

Wisdom Station sees repairs and other maintenance

Every time Wisdom Station's Unit 2 hits 600 starts, it needs a combustion inspection. That inspection took place in late September.

Jacob Olberding, vice president, power supply, Corn Belt Power Cooperative, said this is normal for the unit.

"The maintenance cycle for Wisdom Unit 2 requires this type of inspection," Olberding said. "The inspection requires the removal of the existing combustion hardware and installation of new combustion hardware."

Replacement of the combustion hardware isn't the only thing taking place.

"The old combustion hardware will be removed and sent to General Electric for a detailed inspection," Olberding said. "At General Electric, they will check the parts for damage from wear and thermal stress. Following the inspection, General Electric will advise us on the best option for refurbishing the parts to like-new condition."

Parts refurbishment will take place sometime in 2020 once the inspection of the existing infrastructure is complete.

"Once complete, the refurbished set of combustion hardware will be returned to Wisdom Station and stored until the next combustion inspection is due."



Above | Jacob Olberding, vice president, power supply, Corn Belt Power, right, gets a look as contractors install a transition piece in the Wisdom Unit 2 combustion turbine.



Wisdom Unit 2 combustion inspection

Above | Contractors remove piping late September on Wisdom Unit 2 as part of a routine inspection. A combustion inspection is customary after a unit reaches its 600 start up which Wisdom Unit 2 reached late this summer.

While it took 15 years for Wisdom Unit 2 to reach its first combustion inspection (600 starts), Olberding believes the next inspection will take place much sooner.

"If we continue to experience increased operations like we have the last couple of years, the next combustion inspection will be due in less than eight years," he said. "In addition to a combustion inspection, the unit at that point will have 1,200 starts and will be due for a hot gas path inspection which includes the turbine and exhaust sections of the unit."

The combustion inspection is part of

Corn Belt Power's maintenance plan that may reduce future cost.

"While there won't necessarily be any performance enhancements to the unit following the inspection, by replacing the combustion hardware, we are hopefully reducing the risk of an expensive, unplanned future outage," Olberding said.

Corn Belt Power is also taking this time to replace an exhaust duct on the unit that was damaged by a secondary ignition event in the end of December 2018.

These projects are slated to be done in early October. ■



Above | EPA rules and regulations impact Neal 4, one of multiple generation resources in which Corn Belt Power Cooperative has ownership. The new ACE rule provides Corn Belt Power with an achievable plan consistent with the EPA's authority under the Clean Air Act.

What's the ACE Rule mean for Corn Belt Power Cooperative

In the Fall of 2018, the Environmental Protection Agency (EPA) released its proposed rule to replace the 2015 Clean Power Plan which included new regulation of carbon dioxide (CO₂) emissions from coal-based power plants. The proposed new regulation, known as the "Affordable Clean Energy (ACE) Rule," was released on June 19, 2019, and replaces the Clean Power Plan. The rule was published in the Federal Register on July 8 and became effective on September 6, 2019.

The final ACE Rule applies only to coal-based steam generating units. It recognizes that the Clean Air Act authorizes CO₂ reduction at existing plants through the application of heat rate improvement (HRI) measures and operational changes at the source itself (inside the fence). It also directs

states to develop standards of performance for individual power plants by applying a prescribed list of technologies that constitute the "Best System of Emission Reduction" (BSER). The ACE rule also includes a provision giving states three years to develop and submit a State Implementation Plan (SIP) to the EPA containing standards of performance for each regulated facility in the state. Upon submitting its SIP, the EPA has six months to determine whether the SIP is "complete" and if so, then has 12 months to approve/disapprove the SIP (total of up to 18 months for final action on a SIP). If a state's SIP is still not acceptable by the EPA, the EPA has two years to develop a Federal Implementation Plan to which that state must comply.

What does this mean to Corn Belt Power

Cooperative and its member cooperatives?

Corn Belt Power Cooperative purchases all of its power supply from Basin Electric Power Cooperative, headquartered in Bismarck, North Dakota. Corn Belt Power also has ownership in multiple generating resources, the output of which it sells to Basin Electric through a power purchase agreement. The proposed ACE rule provides Basin Electric and Corn Belt Power with an achievable plan consistent with the EPA's authority under the Clean Air Act.

This is good news as ACE recognizes the investments made by Basin Electric and Corn Belt Power in its coal-based facilities to improve efficiency and reduce CO₂ emissions. In finalizing the rule, EPA recognized the challenges associated with complying with a rate-based standard of performance, given the variable operation of power plants and the correlation with the emissions rate.

The proposed rule is also consistent with federal law by focusing on actions that are achievable "inside the fence" (meaning: focusing on plant competencies, from within its own operations, rather than outside influences which are not directly impacting plant operations) of a regulated unit.

The ACE Ruling allows states to apply the BSER to regulated facilities, develop a standard of performance, and develop monitoring and compliance measures. Facilities owned and/or operated by Basin Electric and Corn Belt Power have already installed most, if not all, of the HRI measures that the EPA **continued on page 4**

Utility experts discuss future of electricity at Electrify Iowa!

In conjunction with the Iowa Rural Power Education Foundation and the Iowa Environmental Council, the Beneficial Electrification League (BEL) held the first ever Electrify Iowa! conference where nearly 100 registered attendees heard from speakers in early September about environmentally beneficial electrification.

Beneficial electrification means devices and electrical appliances like water heaters, ovens, clothes dryers and vehicles have the potential to become greener over time without additional consumer action. As electric generation becomes more renewable and

environmentally responsible, the devices that use electricity automatically become greener compared to those that use fossil fuels like gas, propane and natural gas.

Speakers at the event included Chuck Soderberg, Iowa Rural Power Education Foundation and Iowa Association of Electric Cooperatives, Kerri Johannsen, Iowa Environmental Council.

NRECA, NextEnergy US, Iowa Clean Cities Coalition, Central Iowa Power Cooperative, Iowa Lakes Electric Cooperative, Midland Power and many more made presentations during the day-long conference.

"This was an exciting event," said

Ross Welterlen, director of energy services engineering, Corn Belt Power Cooperative. "Employees from the cooperative world were able to meet and discuss issues with contractors and environmental groups. It was a day full of great open dialogue. At Corn Belt Power, we're always watching for new and emerging technologies, while also keeping our power supply in mind."

Retired Corn Belt Power employee Jim Sayers gave the keynote closing address.

For more information on the BEL and conference, please visit: <https://beneficialelectrification.com/electrify-iowa/>. ■



Travis Kampen

Kampen starts as communication technician

Travis Kampen began at Corn Belt Power Cooperative September 23 as a communication technician in Humboldt. Kampen previously worked for Electronic Specialties for the past six years. He and his wife, Megan, have six children: Rylan, 11, Bryson, 10, Caylen, 8, Amelia, 4, Lincoln, 2 and Nora, 2 months. Kampen is a West Bend Mallard High School graduate.

News in briefs

Matt Koprira elected as new Grundy County REC director

More than 150 attended (95 members registered) at Grundy County REC's annual meeting on Thursday, Sept. 5.

Members heard reports on the cooperative and also learned a little bit about the Youth Tour from last year's delegate Payton Gingery.

Kevin Pruisner and Jason Paper were re-elected to the board. Matt Koprira was elected in the co-op's second district. He was the only candidate in that district.

Norbert Boyle, president; Larry Rohach, vice president; Jason Paper, secretary; and David Schmidt, treasurer, were all elected to officer positions.

Raccoon Valley sees directors re-elected at annual meeting

Raccoon Valley Electric Cooperative held their annual meeting of members on Wednesday, Sept. 4.

At the meeting, directors Steve Seidl and Jeff Cranston were re-elected to another term on the co-op's board.

More than 400 attended the meeting and 154 members registered. Attendees enjoyed a ham and beef meal and presentation from co-op staff and directors.

Officers are as follows: Dave Onken, president; Jeff Cranston, vice president; and Mark Ludwig, secretary.

Calhoun County REC holds annual meeting

At Calhoun County REC's annual meeting, co-op members heard reports on Calhoun County REC's operations and also heard an update from Ken Kuyper, executive vice president and general manager, Corn Belt Power Cooperative.

More than 160 members were in attendance. Members received a chicken, pork, baked beans, cheesy potato and ice cream dinner. Each member received a JJ Candle and Country Blend Seasoning packet.

LaVerne Arndt and Scott Hicks were each re-elected to the board. Officers were elected as follows: Jim Miller, president; LaVerne Arndt, vice president; Jason McKeeney, secretary; and Ron Hanson, treasurer.



Tesla electric vehicle on display

Above | Members check out Calhoun County REC's new Tesla electric vehicle on display at the co-op's September 4 annual meeting in Rockwell City.



Communication exercise

Above | As part of a Touchstone Energy-led communication exercise, Sara Olson-McLaughlin, administrative assistant/office manager, Prairie Energy Cooperative shares what her group will pack for a ski trip versus a road trip. Keywords make a difference in clear communication and meeting objectives.

Retreat builds brand awareness, gives industry updates

Over a two-and-a-half-day period, communicators and energy advisors from Corn Belt Power Cooperative's member co-ops heard from a variety of speakers at its annual retreat hosted this year mid-September at the Wild Rose Resort in Emmetsburg.

Day one of the retreat saw a presentation from ChargePoint and RESCO on electric vehicle charging stations. Energy advisors also heard from Chad Reisenauer, Basin Electric Power Cooperative, on energy audition. Communicators heard updates from Bucket Media on the system's digital marketing and radio advertising campaigns. Keith Kaderly, Inside Information, was on hand to discuss the cooperatives' survey efforts.

During day two of the retreat, Scott Bialick, senior manager, business development, and Josh McGhee, strategic communications manager, both of Touchstone Energy, gave brand and program updates from creative campaigns to the Co-op Connections Card.

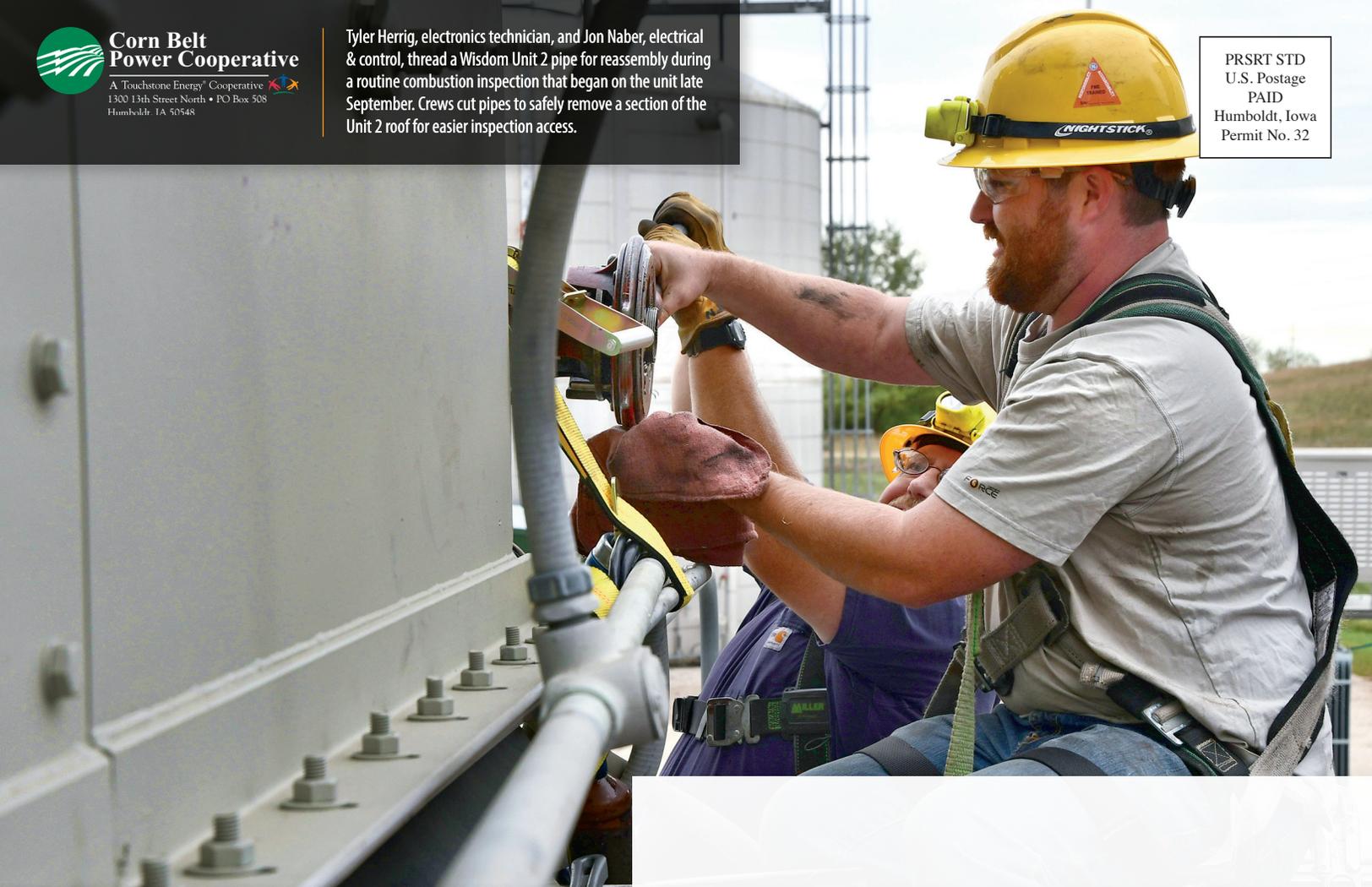
"Touchstone Energy offers hundreds of thousands of dollars worth of valuable tools and programs to member co-ops," says Marena Fritzer, marketing director, Corn Belt Power Cooperative. "We want our co-op communicators and energy advisors to stay informed and on the leading edge of what's available to them."

The group also heard from the Iowa Association of Electric Cooperatives on the 2019/2020 caucus project and legislative updates.

To wrap up the retreat, a small group spent several hours discussing the ethanol industry and touring POET Biorefining outside of Emmetsburg. ■

Tyler Herrig, electronics technician, and Jon Naber, electrical & control, thread a Wisdom Unit 2 pipe for reassembly during a routine combustion inspection that began on the unit late September. Crews cut pipes to safely remove a section of the Unit 2 roof for easier inspection access.

PRSRST STD
 U.S. Postage
 PAID
 Humboldt, Iowa
 Permit No. 32



September Touchstone Energy Volunteer Challenge winner | Daniel Winterhof, board member, Iowa Lakes Electric Cooperative, donated his \$100 drawing prize to the Siouxland Ag in the Classroom program.



Tyler Baxter

The power of human connections

Tyler Baxter, engineer III, Corn Belt Power Cooperative, demonstrates the Touchstone Energy value of commitment to community by volunteering with the Humboldt/Dakota City Chamber of Commerce.

Baxter, pictured right, recently helped plan, set up and break down the area's Cy-Hawk rivalry festival in downtown Humboldt. Before the event, Baxter approved evening entertainment and used his engineering expertise to organize booth locations to maximize flow to all locations.

ACE Rule

continued from page 2 has identified as the BSER. Basin Electric and Corn Belt Power will be working with state regulators in North Dakota, Wyoming, and Iowa to further evaluate the BSER and assist with developing and implementing a standard of performance for each facility.

While there will be challenges with developing standards of performance and associated monitoring and compliance measures among the coal-based fleet, Corn Belt Power Cooperative remains optimistic that states will use the flexibility provided by the EPA to implement this rule without significant economic impact. ■

Corn Belt Power Cooperative Watts Watt

Watts Watt is published monthly for employees and associates of Corn Belt Power Cooperative, 1300 13th St. North, Humboldt, Iowa 50548-0508. This institution is an equal opportunity provider and employer.

Copyright 2019

- Kenneth H. Kuyper, Executive Vice President and General Manager
- Ryan Cornelius, Editor; Vice President, Corporate Relations; CCC
- Marena V. Fritzier, Marketing Director; CCC

[facebook.com/cornbeltpower](https://www.facebook.com/cornbeltpower)

[@CornBeltPower](https://twitter.com/CornBeltPower)

[youtube.com/cornbeltpower](https://www.youtube.com/cornbeltpower)

www.cbpower.coop