, the truck hauling the transformer was stopped by the New York Department of Transportation. The NYDOT stopped travel until May 19, when the truck could have a police escort.

- The transformer was stopped in Indiana on May 22. Once a police escort became available, travel resumed on May 26.

The transformer arrived in Algona at 12 p.m. on May 27 and crews placed the new transformer on May 28. *Continued on page 4*



Above | Chris Shillington, communications technician, retired from Corn Belt Power in July after 20 years of service. Shillington began his Corn Belt Power career in November 1999.

Shillington retires after two decades at Corn Belt Power

Chris Shillington remembers his first day of work. He was a little under the weather during that first week in November 1999. But he jumped right in.

Shillington retired in July, after a 20-year career in Corn Belt Power's communications department.

"I remember my first day," he said.

"They sent me out to Glidden to

terminate equipment while our tower crew was working. I remember having a bad cold that week."

Shillington says he was always interested in radio technology. He spent years working for Prairie Technical Services, a two-way radio shop in Fort Dodge.

"Back before cell phones, two-way radios were big," he said. "A lot of farmers had

systems of their own. Law enforcement and public safety entities also had them. I knew Corn Belt Power was a great place to work and I wanted to come to work here."

Communication methods have changed in the two decades Shillington served Corn Belt Power members. He imagines things will continue to advance.

"When we started the microwave was analogue," he said. "Then, the digital era came. Now it's network. I think fiber is going to get bigger. The speeds are just higher now. Everything is a little more versatile."

Coworkers will miss Shillington.

"Chris was always conscientious," said Kevin Bornhoft, vice president, engineering and system operations. "He always made sure to get his work done in a timely manner. We're going to miss him, but it's a well-deserved retirement."

Jacob Howey, communications technician, Corn Belt Power, worked with Shillington for several years.

"Chris is a nice guy," said Howey. "His smiling face always cheers anyone around him up."

Shillington says he will miss Corn Belt Power.

"Corn Belt is a really, really good place to work," he said. "They value training and education. A lot of places aren't like Corn Belt Power." ■

Sen. Chuck Grassley visits Prairie Energy Cooperative

Longtime U.S. Sen. Chuck Grassley visited with Prairie Energy, Corn Belt Power and IAEC employees on Thursday, July 16. Several Prairie Energy board members were also in attendance. The group discussed a variety of issues including Rural Utility Service (RUS) financing, wind energy, the Paycheck Protection Plan and economic development.

On RUS financing, cooperatives across the country lobbied elected officials in July on lowering existing RUS loan rates. Since the early days of the pandemic, bills in both the House of Representatives and Senate were developed that would provide relief for electric cooperatives in the form of refinanced RUS loans. Proposals would allow RUS borrowers to readjust or refinance the interest rate on existing

loans to the nearest treasury rate. At press time of this newsletter, no bill and/or amendment to a larger Coronavirus relief bill had been passed on RUS loan rate

refinancing.

The meeting was part of Grassley's annual "99 County Tour." Each year, Grassley visits each of Iowa's 99 counties. ■



Advocating for rural issues

Above | U.S. Sen. Chuck Grassley paid a visit to Prairie Energy Cooperative on Thursday, July 17. Chuck Soderberg, executive vice president and general manager, Iowa Association of Electric Cooperatives, thanks Sen. Grassley for his support in protecting cooperative pensions and tax status. During the meeting, Grassley and representatives from Prairie Energy, IAEC and Corn Belt Power discussed issues facing cooperatives and rural America.

News in brief

Corn Belt Power and Iowa Lakes Electric Cooperative support IGL with Revolving Loan Funds

Corn Belt Power and Iowa Lakes Electric are using their Revolving Loan Funds to assist IGL Construction with a new housing development in Spencer.

The development includes cleaning up a former mobile home park on the west side of Spencer for the new Westfield Development. The housing development will have 57 new, affordable, energy efficient homes.

Each home will be close to 1,000 square feet with 2-3 bedrooms and a garage. There will also be a storm shelter and pool for the subdivision to use. Corn Belt and Iowa Lakes are each lending up to \$500,000 for the real estate purchase and installation of infrastructure including streets, water, sewer and fiber.

The real estate purchase occurred July 2, infrastructure work will begin soon and construction of 10 homes will start later this year.



Affordable housing

Humboldt County Memorial Hospital receives REDL&G funds

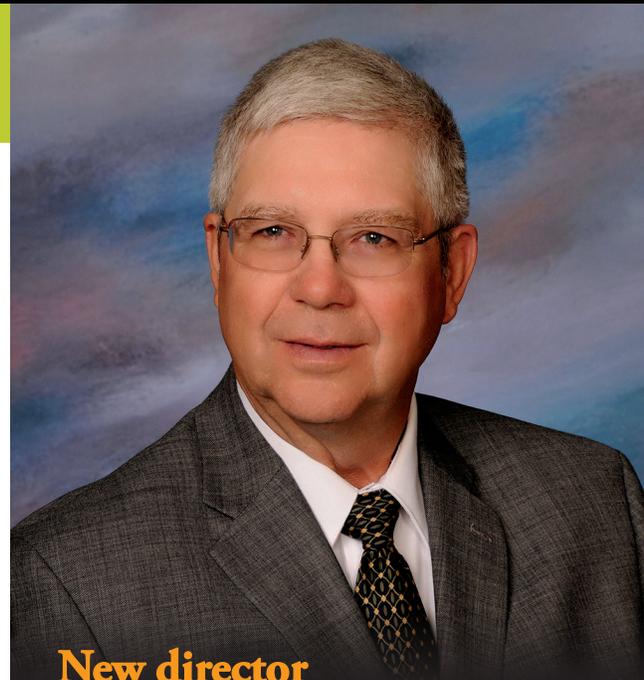
Corn Belt Power and Midland Power partnered together to assist the Humboldt County Memorial Hospital with their \$14 million hospital expansion through new USDA Rural Economic Development Loan & Grant (REDL&G) funds.

Corn Belt Power received \$300,000 through the grant side of the program and matched that with \$60,000 to loan the hospital a total of \$360,000. Midland Power was awarded \$1 million through the loan side of the REDL&G program for the hospital project.

The expansion project included a new 37,740 square-foot two-story addition for a new outpatient specialty clinic, primary care clinic, wellness hub and conference room/staff education area. The hospital will provide additional therapy services to the community in this space. The loans were closed with the hospital on July 15.



Supporting rural healthcare



New director

Above | Following the resignation of board president Scott Stecher, Prairie Energy Cooperative appointed Ted Hall as its new representative on the Corn Belt Power board of directors. Hall was seated at the co-op's June 26 board meeting.

Stecher resigns from Corn Belt Power board, new director seated

In June, Corn Belt Power received word that longtime board president Scott Stecher resigned from Prairie Energy Cooperative's board of directors. This also meant that he would no longer serve as Corn Belt Power's board president.

Following his resignation, Prairie Energy appointed Ted Hall as its delegate to Corn Belt Power's board of directors. Hall was elected to Prairie Energy's board in June 2006.

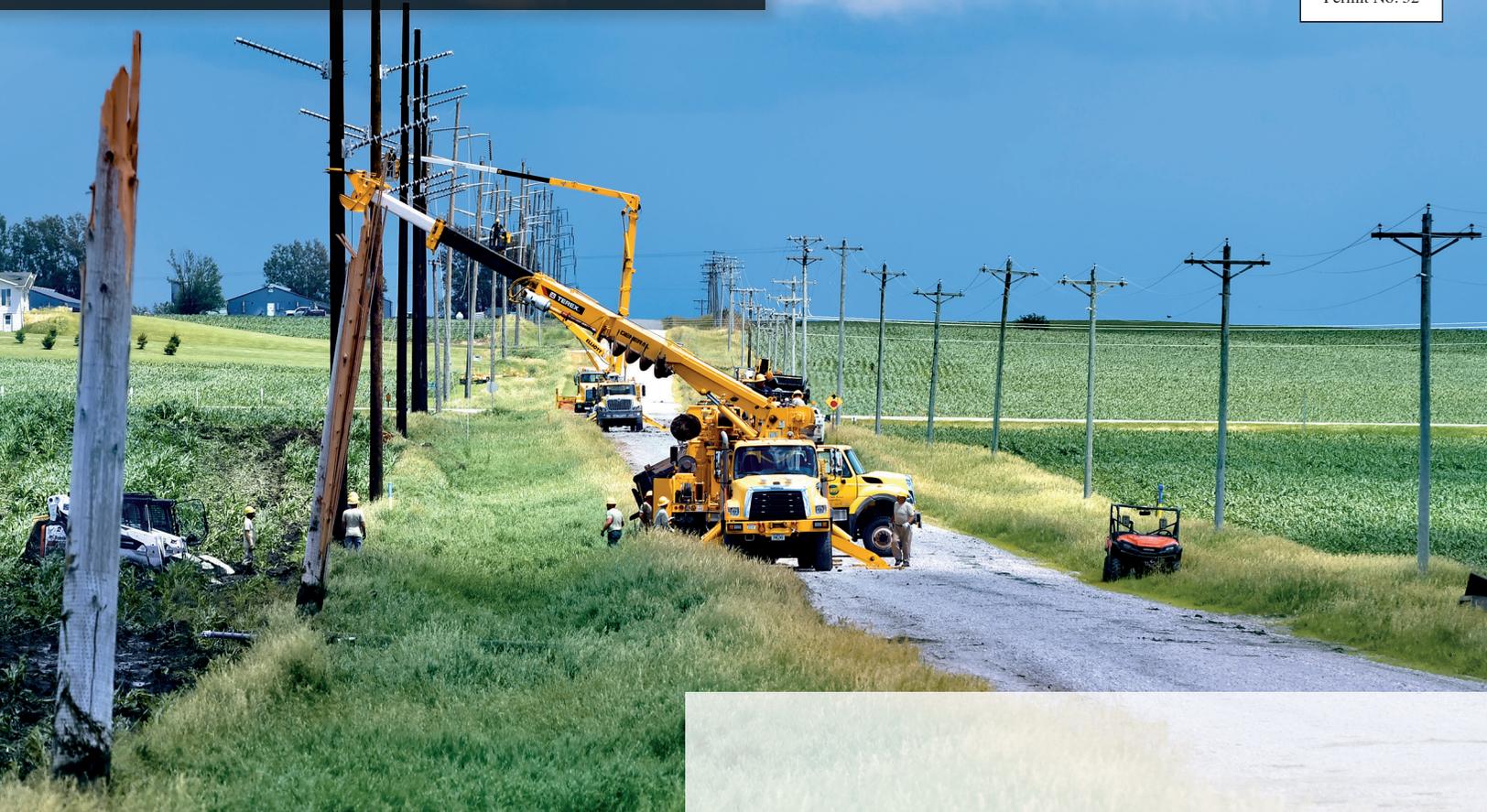
"We were sad to see Scott Stecher resign," said Ken Kuyper, executive vice president and general manager, Corn Belt Power. "We wish Scott nothing but the best. We are excited to have Ted Hall as a new Corn Belt Power board member."

Following Stecher's resignation, the Corn Belt Power board reorganized at its June 26 meeting. Board officers are as follows:

- David Onken, Raccoon Valley, President
- Dale Schaefer, Franklin REC, Vice President
- Jerry Beck, Iowa Lakes, Secretary
- Larry Rohach, Grundy County REC, Treasurer
- Gary Poppe, Butler County REC, Assistant Secretary/Treasurer ■

Corn Belt Power transmission crews repair a line of 10 broken poles in the Hampton Tap after a storm went through the area June 21. This 161kV transmission line is located four miles south of Hampton, Iowa.

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July Touchstone Energy Volunteer Challenge winner | Mark Walsh, foreman, Iowa Lakes Electric Cooperative, donated his \$100 prize drawing to Emmetsburg VFW.



The power of human connections

Mark Walsh, foreman, Iowa Lakes Electric Cooperative, demonstrates the Touchstone Energy value of commitment to community by volunteering to drive in the Emmetsburg St. Patrick's Day Parade.

Walsh has also volunteered countless hours at Holy Family Parish, his local VFW and several other community activities. ■

Transformer installation *Continued from page 1*



Above | Mike Finnegan, right, system electrical superintendent, reviews transformer details with contractor lead.

Finnegan says the old transformer will be used as a backup.

“We poured a spare concrete pad and moved the old transformer onto it,” he said. “We will keep the old transformer as a spare in case we have a failure somewhere in the system. With lead times for a new transformer varying between six months to 14 months it could place our system in a compromising position without a backup. The backup will help ensure reliability of our system.”

Corn Belt Power Cooperative **Watts Watt**

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