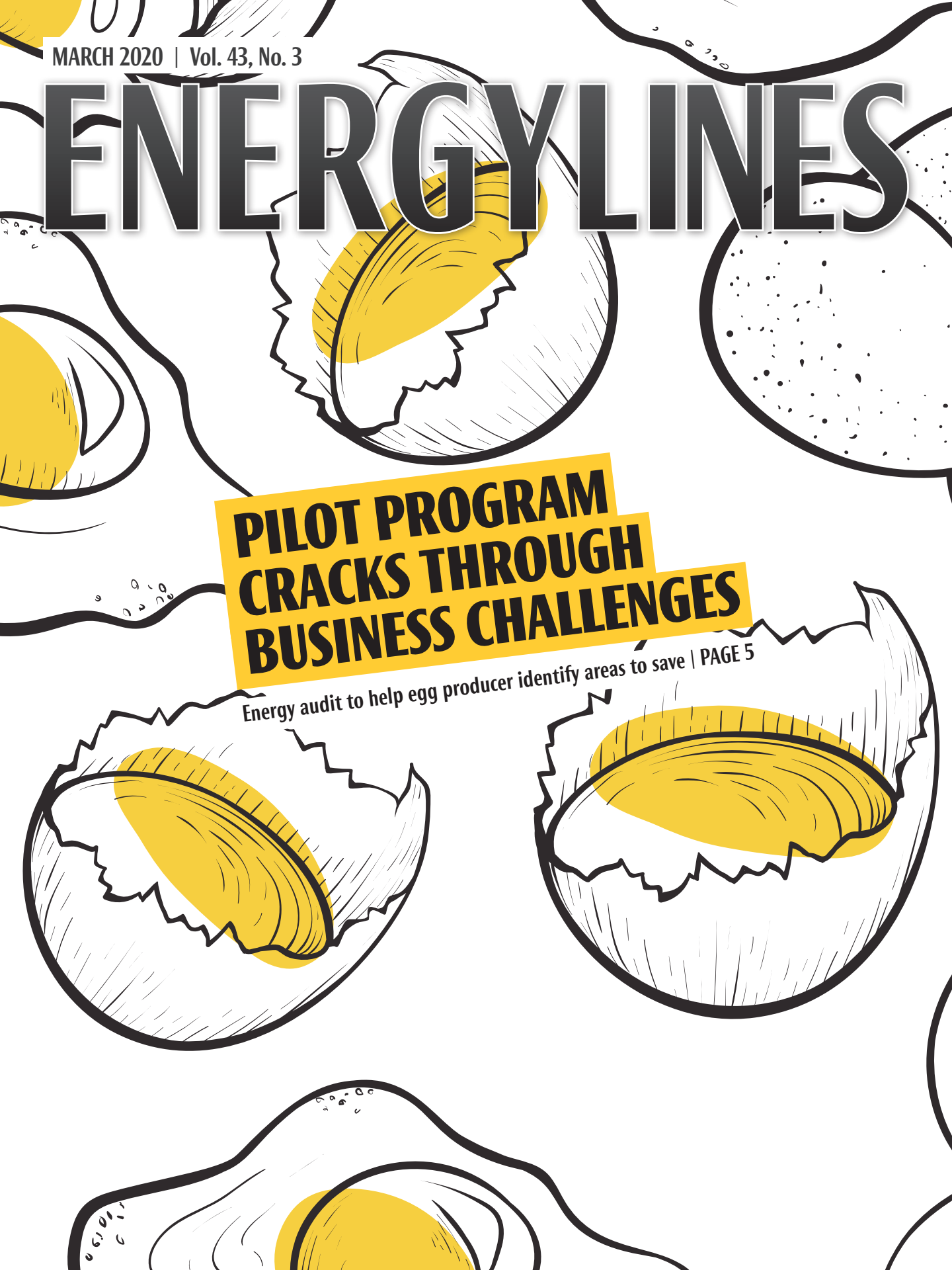
MARCH 2020 | Vol. 43, No. 3

ENERGYLINES



PILOT PROGRAM CRACKS THROUGH BUSINESS CHALLENGES

Energy audit to help egg producer identify areas to save | PAGE 5

ELECTRIC VEHICLES

©GettyImages.com/nrqemi

Rate structure analysis shows cost savings for electric vehicle owners

An analysis conducted by Illinois consumer advocate group Citizens Utility Board found that Ameren customers with an electric vehicle (EV) could reduce their annual charging costs up to 90 percent through the utility's adjustable rate structure.

According to a report at Utility Dive, the rate is based on day-ahead prices in the MISO. The report concludes potential savings for EV owners ranged from $54 to $379. According to the utility, more than 13,000 customers have signed up for this program — helping save more than $12 million.

ONLINEEXTRA

>> Learn how Ameren is marketing their time-of-use rates at:

URL: PowerSmartPricing.org

$20.4 B

RURAL BROADBAND FUNDS

The Federal Communications Commission has released the final order for the biggest sum of federal funds yet for rural broadband.

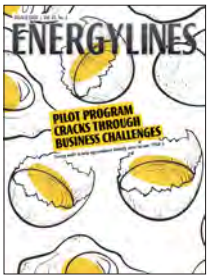
The preliminary estimate shows Indiana has 202,000 eligible locations available for bidding through the first phase.

Digital fund to expand internet in rural areas

The largest amount of federal funds to date for rural broadband will be available for bid this year. This will take place through a reverse auction by the Federal Communications Commission.

The $20.4 billion Rural Digital Opportunity Fund, "if done correctly, will go a long way toward bringing high-speed internet to many rural communities that are being left behind in the digital economy," said Brian O'Hara, NRECA senior director of regulatory issues for broadband and telecom.

The fund will be divided into two phases with each connecting to winning bidders over 10 years.



ON THE COVER

The Rural Energy Audit Pilot Project gives agribusinesses, like egg producer Rose Acres, the tools needed to apply for future state and federal funding.

THE ENERGY MARKET

Challenges of calculating 24/7 renewable consumption

The Interchange, a podcast from Greentech Media, discusses challenges organizations face when they look to match renewable energy consumption with demand. Melissa Lott, a senior research scholar at Columbia University's Center on Global Energy Policy, provides insight into the complexity of procuring renewable energy.

The Interchange

LISTEN IN

A recent The Interchange podcast focused on the emerging art of matching renewables with demand.

URL: GreentechMedia.com

Strategic Priorities

Eight ways Hoosier Energy works to succeed

These are the strategic priorities that the Hoosier Energy workforce strives to achieve every day.

- EMERGING TECHNOLOGIES
- MEMBER FOCUS
- RISK MANAGEMENT
- GOVERNANCE
- COMPETITIVE RATES
- COST MANAGEMENT AND PERFORMANCE
- SUPPLY PORTFOLIO
- OPERATIONAL EXCELLENCE

A strategic focus

Question: *How will Hoosier Energy continue to identify cost-efficiency gains for members in 2020?*

Adam Roberts, Chief Financial Officer

Hoosier Energy takes a proactive approach as it explores all opportunities to lower costs for member cooperatives. Throughout the year, we look at the following aspects and make adjustments to maximize efficiencies.

Roberts

■ We will continue to manage the fuel supply contracts for the Merom Generating Station. This will take place this year through price negotiations.

■ Analysis of our generating fleet, through the Midcontinent Independent System Operator (MISO) market, helps us maximize its value. This can include purchasing energy in the market when pricing is lower than other energy sources – during 2019, Hoosier Energy economically dispatched the Merom Generating Station saving members nearly $2 million.

■ Through the finance function at the G&T, we continuously look for innovative financing opportunities in order to maintain competitive borrowing costs.

During 2019, Hoosier Energy took advantage of changes in the latest Farm Bill in order to lower borrowing costs. The cooperative executed a strategy that involved advancing funds on an existing Rural Utilities Service (RUS) loan at 2.9 percent, investing the proceeds in the RUS Cushion of Credit, and then prepaying $93 million of RUS debt with interest rates in excess of 5 percent. This strategy helped Hoosier realize net savings of $1.5 million from the 2019 budget, with continued savings expected to be realized over the life of the prepaid loans. Hoosier Energy will be analyzing a second opportunity to prepay higher interest rate loans in 2020.

■ A cross-functional team has been tasked with identifying cost-savings opportunities throughout the organization. The cross-functional team includes all five of Hoosier's vice presidents.

■ Hoosier Energy will continue to look for opportunities to manage costs through corporate efficiencies and contract negotiations. This includes making sure benefit offerings are on par with other cooperatives. Labor and benefit costs in 2019 were comparable to 2018 and $1.6 million less than budget driven by continued focus on workforce efficiencies and lower cost insurance plans.

2020 ANNUAL MEETING

Guest speaker's message to focus on being an encourager

Erick Rheam will be the guest speaker at Hoosier Energy's annual meeting on April 2. Rheam has industry experience including development of key account programs for Anderson Municipal Light and Power in Anderson, Ind. Rheam will speak about encouragement. He believes that the world belongs to the encourager.

Rheam says, "When an encourager comes into your life... It lifts up the discouraged."

20-year resource plan to save members an estimated $700 million over two decades

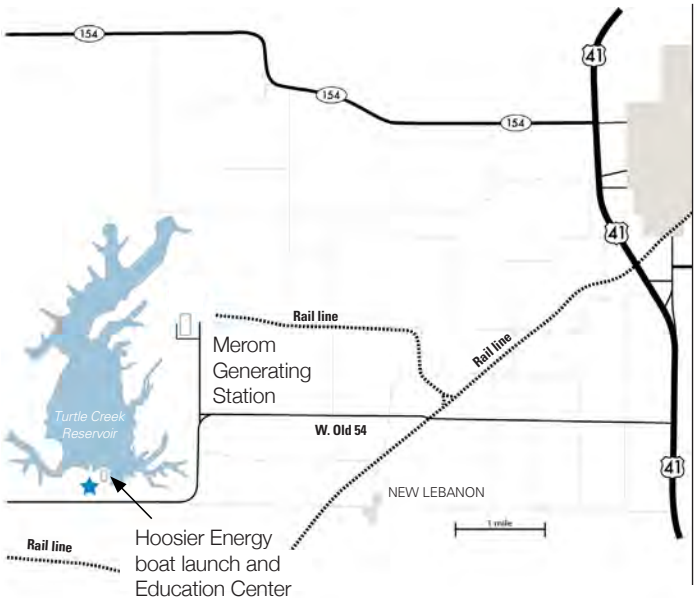
Following a year-long process, Hoosier Energy announced in January that its Board of Directors approved a new long-range resource plan. The current plan is designed to provide its 18 member cooperatives with reliable, affordable and environmentally sustainable energy while saving members an estimated $700 million over the next two decades.

Hoosier Energy expects to retire its coal-fired Merom Generating Station in 2023 and transition to a more diverse generation mix that includes a combination of low-cost wind, solar, natural gas and storage. This plan provides a foundation for supply cost stability and predictability while reducing the company's carbon footprint by nearly 80 percent.

Approximately 185 cooperative employees currently support operations of the 1,070-megawatt Merom Station, which is in Sullivan, IN, and went online in 1982. Hoosier Energy President & CEO Donna Walker said, "We sincerely value our dedicated employees and will help those impacted during this transition by working with the IBEW to offer assistance such as retraining, reassignment and professional outplacement, along with retirement options."

There are several possibilities regarding the future of the site. Hoosier Energy will work with state and local economic development officials to market portions of the Merom property for industrial development. The company will also consider renewable energy generation at the location or pursue a sale of the plant. EL

Catfish tournament April 4 at Turtle Creek Reservoir



Hoosier Energy will host an Indiana Catfish Association fishing tournament on April 4 at the Turtle Creek Reservoir.

Registration for the open tournament begins at 5 a.m. with a $20 boat entry fee. There will be $2,800 in cash and prizes.

Did you know?

HYUNDAI TO INVEST $87 B IN ELECTRIC TRANSPORTATION

According to a report by Forbes, the Hyundai Group plans to spend $87 billion on the development of a common electric vehicle architecture.

Eliminating multiple platforms for electric vehicles will help the Korean automotive manufacturer reduce production complexity and costs.

READ MORE AT:
Forbes.com

Submitted photo

THOUGHT LEADERS: Discussions at the International Maintenance Conference were led by Hoosier Energy employees. Thought leaders include: Chester Hembree, Mark Kramer, Dave Appel and Gary Burris.

"The conference applies a business philosophy that streamlines organizations and ties the value of their assets to their company mission."

CHESTER HEMBREE
Senior Power Production Engineer

Building a culture of reliability through operational excellence

Hoosier Energy teams present at international event for maintenance excellence

Reliability is part of Hoosier Energy's mission for members. Connecting to this mission was a recent event focusing on reliability beyond equipment maintenance. Thought leaders in the industry from the cooperative presented at the International Maintenance Conference with more than 1,000 in attendance from around the world.

"The conference applies a business philosophy that streamlines organizations and ties the value of their assets to their company mission," says Chester Hembree, senior power production engineer.

Planning, executing and supervising the core team model of small, cross-functional teams, Hembree co-presented "Building the Culture of Excellence Foundation with Core Teams" with senior project manager Mark Kramer.

The presentation addressed Merom Generating Station's maintenance culture journey, the development and implementation of core teams, and how the plant uses core teams to drive excellence.

In 2011, the Merom Generating Station started down a path to bring accountability and ownership to the maintenance process by implementing the Equipment Ownership program. While successful, the program was still reactive in nature, according to Hembree. In 2015, a cross-functional team was assembled to find a proactive approach to maintenance. Core teams focus on specific sets of equipment at the plant. This new initiative built off of the successes of the prior program, while driving the organization in a more proactive direction.

Lubrication reliability

The second presentation, "Merom Generating Station Lubrication Reliability Program," was presented by environmental specialist Dave Appel and production engineer Gary Burris.

Burris and Appel explained how the Merom Generating Station, like many power plants, had issues with use, handling and storage of lubricating oil. To ensure a successful lubrication reliability program, the team created a guideline manual, which provided a roadmap from the inception of new oil to the disposal of the old oil. This was the basis for reliability that they shared with conference participants.

When the presenters were not actively presenting, they took advantage of gleaning as much information from the conference as possible. EL

Improving the process

Rural Energy Audit Pilot Project gives agribusinesses tools to apply for funding

Wanting to meet the needs of farmers and rural business owners, Hoosier Energy launched a pilot program to conduct rural energy audits and find ways to improve operations.

So far, six audits have taken place in service areas for Whitewater Valley REMC, Henry County REMC, Southeastern Indiana REMC, Jackson County REMC and Orange County REMC.

A large agribusiness in the pilot program is Rose Acre Farms, which has 15 accounts at SEI REMC with a total load of about 1,900 kW, according to General Manager Keith Mathews. Rose Acre Farms, one of the largest egg producers in the United States, is one of SEI REMC's top 20 industrial loads with all accounts combined.

"I'm looking forward to finding out what the audit shows and what benefits they will reap or get out of that process," Mathews says of Rose Acre's energy audit. "We want to make sure everybody is conscientious on how they use power."

"If companies like Rose Acres can shave off 1 or 2 percent (of operating costs), that's going to be a great value for them... If they can shave off when they peak, that's another thing that could be a win-win."

KEITH MATHEWS
SEI REMC General Manager

MEMBER-FOCUSED: Rose Acre Farms is dedicated to producing shell eggs and egg products. With locations in Southeastern Indiana REMC territory, the co-op was able to help the business with energy audits.

Mike Owens, Hoosier Energy Key Accounts manager, estimates that the audit will bring around $22,000 a year in savings, although data is still being gathered for the final report.

The Rural Energy Audit Pilot Project started last year when Hoosier Energy and co-op personnel decided to find a way to meet the needs of rural businesses, especially farmers, that needed energy audits in order to apply for USDA funding.

"If you're a member of an operation and you want to borrow capital – say go to the USDA for a loan or grant – the first thing that the USDA requires is that you do an energy audit," says Owens. "You're on your own to get that energy audit and it tends to be expensive. Our pilot project gives businesses a lot of options to pursue funding."

Owens and Mathews both hope more grant money will be secured to extend the pilot project and expand the number of businesses that are helped.

"If companies like Rose Acre can shave off 1 or 2 percent, that's going to be a great value for them," Mathews says. "And if they can shave off when they peak, that's another thing that could be a win-win situation for the REMC and the company. We can pass on savings that way."

Scott Bowers, Vice President of Public Policy and Member Services, says pilot programs are important because they offer the opportunity to try new ideas and assess their long-term benefit while keeping upfront financial and resource investments to a minimum. Funding from state and federal agencies is also available for pilot programs like this one.

If the pilot is successful, the size and scope of the project could be expanded, making it available to all of the member cooperatives.

Metzger to be named CEO at Bartholomew County REMC

Bartholomew County REMC has announced that Courtney Metzger will serve as its new Chief Executive Officer. Metzger will start on March 23 and be named CEO on April 8 after the co-ops annual meeting.

Metzger

Metzger, who previously worked as a consultant to the nation's electric cooperatives at the National Rural Utility Cooperative Finance Corporation (CFC) near Washington, D.C., is a native of southwestern Indiana. During her time at CFC, she engaged with co-ops on strategic initiatives, including cost-of-service studies, ratemaking, emerging technologies, electric vehicle programs and the evolving member.

Prior to her work at CFC, Metzger was employed by Kenergy, an electric distribution co-op in northern Kentucky. Her primary roles there were in engineering, materials management, contracting and procurement management.

Metzger earned an Executive MBA from Purdue University and a Bachelor of Science in Business Management from Oakland City University.

She and her husband, Heath, look forward to joining the Bartholomew County family.

MEROM GENERATING STATION

HE photo

EFFICIENT OPERATION: Control Operator Kenny Goff tests the simulator during a testing phase of the project at the Merom Generating Station.

Simulator training aids in everyday tasks, adverse events

When Matt Figg trained as a control operator at Merom Generating Station, he stood at a tapered bench board covered with pistol grips, switches and buttons and looked at a giant wall of lights, gauges and paper charts. To prepare for future situations, Figg would run actions through his mind – turn this switch, push that button.

Now as operations training specialist, Figg is working with Tim Goodman, flue gas desulfurization (FGD) training specialist, to develop a virtual simulator with Emerson Process Control in Pittsburgh, Pennsylvania. Once the simulator arrives in late spring, the pair will train operators on the system, which will allow hands-on experience in handling a myriad of situations without working on a live system.

The simulator allows operators to go through different processes, like starting a unit, taking a unit offline or handling an adverse event, a trip or an equipment failure. "They're actually able to lay their hands on the controls," Figg says. "The simulator has shortened the learning curve for our control operators dramatically."

The simulator is an exact replication of computer panels in the main and FGD control rooms. It allows an operator to become more efficient and test procedures in a controlled environment.

"We've got a good bunch of folks here and this helps them do their job better," says Figg, explaining that the three most important results from using a simulator increases safety, improves reliability, and increases efficiency. "This helps us have a smooth, consistent, efficient operation."

SIMULATOR, continues on Page 10

ONLY IN ENERGYLINES (MARCH 2003)

POWER SUPPLY PORTFOLIO

HOOSIER ENERGY ADDS THE WORTHINGTON STATION IN 2003

Generation resource

In 2003, Hoosier Energy completed the purchase of the Worthington Generating Station from Williams Energy. The 174 MW gas-fired station, located in Greene County, helps diversify the generation and transmission's (G&T) power supply portfolio.

The gas turbines, similar to those used in large commercial aircraft, develop approximately 50,000 horsepower and the torque necessary to rotate the generator that produces electricity.

The output of each engine is approximately 43,000 kilowatts.

When at full operation, the station can supply power for 140,000 average homes. EL

Submitted photo

TAKING TO THE WATER: Rain led to flooding in Bloomfield where UDWI REMC crews took to the water using an airboat to access de-energized lines for repairs.

Flooding leads to challenging power restoration effort for UDWI REMC

Strong rain fell across much of the state during the second weekend of the year. In a three-day period, The Weather Channel reported nearly four inches of rain fell in Greene County – an area that averages 5.6 inches of precipitation for the entire month.

With the high amounts of rainfall, the White River overflowed its banks and spilled into area roadways, closing off access to homes, businesses and farms.

In addition to impassable local roads, the intense rainfall caused weather-related outages for UDWI REMC member-consumers.

Crews were already at UDWI getting ready to start the day when an outage call came in from a member living near the White River.

"The consumer that was out of power has a working cattle farm and relies on electricity to be able to feed his cattle everyday," said Jared Pyne, Line Superintendent at UDWI REMC. Crews began inspection of the lines near the river using a drone to fly the flooded area, where they found a damaged power pole.

Line crews determined the safest way to reach the de-energized pole was with an airboat as floodwaters made the area impassable for bucket trucks.

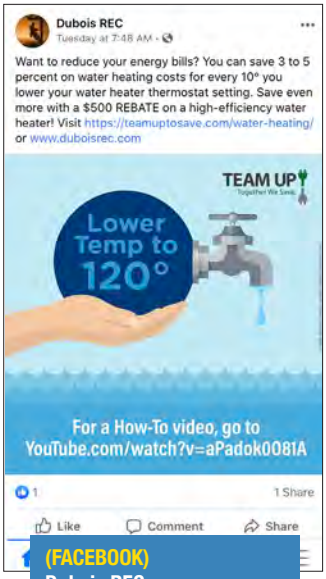
Pyne reached out to Eastern Height Utility, the local water company, for help. The water company has offered the use of their airboat in the past when the co-op needed to pull conductor across the river. Being a good neighbor, Kenny McIntosh, General Manager of the water company has told Pyne many times to call if the co-op needed any help.

McIntosh was quick to respond >>

Social session

Dubois REC took to Facebook to show member-consumers how they could reduce their energy bills by lowering their water heater thermostat setting.

Harrison REMC showed Facebook followers its commitment to community though their annual firemen and emergency personnel seminar.



(FACEBOOK)
Dubois REC

(FACEBOOK)
Harrison REMC

ENERGYLINES

CONTACT US AT:

EnergyLines Editor
Hoosier Energy
P.O. Box 908
Bloomington, IN 47402

ENERGYLINES EDITORIAL STAFF

A Touchstone Energy® Cooperative

This institution is an equal opportunity provider and employer.

The following stock images were used in this issue .

©Getty Images.com/ SpicyTruffel

©Getty Images.com/ offstocker

©Getty Images.com/ VikiVector

Submitted photo

TRAVELING TO RESTORE POWER: UDWI REMC partrnered with a local water utility to restore power due to flooding in Bloomfield. In the airboat from left are: Shaun Hayes and Will Padgett of UDWI REMC, and Kenny McIntosh of Eastern Heights Utility.

and brought the airboat to the river. He was met there by Line Foreman Bill Baize, Journeyman Lineman Shaun Hayes, Line Apprentice Will Padgett and Engineer John Sutton, UDWI employees with nearly 75 years of combined experience, to develop a plan to repair the damaged equipment.

"We believe that one member is just as important as 1,000 being out of power," said Pyne.

Using the co-op's Facebook page, member-consumers thanked everyone involved for the quick restoration.

One of the most powerful ways the cooperative shows its commitment to community is through coordinated power restoration efforts such as this. EL

SIMULATOR,
Continued from page 7

The simulator allows operators to practice situations that may only happen every five or 10 years without causing adverse reactions. "Operators can make mistakes or test theories that they can't do on a live unit without causing some sort of adverse reaction," Goodman says. "They can check out procedures on the simulator and see how the system reacts to what they're wanting to do."

Ultimately, though, having practice and being prepared will save money.

"As a generation station, if we can prevent a unit trip or speed up a unit startup by an hour, or if we can prevent damaging a piece of equipment, those dollar amounts can pile up exponentially," Figg says.

This simulator replaces a less sophisticated one used since 2006, when the generating station transitioned to a digital control system, to help control operators learn to use a graphic user interface. It was meant to be a conversion tool, not a training tool. Eventually, the software and hardware became outdated.

Figg and Goodman have been testing the new simulator, which is in Pittsburgh, virtually through the mock control room in the training facility. Once tests are done, the system will be transferred to Merom. EL

NEXT MONTH

More information about the Duff Coleman project will be in the April issue of EnergyLines.

Duff Coleman transmission project

Significant progress has been made on the 30-mile 345kV Duff Coleman transmission project that will span from southern Indiana to northern Kentucky. Hoosier Energy has partnered with Republic Transmission and Big Rivers Electric Corporation to develop, build and maintain the single circuit line.