SUMMER 2021 | Vol. 44, No. 6-8

ENERGY LINES

BEHIND THE LENS

HELPING CO-OPS PRODUCE LIVE ANNUAL MEETINGS

RESILIENT UPGRADES

How a multi-year, 1,600-mile project is helping strengthen the grid

+ ELECTRIFY INDIANA

Register to learn how the state is electrifying its economy, consumers

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Co-ops adapt through shared principles that honor teamwork, collaboration

EDUCATE + INFORM

Information produced to help consumers navigate solar sales market

ENVIRONMENTAL NEWS

HE Photo

MATERIAL HANDLING: The coal pile at the Merom Generating Station. Purdue University researchers have developed a technology to purify coal ash without solvents.

PROCESS OF EXTRACTING RARE EARTH ELEMENTS FROM COAL ASH IMPROVED

A Purdue University professor and her research team have licensed technology to separate and purify rare earth elements (REE) found in coal ash without the use of solvents, according to the Indiana Environmental Reporter.

The new technology uses chromatography techniques to separate REEs from other impurities and then from each other. Chromatography is the process of separating a mixture using a solution or vapor.

This technology could help the U.S. enter the $4 billion REE production market in an environment-friendly way, according to Purdue University.

With about 1.5 billion tons of coal ash being stored in the U.S., the material could produce REEs for decades. The research conducted at Purdue is at laboratory scale and more work is needed to show how it can be used at a larger scale.

INDUSTRY NEWS

Agency approves $8 billion to fund power grid upgrades

The Biden administration implemented $8 billion of Energy Department financing for high-voltage transmission lines. The expansion of these lines are to boost low-carbon energy supply by connecting wind and solar sites to areas of population, according to the Wall Street Journal (WSJ).

The agency has specifically requested loan applications for transmission projects that transport direct current and sites located along railroad and highways, according to the WSJ.

This includes rights-of-way guidance from the Transportation Department to help the expansion of the grid and associated infrastructure.

ON THE COVER

Hoosier Energy video producers have been helping members produce live annual meetings. Chris Johnson is shown behind the camera.

19.9%

INDIANA PROPOSAL

Duke Energy has proposed selling 19.9 percent of Indiana operations to help the Investor Owned Utility avoid selling debt or issuing stock.

Duke Energy seeks partial sale of Indiana operations

Duke Energy is looking to raise billions of dollars by selling partial ownership in Indiana operations for $2.05 billion to GIC Private Ltd., a fund established by the government of Singapore, according to the Indianapolis Business Journal (IBJ).

Through the proposal, Duke Energy would sell 19.9 percent of Indiana operations. The deal would help the North Carolina-based utility avoid selling debt or issuing more stock.

The utility states this deal would boost its $60 billion, five-year clean-energy capital projects across all U.S. operations, according to IBJ.

Such a purchase would be reviewed by the Federal Energy Regulatory Commission and the Committee on Foreign Investment in the United States.

Duke Energy Indiana is headquartered in Plainfield, Ind., and serves 840,000 consumers with a 2020 operating revenue of $2.8 billion.

EL

FIND US ONLINE

To subscribe or to read back issues, visit HoosierEnergy.com/news/energylines

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***

INDUSTRY NEWS

Volkswagen committee awards $5.5 million to add up to 60 charging stations across Indiana

The Indiana Volkswagen Environmental Mitigation Trust Program Committee approved $5.535 million in funding to the Indiana Utility Group to install up to 60 direct current (DC) fast electric vehicle (EV) charging stations across Indiana.

The Indiana Utility Group is made up of eight Indiana utilities including: Hoosier Energy, Duke Energy Indiana; Indiana Michigan Power; AES Indiana; Northern Indiana Public Service Co.; Vectren; Wabash Valley Power Alliance; and Crawfordsville Electric Light & Power.

While the plans are in their early stages, the committee is excited to fund DC Fast EV charging stations to help meet Indiana's future transportation needs as more auto manufacturers offer EV choices. Having a network of DC fast charging stations that can charge some EVs in as little as 20 minutes allows Indiana consumers to consider the environmental benefits of purchasing an electric vehicle. The charging stations will help Indiana continue to be a leader in meeting transportation needs of Hoosiers and visitors as they travel throughout the state.

ONLINEEXTRA

>> Updates available at: **idem.IN.gov/vwtrust**

INDUSTRY NEWS

Petroleum companies pivot toward renewable energy

Renewable energy is seeing a boom and oil companies are investing in these resources. From Royal Dutch Shell to BP, petroleum producers are building wind and solar projects to supply electricity to corporations including Amazon and Microsoft according to the Wall Street Journal (WSJ).

The global reach that oil companies have can give them an advantage as companies look to diversify how they source power for their operations. Corporate power-purchase agreements remain a small piece of the renewable energy pie today but interest is growing at a rapid pace.

Companies purchased a record 25 gigawatts of renewable energy last year, up 25 percent from the previous year according to the WSJ.

INDUSTRY NEWS

Idled power plants get new life powering bitcoin mining

A new trend is taking place across the country – cryptocurrency investors are funding power generation, according to a Wall Street Journal (WSJ) report.

The computer networks used to mine cryptocurrencies require a lot of energy to solve complex computational math problems that help verify the accuracy of Bitcoin transactions. This is how companies can earn cryptocurrency, or digital cash, without having to pay for it.

A Nasdaq-listed bitcoin miner called Marathon Digital Holdings Inc. partnered with a coal-fired generation station last year to power its network. With 100 MW of power capacity planned, Marathon Digital

is looking to produce 55 Bitcoins a day by 2022, according to the WSJ.

As of July 20, the price of one Bitcoin was $29,951.

BEHIND THE LENS

VIRTUAL ANNUAL MEETINGS GET A BOOST THROUGH PROFESSIONAL VIDEO PRODUCTIONS

We're live in five, four, three, two, one…

With cameras rolling, co-op annual meetings are taking place live on Facebook as co-ops work to meet safety protocols.

To assist with these events, Hoosier Energy's Communications and Technology Support Service departments have teamed up to provide audio and video support for members.

Virtual meetings consist of two distinct video methods. Segments can be pre-recorded or they can take place live. Often a blend of both are used. No matter the process implemented, there are a lot of moving pieces that take place behind the scenes. That is why planning is such an important part of executing a great event. With clear direction and coordination among everyone involved, virtual events are proving to be effective.

Co-ops helping co-ops

At Whitewater Valley REMC, Sandy Cason and Jennifer Scott led the coordination for this year's virtual meeting. They wanted to make improvements and they reached out to Hoosier Energy for help.

Video Producers Chris Johnson and Ben Turner showed Cason the methods available and she decided to use both.

The co-op meeting had live segments with Secretary/Treasurer Jodie Creek

"If you have bad sound, it's a dead giveaway that the video is not professionally produced, and when the sound is so bad, it can detract from the content of the video itself. That's where we can help."

BEN TURNER
Video Producer

TESTING BEFORE GOING LIVE:
At left, Mary Jo Thomas, Whitewater Valley REMC CEO, stands at a podium to test audio and video quality before going live for their annual meeting.

Second from left to right: Zach Horstman of Hoosier Energy captures the audio and video feed for use on Facebook while Jennifer Scott looks on. Sandy Cason uses a laptop to respond to member-consumers as they post comments on social media channels.

updating members on meeting bylaws and stating a quorum had been met, and the cooperative's attorney, Amber Orozco, updated members on director election results.

For some co-ops, segments of their annual meeting conducted live meet legal requirements for the election process. Some co-ops have amended bylaw to accommodate the ways meetings take place in a virtual setting.

"Our board updated our bylaws a few years ago allowing our election process to take place by mail-in vote. Last year, as the in-person meeting was canceled due to COVID, another bylaw update was made expanding the timeframe we had to hold the meeting," said Cason.

The co-op's 17-minute meeting also included pre-recorded messages from CEO Mary Jo Thomas and Board Chairman Rod West.

"We were able to integrate the pre-recorded segments in such a way that the meeting played as if it were a continuous live broadcast," said Johnson.

"I was amazed how everything was put together – it was seamless," said Cason.

Member-consumers were commenting during the Facebook Live event saying they were enjoying it. Cason was on her computer, responding to member comments as they were posted.

Equipment used leads to high quality virtual events

The equipment used to pull off TV-quality live events include more than a phone and an internet connection. High-definition video cameras, lighting, a teleprompter and microphones all help improve the experience.

With a combined 40 years of experience, Johnson and Turner know what it takes to produce content that looks and sounds great. When setting up for a shoot, they focus on proper lighting and camera exposures. They have a variety of microphones in their arsenal to capture clear, noise-free audio and they always frame shots to make their subjects look great. Turner boiled things down to one element that can make or break a video.

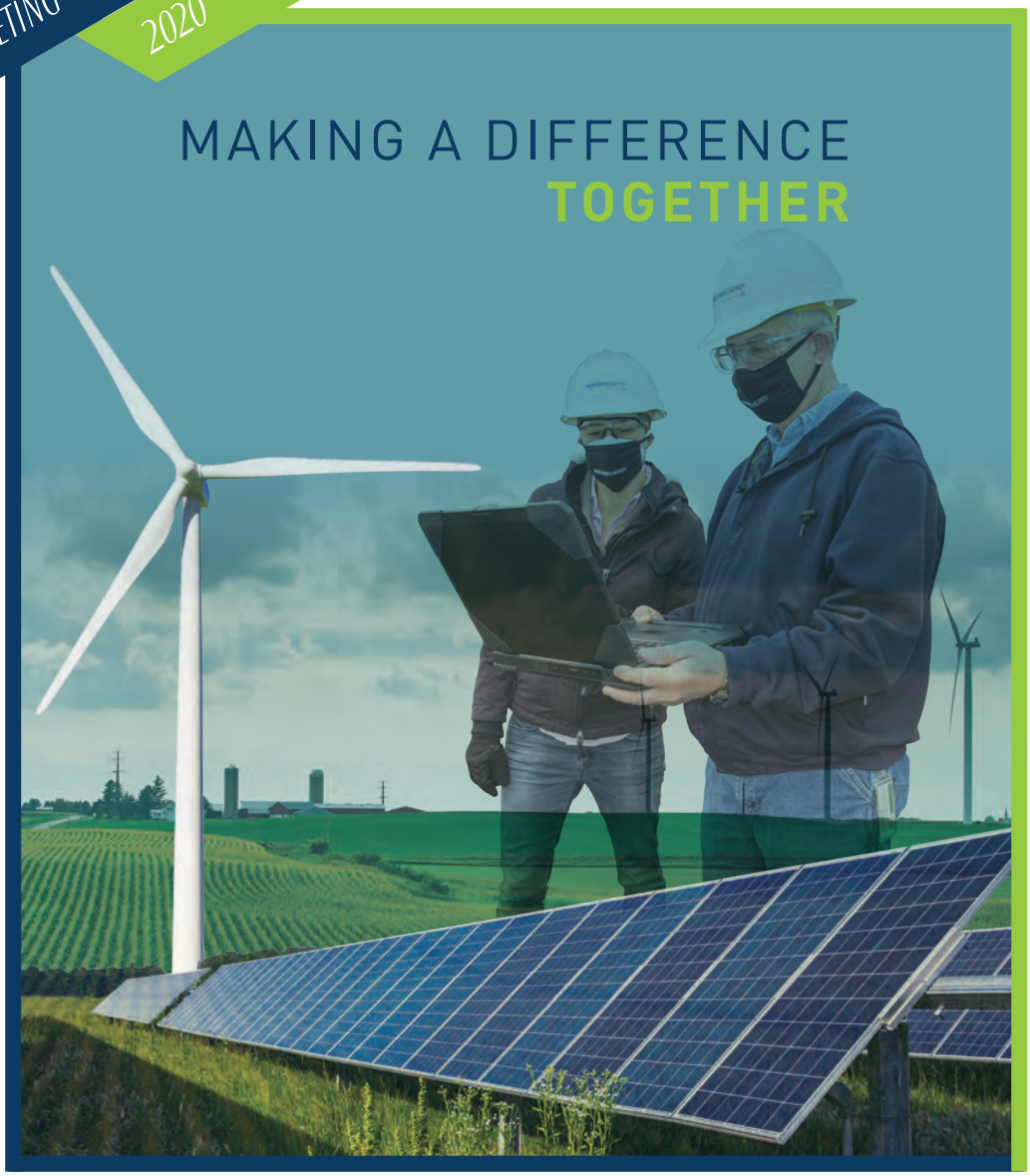
"If you have bad sound, it's a dead giveaway that the video is not professionally produced, and when the sound is so bad, it can detract from the content of the video itself. That's where we can help," said Turner.

At Whitewater Valley REMC, their experience with this virtual setup has them looking toward the future and how virtual events can be part of ongoing member engagement.

"We have members that don't want to take three or four hours out of a weeknight to attend an in-person meeting to vote for a director and maybe win a prize. We are weighing our options to come up with a happy medium to keep our members engaged and informed," said Cason.

ANNUAL MEETING 2020

MAKING A DIFFERENCE TOGETHER



CO-OPS ADAPT THROUGH SHARED PRINCIPLES THAT HONOR TEAMWORK, COLLABORATION

At the heart of the cooperative culture is an honest desire to provide services that value reliability, affordability and sustainability, as well as fairness to all.

In 2020, Hoosier Energy began to put into action a new long-range resource plan centered on assuring member-consumers the energy they use in their homes and businesses is coming from energy sources that provide flexibility and value into the future.

Approved by the Board of Directors in January, the plan takes advantage of an abundance of low-cost natural gas, continued advancements in wind and solar technologies, and the potential for large-scale battery storage.

This path to greater energy supply diversity addresses changing consumer desires, while saving hundreds of millions of dollars, significantly reducing carbon emissions and creating long-term cost stability.

The cooperative didn't stop with merely planning for tomorrow. It ensured the new

2020 annual meeting

Hoosier Energy conducted annual meeting requirements on April 6 at headquarters in Bloomington. The Board of Directors met in person to elect officers, directors and committee chairs. Director service awards and board chairman recognition were presented at the March board meeting. These changes were made to reflect COVID-19 social distancing requirements.

plan supports modern technologies for grid management, beneficial electrification, workforce development and economic opportunity.

Adapting to changing times

These efforts began to unfold during a year marked by economic uncertainty associated with the COVID-19 pandemic.

Hoosier Energy and its members adapted to these times, leaning on shared cooperative principles that honor teamwork and collaboration. The pandemic may have changed how we work, but not what we do. If anything, it helped strengthen our resolve to cushion the blow.

Shift rotation changes limited potential exposure to the virus, while daily work — always performed with safety in mind — kept the system going while technology kept us connected.

Swift action by the Board of Directors led to a one-time special retirement of $6 million in capital credits to support member cash flow needs. Member assistance measures also included an extension for power bill payments, $29 million in cost reductions and lowering our operating margin for 2020. Opportunities to purchase low-cost energy through the wholesale markets supplemented these efforts, minimizing power supply costs.

As a result of Hoosier Energy's financial strategies, unrelated to COVID assistance, our new resource portfolio and continued cost management, wholesale rates are >>

BOARD CHAIRS

Bob Stroup Chairman of the Board
(RushShelby Energy)

Gary Waninger Vice Chairman
(Southern Indiana Power)

David Smith Secretary
(Southeastern Indiana REMC)

Jodie Creek Treasurer
(Whitewater Valley REMC)

COMMITTEE CHAIRS

John Edwards
Operations Committee Chair
(Daviess-Martin REMC)

Steve Dieterlen
Employee Relations Committee Chair
(Clark County REMC)

Darin Duncan
Finance & Audit Committee Chair
(Harrison REMC)

currently projected to decrease 7 percent by 2024.

Benefits of emerging technology

As the trusted energy partner for 710,000 people in central and southern Indiana and southeastern Illinois, Hoosier Energy's 18 member distribution systems also began identifying how co-ops can bring the benefits of emerging technologies to homes and businesses throughout the 15,000-square-mile service area.

An electric vehicle smart charging pilot program is gathering local data on consumer charging patterns. The information is helping member co-ops identify the most beneficial time to charge for the consumer and the co-op, as well as introduce member-consumers to the cost advantages of electric vehicles.

Building a smarter grid

Traditional demand side management and energy efficiency programs are making way for projects that reward "smart grid" efficiencies through use of new commercial lighting, HVAC, thermostat or heat-pump technologies.

On a larger scale, battery storage pilots are exploring how battery packs could be used to solve critical power quality issues, optimize production of renewable energy resources or create microgrids to strengthen the reliability and resiliency of the larger interconnected power network.

Gathering local, real world data helps form the energy plan for the future — creating beneficial electrification programs that reward consumers or improve business efficiencies, while reducing overall environmental impacts.

Behind the scenes, members teamed up with Hoosier Energy to produce a comprehensive, interactive communications map identifying areas of potential collaboration in fiber optic, radio and smart switching technology. Together, we can now quickly identify areas of potential cost-effective collaboration in preparing for distributed generation and technology upgrades.

Substations, capacity and infrastructure upgrades with smart grid technology support future economic development and load growth. Upgraded communications equipment allows us to operate switches remotely and quickly identify faults on the system to provide quicker response, assuring reliability.

Economic Development successes

Our members' knowledge and commitment to community extend beyond just wires and poles and are among the reasons Site Selection Magazine named Hoosier Energy as one of the nation's top 10 utilities in economic development for 2020. Hoosier Energy's renewables portfolio stands to help companies meet corporate sustainability goals, another advantage in a region intent on developing industrial and commercial sites that meet today's standards for technology and sustainability.

Integrated decision making

The long-range resource plan is also about transitioning the Merom Generating Station site for industrial development.

Hoosier Energy will join Hallador Energy Company to develop 200MW of energy from solar and battery storage through purchase power agreements in 2025. The new generation will be located near the Merom Generation Station.

Our integrated resource portfolio is designed to reflect current and future market circumstances, which are favoring low-cost, sustainable resources.

Collectively, we will continue to pursue innovative opportunities to meet changing consumer needs in 2021 and beyond. Our optimism for the future — and continued success — is centered on the cooperative principles we share — while making a difference together. EL

COMMUNITY IMPACT

Hoosier Energy Endowment Fund affirms commitment to Sullivan County and its residents through $33,334 contribution

Hoosier Energy has supported the Sullivan County community through various charitable efforts for nearly 40 years. With the establishment of the Hoosier Energy Endowment Fund, the electric cooperative has affirmed its lasting commitment to Sullivan County and its residents.

The Wabash Valley Community Foundation, through its affiliate the Sullivan County Community Foundation, has received a $33,334 contribution from Hoosier Energy for the establishment of the Hoosier Energy Endowment Fund. This amount will leverage an additional $66,668 from Lilly Endowment Inc. through its GIFT (Giving Indiana Funds for Tomorrow) initiative, resulting in a $100,000 endowment to benefit the county.

The Hoosier Energy Endowment Fund, a community grant fund, will enable the Community Foundation to provide support to nonprofit organizations and agencies. The fund will have flexibility to address the most pressing issues facing the Sullivan County community for years to come.

"We have a deeply-rooted history of community involvement in Sullivan County and are grateful to be able to support the area, its residents and businesses through the establishment of the Hoosier Energy Endowment Fund for Sullivan County," said Donna Walker, Hoosier Energy President & CEO.

"Concern for community is one of the seven core cooperative principles that guides Hoosier Energy. Thanks to the generous support of operational and programmatic competencies, organizational sustainability and substantive relationships with community stakeholders. EL

ENERGY PARTNERSHIP

Hoosier Energy, Hallador Energy Company to develop up to 1,000 MW of renewable energy

Hoosier Energy recently announded it will join Hallador Energy Company to develop up to 1,000 megawatts (MW) of renewable energy. The new generation will be located near the Merom Generation Station in Sullivan, IN, which Hoosier Energy expects to retire in May 2023.

The plan calls for Hallador to develop approximately 200MW from solar and battery storage through power purchase agreements with Hoosier Energy beginning in 2025. Hallador will seek other customers to develop the remaining generation capacity.

"We are excited for the opportunity to work with Hallador Energy and open a path for them to develop renewable energy near the Merom Station," said Donna Walker, President and CEO of Hoosier Energy. "While it may seem surprising for a coal producer to assist with a renewable transition, Hallador has been helping serve the needs of Hoosier Energy for 17 years. Not only will this conversion assist both companies in transitions to a greener future, but it will also benefit our members and their member-consumers as well."

Expanding Hallador's portfolio to include renewable energy is the natural next step in the company's evolution, said President and CEO Brent Bilsland.

"With today's heightened focus on decarbonization, utilities are constantly evaluating the makeup of their generation. Thus, during these times of rapid change we are seeing coal plant retirement dates being both accelerated, for environmental reasons, and delayed, over grid stability concerns," Bilsland said. "Hallador is now uniquely situated to support our customers through coal supply to existing plants while also offering a platform to help customers transition to solar and batteries at the time of their choosing. This flexibility we can now offer is good for our customers, employees and our shareholders." EL

VISUAL ENG

ERIC NEELY IS A DESIGN-FOCUSED

Sit for a casual chat with Eric Neely and the topics of music, cars, travel and IndyCar racing are nearly guaranteed to be discussed. But in his capacity as Communications Coordinator for Design and Digital Media, Neely shows how he combines elements together to tell stories with visual impact.

"If a design does not attract your eye, it's not going to engage your brain to think about the message or take action," said Neely, who describes himself as a design-focused strategic communicator. "Messages without impact often get caught up in the noise of the world and lose their ability to engage. Design is a language that is easier to understand when you put strategic thought into why you're doing what you're doing."

Neely's professional design work began in the news industry for six years. While working on deadline at a newspaper, he got a call from Hoosier Energy for an interview. That was 14 years ago.

"Energy fascinates me and I was ready to shift careers. I'm glad I did because I have been able to learn about and see the cooperative business model in action. It is something special," said Neely.

Today, Neely writes, edits and designs for EnergyLines while also providing communication support to the Hoosier Energy workforce. For

AGEMENT

CO-OP COMMUNICATOR

HE PHOTO

DRIVING ENGAGEMENT: Neely has focused on co-op storytelling throughout his 14-year career at Hoosier Energy.

members, he provides content for Indiana Connection, creates custom design work and articles.

"I do a lot of work for Hoosier Energy itself but I'm always excited to help members with their needs," said Neely, whose skills revolve around creativity.

His passion for design goes way back to his childhood when his parents bought him big pads of paper so he could draw.

"I always drew. I'm a child of the era without the internet and cell phones, so sitting around playing a cassette tape, or listening to the radio and drawing was fun," Neely said, explaining that he drew graphics freehand – tweaking elements to make them original.

In elementary school he knew he had stumbled on something special when his art teacher took interest, encouraged him to color in his illustrations, and then entered one into an art contest. The piece won and was displayed with other winning entries at the Indianapolis Children's Museum.

"At the time I was too young to realize I was teaching myself the fundamentals of design like the use of line, shape, form, texture and pattern," he said. "Those skills followed me all the way to college."

Neely started his undergraduate career at Ball State University by majoring in graphic design. But two years in, he wanted to build upon those skills, so he made the switch to journalism. "When I realized I could take data and visualize it creatively, everything clicked. I switched majors immediately," he said.

"When I begin a project, I lean on my experience and research. My goal is to see how a story can best be told."

ERIC NEELY
Communication Coordinator –Design and Digital Media

After joining Hoosier Energy, Neely earned a master's degree in organizational communications from Northeastern University – helping him continue to grow as a communicator.

"When I begin a project, I lean on my experience and research. My goal is to see how a story can best be told," he said.

Neely's approach is strategic and he builds projects with an understanding of the variety of reading styles that exist.

Some people will want to read everything, some will dive into an article a little bit to see if they are interested, and others will just look at photos and read the captions. He says his goal is to engage all of them.

"If I've done my job well, the readers who are not as interested in the topic will end up reading more than they thought they would." EL

ELECTRIFY INDIANA 2021

Conference in Indianapolis to highlight how Indiana is electrifying its economy, consumers

Discussions rooted in Indiana's economy and investments in electrification summarizes what will take place at the state's second Electrify Indiana conference.

Hosted by Hoosier Energy and Wabash Valley Power Alliance, the one-day conference will take place Nov. 9 at The Westin in downtown Indianapolis.

Events like this are taking place across the nation to highlight what is being achieved regionally to promote beneficial electrification.

Electric utility professionals, legislators, regulators and industry experts are planning to attend to learn about electrification advancements in public policy, economic development, residential, C&I and agricultural sectors across Indiana.

"This conference will provide attendees a broad perspective on how the state is growing its beneficial electrification efforts – from public policy to the shift in member-consumer preference," said Manager of Energy Management Solutions Blake Kleaving.

Holistic awareness through a conference like this helps utilities, business leaders and legislators approach the topic of electrification from a shared view as Hoosiers continue their path forward toward electrification and energy diversification. EL

REGISTER TO ATTEND

>> Register online beginning August 10 at:

hoosierenergy.com/electrifyindiana2021

Q&A

Robin Reynolds, Senior Engineer

Hired in 2010 as a temporary engineer to help Power Delivery transition to using the Maximo system, Robin Reynolds was hired full-time in 2012 at his current position, which has changed titles and departments several times since. EnergyLines sat down with him to discuss what working here has meant to him.

Tell me a little about yourself.

I am an engineer through and through; I am a problem solver and puzzle decipher-er at heart. However, as an engineer, I find myself pulled in two opposing directions: as much as I value learning new things, developing better ways of doing things, and am fascinated by (and embrace) the latest and greatest in new technologies, I also find myself strongly drawn to old things that still perfectly fulfill their purpose. My vinyl collection and the tube-amp stereo (originally built by my father and refurbished by me), which serves as my primary audio system, may be old, but they coexist gracefully with the automated smart-home lighting system and whole-house speaker system I regularly enjoy upgrading.

What is your best habit?

Novelty is the best way to keep your brain pliable and young, so I've made it a habit to find new experiences and deliberately seek out new knowledge.

What is a business buzzword you don't ever want to hear again?

So many to choose! Low-hanging fruit or paradigm shift.

How do you unplug?

While I require a new destination to truly reset, in my off hours in Indiana, I enjoy hiking and kayaking. On a sunny day, you'll find me on Griffy Reservoir or Lake Monroe 45 minutes after my workday ends.

What advice would you give your younger self?

Your inclination toward problem-solving is a valuable skill and is applicable in ways you haven't imagined yet. Also, don't sell your 1987 CRX, you'll never find a car that fun again.

Where do you live? What do you enjoy most about living there?

I live with my partner and cats in

REYNOLDS, continues on Page 18

Did you know?

DISTRIBUTED WIND DEVELOPMENT

Learn more about the Department of Energy's new program to help co-ops broaden the use wind as a distributed generation resource in NRECA's latest Along Those Lines podcast.

WHERE TO FIND IT:
Cooperative.com

ELECTRIFICATION INSIGHTS

The Midcontinent Independent System Operator released 'Electrification Insights' highlighting the challenges and opportunities facing the electric grid.

WHERE TO FIND IT:
MISOenergy.org

ONLY IN ENERGYLINES (NOV. 2010)

LIFE ON THE LINE

A CONSTANT COMMITMENT TO QUALITY AND SAFETY

Building the grid.

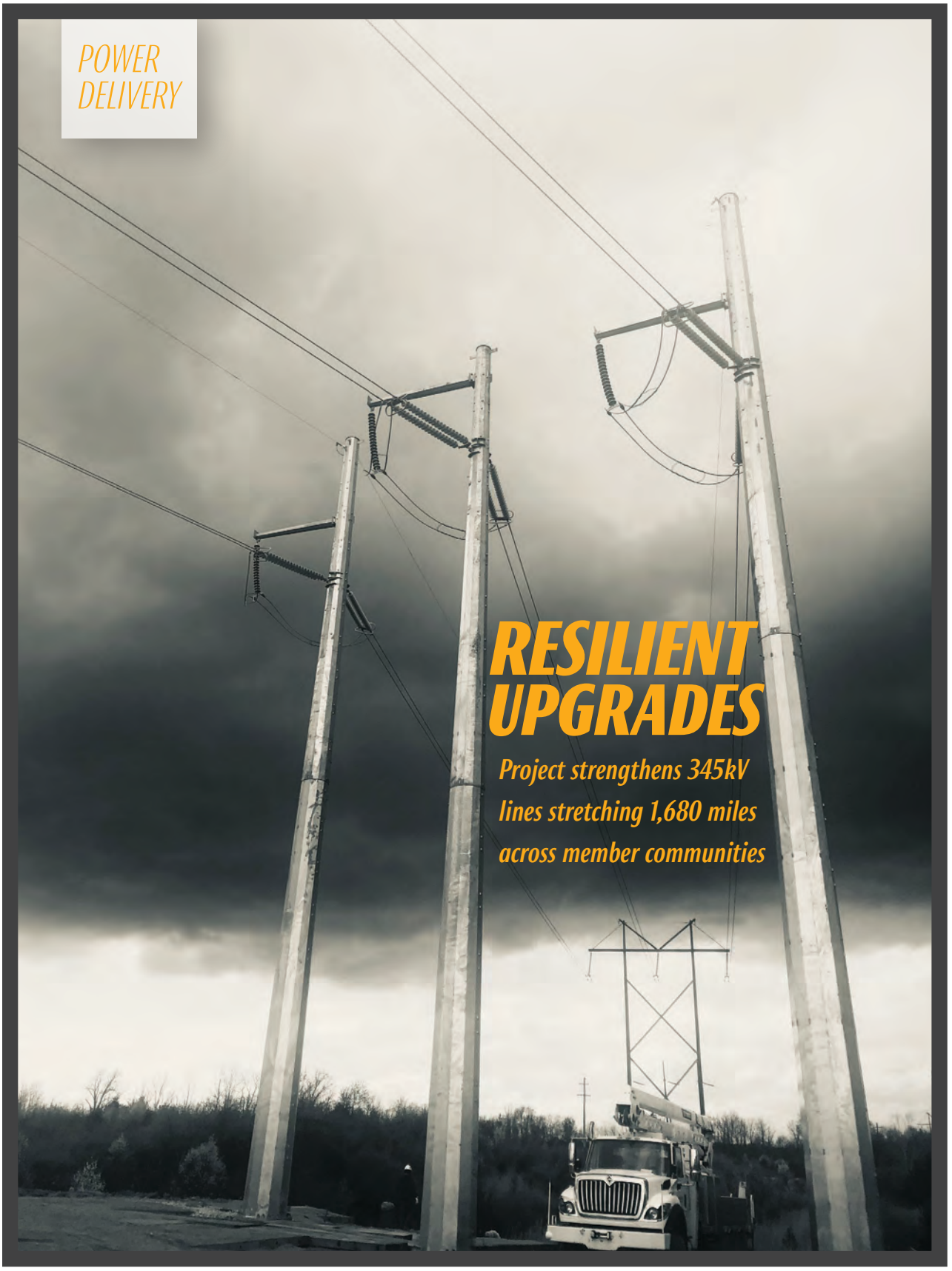
The following is an excerpt from a Nov. 2010 article about co-op line crews and the challenges they face in adverse weather, 24/7/365.

Sometimes it's dusty. Sometimes it's muddy. It might be so hot your shirt is soaked with sweat in just minutes. It could be so cold you can't feel your hands – and your hands are your tools. You might get a call in the dead of night to head out to fix an outage in a blizzard.

It's crucial, it's critical, and it's the job of a line specialist.

Line specialists wake up early, never knowing if they'll have to stay late. They pack their lunches and carry plenty of water. They trek across rough terrain, and they go wherever the job demands.

There's sunscreen and bug spray for the summer; tall boots with liners for the winter. There's the daily talk about cars and boats, hunting and fishing, spouses and friends. There are long stretches of silence. There are grunts and hand signals that carry whole sentences of meaning. EL



RESILIENT UPGRADES

Project strengthens 345kV lines stretching 1,680 miles across member communities

HE PHOTO

Upgrading 1,680 miles of the grid is a significant endeavor in the best of times. Throw in a pandemic, and it's easy to imagine how the whole thing could get off track.

But that's not what happened with a recent Hoosier Energy project.

"Our crews get the job done no matter what they're thrown," said Senior Project Manager Kyle Eslinger. "It was a great collaboration between operations, engineering, purchasing and project management overall."

It is important to learn how they did it by looking at what took place.

Through an internal study, Hoosier Energy learned it would significantly increase grid reliability for members by upgrading the 345 kV line that stretches from Bloomington to Worthington to Sullivan.

It's easy for bad weather or a vehicle collision to take down a pole. And once one pole falls, it can start a domino effect.

"One pole falls and it pulls on the wire and it then will pull down the next pole because of the wire," explains Manager of Power System Design Brett Stephens. "And it pulls down the next pole and the next pole and the next pole."

To stop the chain reaction, the G&T strategically places poles that are designed to withstand that force called dead-ends. The problem was that there weren't quite enough of these structures on the stretch in question — and the existing structures were aging.

The project, which began in 2017 and just wrapped up this year, was designed to ensure that dead-ends are no further than five miles apart. The old dead-ends, which were all made of wood, were replaced with steel — and the engineering team made sure they were strong enough to hold steady no matter what might stress them.

"It was determined that the structures needed to be put on a concrete foundation that is some 8 feet in diameter and 30 feet in the ground to stop such failures," Stephens said.

STRENGTHENING THE GRID: Hoosier Energy line specialists review information as large steel poles lay on the ground, ready to be set. These poles are strong enough to stop a chain reaction of lines facing extreme tension if a pole falls. The poles are set in a concrete foundation 8 feet in diameter and 30 feet deep.

Some of the locations for the dead-ends did not have easy access. That caused another challenge.

Crews built access roads to each pole being replaced — and then dismantled it once the work was done. In one case, the road was a full half-mile long.

"We know the terrain, but some of the dead-ends were down in some pretty low-lying areas," Stephens said. "So it was challenging to have to deal with water in the spring."

The crews also had to make sure the existing poles did not have an eagle's nest built on top – none did. To help thwart nest building and the outages needed to safely relocate nests, the new poles used are designed with domed tops.

This project was on schedule going into the last phase of the project that included replacement of six structures in Sullivan County. Work was scheduled, equipment purchased and crews were ready to finish the upgrades.

"We got done six weeks early," said Eslinger. "That's going to save our co-op money. Our guys will make anybody look good."

But, at the end of the day, money is not the most important thing, according to Eslinger. It's working together for the benefit of everyone — and keeping everyone safe.

"I don't put those guys in a situation I wouldn't put my son in," he said. "It's like a family. We're all watching out for each other."

CONSTANT COMMUNICATIONS: Sr. Purchasing Agent Maria Jarvis keeps projects on track by staying in close contact with suppliers and the warehouse team at Hoosier Energy.

PURCHASING POWER

How G&T keeps projects on track through timely equipment purchases

Big power delivery projects are nothing new for Hoosier Energy and the recent 345kV upgrade from Bloomington to Sullivan is a clear example. Multi-year projects like this have many moving pieces and Sr. Purchasing Agent Maria Jarvis has a simple way to keep equipment orders on track – the phone.

"I've found it's harder for a supplier to ignore you over the phone than over an email. It also helps establish that relationship which is crucial to be effective," said Jarvis.

The relationships she has built during her 11-year career at Hoosier Energy are crucial for the times she needs to ask a vendor for quick equipment delivery. Keeping vendors informed helps the co-op get equipment others might wait much longer to receive.

With the task of placing orders for all power delivery equipment and materials, purchasing's role connects to safety and helps control costs as timely delivery of equipment keeps crews and projects on schedule.

To show the speed that Jarvis takes to process purchase requisitions, she completed 240 in April of this year alone! To accomplish this, you would think that she has a lengthy spreadsheet to keep everything on track. She doesn't. She moves so quick, all she uses is a desk calendar to set reminders.

Her system is simple because she keeps in close contact with the suppliers she works with and the warehouse team at Hoosier Energy. This helps her be sure equipment is ordered and stocked as needed.

"Maria does an excellent job of prioritizing the orders that need to go out today so equipment is on hand as soon as possible," said Manager of Purchasing and Contracts Damon Crain.

Part of her prioritization process involves keeping project leaders in engineering and power delivery updated on pricing and lead times. This has been a vital component

PURCHASING, continues on Page 18

EDUCATE + INFORM

Hoosier Energy produces information to help member-consumers navigate the solar sales market

Whether it's solar panels, energy efficient windows, or other improvements that enable homeowners to live greener and more environmentally conscious lives, navigating sales tactics and practices can leave them second guessing their decisions.

Member cooperatives approached Hoosier Energy about three months ago with an opportunity to partner in promoting co-ops as the trusted energy resource for residential member-consumers attempting to navigate the emerging solar market.

This partnership has Hoosier Energy's Communications and Emerging Energy Resources teams working with co-ops to develop information and education tools for member-consumers. This includes social media graphics, videos, web banners and bill stuffers that explain points to consider when pondering solar installations and payback.

"Our goal is to understand the motivation behind each member-consumer's consideration of solar as an energy source and to provide them with accurate and well-researched material about the costs, benefits and alternative options so they can make informed decisions," said Ryan Henderson, Hoosier Energy's Senior Manager, Emerging Energy Resources. "As a trusted energy partner, our services go beyond delivering safe, reliable power. We want to ensure no member-consumer unknowingly trades a slightly lower energy bill for significantly higher hidden costs or installs a less cost-effective system."

CONSUMER KNOWLEDGE: Hoosier Energy is working with member co-ops to develop education tools to help consumers make informed decisions.

Have an idea, we can help

Co-op members with ideas for custom videos to educate, inform or share information with member-consumers can contact Ben Turner at bturner@hepn.com or Chris Johnson at cjohnson@hepn.com.

Besides social media graphics, Hoosier Energy is producing a video series, starting with five main topics, that warn of misleading comments made by some solar installers and offering points to consider prior to investing in an expensive system.

"Currently we have many members seeking solar for a way to experience significant savings, but achieving that takes a lot of research and planning," said Nick Geswein, Energy Advisor at Harrison REMC, who has been working with member-consumers who have questions about solar. "We have found many are moving on installing systems without considering all the variables to ensure that they install the system that matches their specific usage needs. This usually results in the

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system not performing as well, resulting in less savings than expected."

In addition to the solar-related materials, Hoosier Energy has a 10-part video series on energy efficiency tips that encourage member-consumers to make economical upgrades prior to investing in a solar installation. Not only can these tips help lower energy costs, but they could lead to a smaller, lower-cost solar energy system.

This makes a big impact for consumers as they experience how their co-op is a partner in helping them understand the real costs of equipment and installation of products and services. EL

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in acquiring materials as product availability has fluctuated during the pandemic.

Jarvis has been proactive to learn what her vendors have been facing as supply chains are impacted across the world. For example, the purchase of reclosers, equipment used to detect and interrupt faults on the grid, now have almost a year turnaround. This type of equipment normally has a turnaround of three months.

This process is backed by Maximo – Hoosier Energy's asset management software providing a unified view of operational data. Combine this back-end system with Jarvis on the phone and you have a robust system to complete projects that improve grid resiliency for Hoosier Energy and member cooperatives. EL

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a vintage mid-century ranch on the northwest side of Bloomington. Besides the vintage appeal of the house itself (it still has the original 1964 GE oven with a gull-wing door!), the best thing about our house is that it's surrounded on two sides by property belonging to the Sycamore Land Trust.

What has working at Hoosier Energy meant to you?

One of the things I value most about working for Hoosier Energy is that the smaller company size means that I have the opportunity to develop a much wider breadth of knowledge than my peers at other utilities; every day is a chance to learn something new and challenging.

What is something most people don't know about you?

In my younger and wilder days, I was very into autocross, (legal) street-racing, and modifying Hondas and Acuras; in fact, I still have in my garage a mid-90s teal Acura Integra that I tinker with on the occasional weekend afternoon. EL

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Co-op line work focuses on safety

Journeyman Lineman John Herbert prepares a pole for replacement in Northeast Shelby County. Herbert uses proper personal protection equipment, including rubber gloves and orange line hoses, to safely prepare the work area.