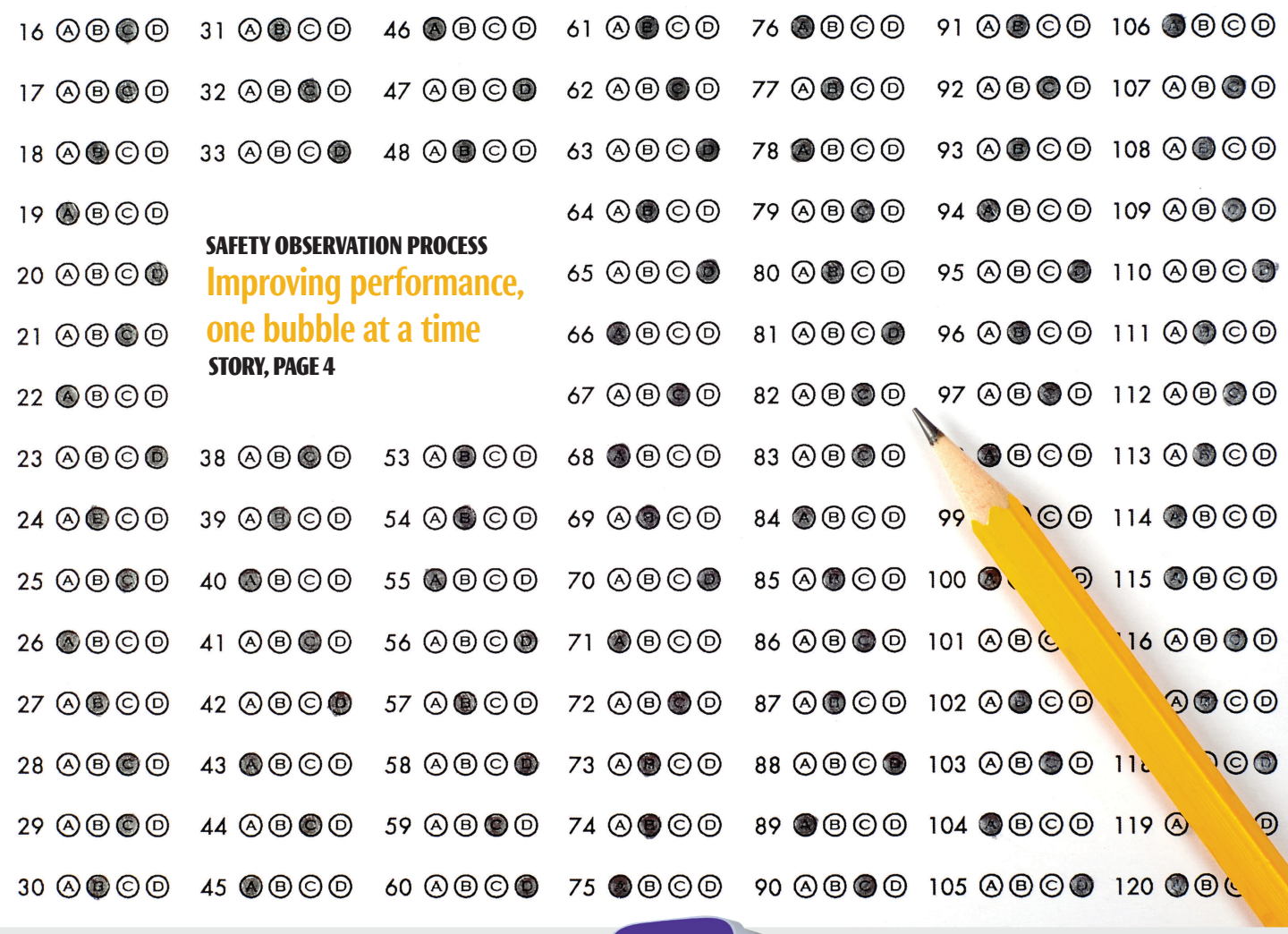
AUGUST 2020 | Vol. 43, No. 8

ENERGYLINES



SAFETY OBSERVATION PROCESS

Improving performance, one bubble at a time

STORY, PAGE 4

CHARGE *AHEAD*!

A new initiative was introduced by the Hoosier Energy Emerging Energy Resources (EER) team to help members focus on the changing needs and habits of member-consumers.

STORY, PAGE 6

Thermostat pilot

Project at Jackson County REMC underway to determine effectiveness of using smart thermostats to reduce member-consumer demand.

STORY, PAGE 3

ACROSS THE NATION

Source: NRECA

COMMITMENT TO COMMUNITY

Bedford Rural Electric Cooperative in Pennsylvania donated $25,000 to help its community build a drive-in theater. The goal was to help the area salvage a summer tourism season disrupted by COVID-19.

ONLINEEXTRA | >> Read the article by NRECA at Electric.coop.

INDUSTRY NEWS

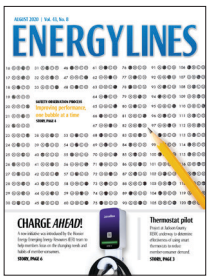
Six nations listed on foreign adversary equipment list

President Trump's Executive Order has listed six nations prohibited from U.S. utilities for acquisition, importation, transfer or installation of Bulk Power System equipment. Nations on the list include: Cuba, Iran, North Korea, Venezuela, China and Russia.

China and Russia were identified as having advanced cyber programs that pose a major threat to the U.S. government and critical infrastructures. The Department of Energy is developing a list of pre-qualified equipment and vendors allowed.

ON THE COVER

Scantrons are being used at the Merom Generating Station to improve workforce safety.



CYBER SECURITY

Enel Group shows best practice for cyber security

The World Economic Forum states that security is most effective when it begins with organizational leadership. This is what the Enel Group has done to thwart a significant cyberattack. Enel was recently a target of a ransomware attack to its corporate network. Through a structured and systemic approach to cybersecurity, it was able to isolate the issue and restore the network the next day. Enel states that no customer data was exposed during the attack. The Enel Group makes the JuiceBox charging system used in the Cooperative Charge pilot program.

60%

DUKE RATE REQUEST SLASHED

In late June, the Indiana Utility Regulatory Commission reduced Duke Energy's rate increase request by 60 percent.

Federal regulator petitioned by IOUs

In June, Duke Energy and nine other utilities approached the Indiana Utility Regulatory Commission (IURC) requesting to increase rates due to decreased revenue during the pandemic. The IURC voted unanimously to deny the request.

The IURC said, "Asking customers to go beyond their obligation and pay for service they did not receive is beyond reasonable utility relief based on the facts before us."

The Indianapolis Business Journal reports that more than 2,300 people sent emails to the Indiana Utility Consumer Counselor in response to the rate increase request making it one of the largest complaints in a decade.

As efforts to recover costs at the state level have been unsuccessful, Duke Energy and other investor-owned utilities (IOUs) have transitioned to petition on the federal level through the Federal Energy Regulatory Commission.

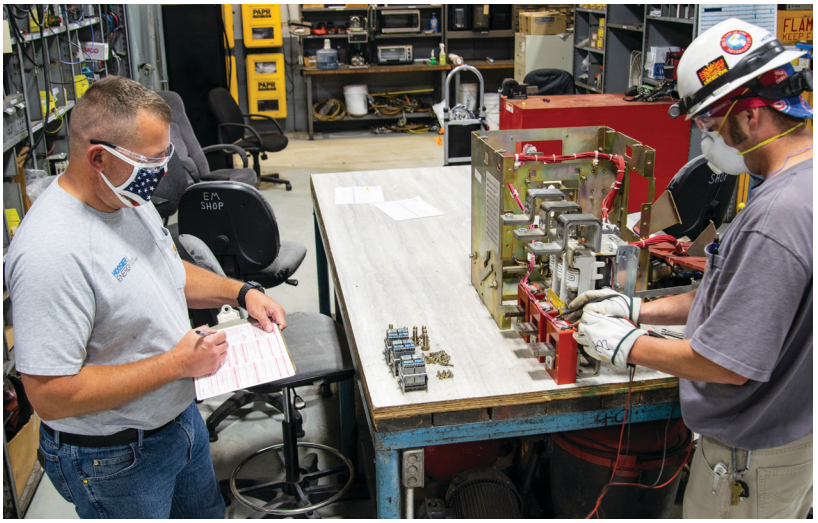
In a July hearing, IOU leaders noted the COVID-19 pandemic and economic slowdown has not put them at risk. Utility Dive reports leaders cautioned if the situation continues – the uncertainty remains a significant threat to the sector that will require adequate and timely cost recovery. EL

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



SAFETY PROCESS: Area Coordinator John Sneed, left, observes Electrician Rich Beller at Merom's Electrical Maintenance Shop as he performs a circuit breaker repair.

SAFETY OBSERVATION PROCESS

Scantron helps workforce track safety process — one bubble at a time

When asked to use a No. 2 pencil, fill circles completely and make no stray marks on the form, these instructions are likely to bring back memories of school years when scantron technology was used for testing.

Merom Generating Station's Job Safety Observation Team is utilizing scantron technology in a new way.

Using a custom form that is specific to the power plant, members of the team observe work practices and identify safety procedures. They use scantron forms to identify if practices used are safe or at-risk.

"We worked directly with the Scantron company to develop our form for the specific safety items that we wanted. The custom form allows us to identify and address at-risk areas and make proactive changes in order to improve working conditions and maintain a high level of safety for our employees," said John Sneed, Area Coordinator – I&E Maintenance at the Merom Generating Station and Job Safety Observation Team Lead.

A safety observation starts with a Safety Observation Team member meeting with the work crew at the job briefing – scantron and pencil in hand.

Supervisors are taking advantage of getting on the job site with employees as they observe their safety practices. Supervisors attend the job briefing, review procedures with employees, and talk about safety.

Through this process, safety leaders are able to identify risks >>

involved with a certain job or task, including climbing, using a forklift, or connecting rigging equipment.

"We'll talk through those things and get them to think about what they are concerned about and how we can make this better. If there is an actionable item, we'll make changes to make things safer for employees," said Sneed.

Throughout the observation process, Sneed checks items off on the scantron. Bubble after bubble, details of the job are categorized as safe or at-risk. If the job is completed properly, with safety at the forefront of the work being done, the task is marked as safe. If there were safety issues not addressed, such as forgetting to check fall protection harnesses, the task is marked as "at-risk."

Unsafe practices are discussed on the spot and also noted on the back of the scantron. The goal is to help employees build safety habits through the work they do – and the work is diverse.

The safety review process includes topics such as permits and procedures, personal protective equipment, excavation, ladders and fall protection.

Capturing safety information like this is important but what you do with the data is where the value lies. Once scanned, data collected is then searchable through a database so that analysis can be performed that will identify the most "at-risk" behaviors.

"We can see where the 'at-risk' areas are as we go along so we can identify trends. If we need to fix something, retrain or make improvements, we have the data to figure that out," said Sneed.

A quarterly report shows the observations that have taken place, the most frequent aspects that employees are concerned about and any corrective action taken.

"This program really is about getting the employees engaged and discussing their own safety and how we can help them improve safety in the field," said Sneed. EL

A 'smart' way to reduce member energy demand

PILOT PROJECT CONNECTS TECHNOLOGY TO MEMBER HOMES TO STUDY ENERGY USE

One of the most expensive energy demands in a home centers around the HVAC system. To gather data to help member-consumers and co-ops, Hoosier Energy and Jackson County REMC are working together to find alternative solutions to reduce HVAC energy use, while maintaining preferred comfort levels in the home.

"One of the things that we want to evaluate in the Jackson County REMC Smart Thermostat Pilot Project is the effectiveness of using thermostats to reduce demand," says Jeff Myers, who is president of Jeffersonville-based Big 4 Enterprises and a contractor for Hoosier Energy.

The co-op is offering members who enroll in its broadband internet service an ecobee thermostat at no additional cost to them. The thermostats are installed at the same time as broadband service.

"One thing about this program that is attractive to co-ops is that the thermostats are owned by the member-consumer."

BLAKE KLEAVING
Manager of Energy Management Solutions

Chosen through a request-for-proposal process – based on marketplace experience, technology offering, data quality and quantity, and ability to meet schedule and budget requirements – ecobee thermostats give homeowners more control when it comes to saving energy and maintaining comfort in their homes.

The pilot project is open to 150 member-consumers. The only stipulation is that the member agrees to share data with Jackson County REMC and Hoosier Energy so the program can be evaluated. Operational data that is collected and shared with the co-op includes temperature set point, fan status, heating or cooling mode, compressor and fan runtimes, and opt-in or opt-out status.

"We'll be able to utilize that data with the hope to >>

Key features of the ecobee thermostat

The ecobee thermostat provides homeowners flexibility of control of their HVAC system on their Android or Apple devices. This Energy Star device learns user heating and cooling patterns so it can adjust how it reaches your desired temperature in an efficient manor.

Image source: ecobee

expand the pilot within Jackson County REMC members and also to other co-op members in the future," Myers adds.

The pilot project will take place for a year, covering both the summer and winter control periods. "In the spring of 2021, we will be assessing the impacts and then making decisions on how to go forward from there," says Myers.

Load control events for those in the pilot project are scheduled at the same time as Hoosier Energy's load control events. The summer season is June, July, and August, and winter control season is December, January and February.

Because NRECA is interested in the energy savings impacts, the organization offered to finance the analysis of the data collected. Throughout this pilot project, they have third-party consultants that they've hired to do the analysis.

According to Blake Kleaving, Manager of Energy Management Solutions, several co-ops have shown interest in the pilot program's expansion.

One popular feature of the ecobee thermostat is an accompanying smartphone app that allows the homeowner to predefine comfort limits they're willing to endure during control events by either Jackson County REMC or Hoosier Energy. Members can control the temperature inside their homes from anywhere, as well as monitor for temperature spikes or drops.

"When a control event is called, the ecobee thermostat is going to do a couple of things – it's going to assess first for the homeowner's setting, and then it's going to adjust the temperature in the space, taking into account the predetermined comfort level, because comfort is a combination of the temperature and humidity," says Myers.

With the ecobee thermostat, members select their preferred savings level on the smartphone app, and the thermostat optimizes its settings and schedules for those preferences. This reduces energy demand by determining when to heat and cool a home when electricity costs are lower – adjusting for comfort in high and low humidity. The thermostat learns routines and recommends changes to the thermostat schedule.

"One thing about this program that is attractive to co-ops is that the thermostats are owned by the member-consumer," says Kleaving.

In control periods outside this trial, a compressor switch is added to the physical unit, and then maintained and owned by the co-op.

With the smart thermostats, Jackson County REMC will provide installation and technical support as needed, and ecobee will provide online and telephone technical support. "With these thermostats, we're hands-off of the actual physical unit," said Kleaving. EL

CHARGING AHEAD

New initiative focuses on needs, habits of member-consumer electric vehicle charging while at home

The energy industry is evolving and Hoosier Energy is evolving along with it. A new initiative was introduced by the Hoosier Energy Emerging Energy Resources (EER) team to help members focus on the changing needs and habits of member-consumers.

Electric vehicles (EV) are a significant part of this change. That led to the EER team identifying a strong need for charging stations in member territories – for public and residential use. Through their analysis, they established the Cooperative Charge pilot program.

This team began by reviewing four EV charging solutions on 10 criteria: differentiation; go-to-market; partners; investments, geographic reach; sales; portfolio; marketing; innovation; and staying power. The goal of the analysis was to provide a thorough assessment of these companies' strengths and weaknesses in the current global EV charging hardware market.

"We chose Enel X for our charging stations after working with four companies to determine a partner,"

"The program is an important piece of beneficial electrification and providing member-consumers with the technological services they need."

RYAN HENDERSON
Senior Manager of Emerging Energy Resources

Image source: Enel x

said Josh Cisney, Emerging Energy Resources Tech Advisor. The project was created by the Emerging Technology Committee, headed by Bob Richhart, Chief Technology Officer and Doug Childs, CEO of UDWI REMC.

Enel X has an established smart EV charging system called JuiceBox. With more than 80,000 charging stations sold, Enel X has established technology and a solid reputation for integrating with utility programs on residential and commercial programs.

Hoosier Energy purchased 18 JuiceBox Pro commercial level 2 EV chargers. With the high charging speed of 40A / 9.6 kW, these commercial chargers allow for a quicker charge and have two charging ports on each station, allowing for multiple simultaneous charging. By making these chargers available to the community, the cooperatives are providing a valuable service and encouraging the use of electric vehicles.

These commercial chargers are designed to help promote electric vehicle use. Co-ops have been asked to choose the best location within their territory for the commercial chargers, whether that's the co-op headquarters or another business in the community.

Hoosier Energy has also purchased 100 JuiceBox residential level 2 chargers. Each co-op will receive five chargers, and the remaining chargers will be available on a first-come, first-served basis. Pending demand for the chargers, Hoosier Energy has the option to purchase an additional 100 residential chargers.

These smart chargers will provide valuable information to co-ops about how they are being used such as patterns of use and the amount of energy consumed. The information gathered will help form the energy plan for the future.

"The program is an important piece of beneficial electrification and providing member-consumers with the technological services they need," said Senior Manager of Emerging Energy Resources Ryan Henderson. EL

ONLY IN ENERGYLINES (APRIL 2010)

25

The number of semi-truckloads of scaffolding erected throughout the plant. There were four truckloads of scaffolding in the boiler alone.

400 +

The number of contractors on site. They come from seven major contractors and several smaller firms.

4,000 +

The number of 55 gallon bags full of insulation stripped from various areas of the plant in the first three weeks of the project.

THE BIG TEARDOWN AT MEROM

Generation reliability

An eight-week maintenance project at the Merom Generation Station stems from a year-long planning process at the 1,070 megawatt power plant. In the spring of 2010, the power plant was buzzing with activity as Unit 2 received significant maintenance. From a turbine-generator rebuild to an selective-catalytic reduction catalyst exchange, the work completed helped with reliability of the station. EL

High-voltage transmission project completed

FIRST-OF-ITS-KIND PROJECT PROVIDES VALUE FOR UTILITIES IN THE MISO REGION

Republic Transmission, through a Hoosier Energy and LS Power partnership, together with Big Rivers Electric Corporation, have completed the single circuit 345 kilovolt Duff-to-Coleman line. Spanning 30 miles, this transmission line crosses sections of Dubois and Spencer counties in Indiana; and Hancock County in Kentucky.

In early July, Hoosier Energy exercised its option to invest an additional 10 percent in this project bringing the total to 20 percent ownership. The Generation and Transmission (G&T) electric cooperative will perform operation and maintenance on this new line as it has personnel and equipment nearby to perform maintenance as needed.

The Duff-to-Coleman line was the first competitively-bid Midcontinent Independent System Operator (MISO) project following the Federal Energy Regulatory Commission (FERC) Order 1000 enacted in July 2011.

The FERC transmission planning framework allows for large-scale projects so the grid can better support wholesale power markets ensuring services are provided at rates, terms and conditions that are reasonable.

This project was justified and built for the economic benefits — reducing congestion in MISO — and had a 16 to 1 cost/benefit ratio.

"The costs of this project are spread across the entire MISO north region so increasing our ownership percentage doesn't mean Hoosier Energy member costs will increase," said Mike Mooney, Senior Manager of Resource Planning.

To secure this project, Hoosier Energy partnered with LS Power and competed against 10 other proposals. This project caught the eye of the G&T because it crosses Hoosier Energy member service territory – Southern Indiana Power and Dubois REC.

HE photo

MISSION TRANSMISSION: A section of the Duff-to-Coleman transmission line being strung with conductor in early 2020. The transmission line has been completed and Hoosier Energy has a 20 percent investment in the project.

"Strengthening the grid in our service area through this project, our members will benefit for years to come."

CHRIS WARE
Manager of Power Delivery Engineering

As energy moves across the grid to meet demand, transmission congestion causes more expensive generation to be used. Alleviating congestion helps cost-effective generators, such as wind, solar and natural gas to be used as it can be transmitted to where demand exists. All of this happens in real time and an expansion of the grid helps MISO better manage the flow of energy.

"Strengthening the grid in our service area through this project, our members will benefit for years to come," said Hoosier Energy Manager of Power Delivery Engineering Chris Ware. EL

Submitted photo

ANNUAL MEETING: RushShelby IT Services Manager Brad Rogers welcomes a member on July 8 to the drive-through annual meeting at the co-op.

ADAPTIVE ANNUAL MEETINGS

Meeting formats change during pandemic to keep employees, members safe

The response to the pandemic has led to new ways of doing things. For co-ops, they have changed how they meet – especially for annual meetings that often draw hundreds of members.

For many, the use of technology is helping in this time of transition as co-ops focus on safety for their membership.

Orange County REMC used an app that allowed members to register for their 83rd annual meeting using a phone or tablet. In all, more than 600 members registered – a record for the co-op.

On the day of the meeting, the co-op set up a tent on its parking lot for member-consumers to drive through to receive information and a gift.

Later in the evening, Rodney Hager, Orange County REMC Board President, welcomed members to the meeting virtually on Facebook Live. Board members and key staff sat in the board room at the co-ops headquarters.

"This is not the annual meeting we thought we'd be having this year, but considering the circumstances, the co-op is happy that we are able to conduct official business while also doing all we can to keep the meeting the same," said Hager.

Hager noted this was probably the most unique meeting that the co-op has conducted. He said that live streaming the annual meeting from the board room, instead of shaking hands with members at the gym in Paoli, will forever be remembered. "In this trying time, we need to move forward together for tomorrow."

Orange County REMC General Manager and CEO Matt Deaton took a moment to recognize the work completed by the board throughout the pandemic.

"Members should be proud of their board of directors, for their leadership. >>

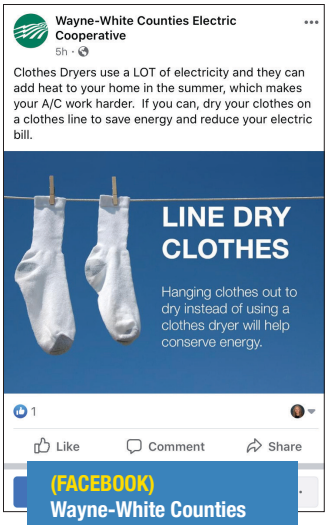
Social session

Members took to social media to communicate how to save energy this summer.

SCI REMC directed member-consumers to the lighting store to find LED bulbs that can help with their home improvement projects.

Wayne-White Counties Electric Cooperative directed member-consumers to the great outdoors to air-dry their laundry – and save energy in the process!

(FACEBOOK)
South Central Indiana REMC



(FACEBOOK)
Wayne-White Counties Electric Cooperative

ENERGYLINES

CONTACT US AT:

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

Leading through transformational change is difficult and these seven cooperative members have done an outstanding job of guiding us all through the changes," said Deaton.

Deaton noted that the cooperative has been there for its members throughout the pandemic and that co-op employees have met each challenge that has come their way.

Resembling in-person meetings, member-consumers who registered electronically or by returning their registration card to the REMC were entered in a prize drawing that took place at the end of the virtual meeting. Winners were contacted to make arrangements to receive prizes.

In his closing comments Deaton said, "It's an honor to serve this cooperative and report to this board of directors, creating and executing a vision is very rewarding. New challenges will come along the way, and although I can't guarantee the exact outcomes, I can guarantee it will be an outcome that is best for members."

Members were directed to the co-op's website to review a copy of the annual report.

Taking a similar approach, RushShelby Energy members drove to the co-op's office to cast their vote and receive an energy efficiency kit at their drive-through annual meeting. About 17 percent of their membership chose to vote electronically or by mail. All voting members received a $10 bill credit.

Terry Jobe, President and Chief Executive Officer, started RushShelby Energy's 84th annual meeting via a Facebook Live session from his office at the co-op. He said he missed seeing everybody in person this year, but "The health and safety of our employees, our members and our community is most important as we continue to navigate the ongoing pandemic." He gave special recognition to frontline workers.

Facebook Live image

ANNUAL MEETING: Orange County REMC General Manager and CEO Matt Deaton addressed members during a virtual annual meeting.

"Our communities and country are experiencing unprecedented challenges, and I am humbled by the dedication and perseverance of those who serve on the frontlines." RushShelby uses Survey & Ballots, an election survey company that provides an opportunity for members to cast their votes off-site. The co-op implemented this service several years ago to allow all members to vote, even those who were unable to attend in-person meetings.

"Our communities and country are experiencing unprecedented challenges, and I am humbled by the dedication and perseverance of those who serve on the frontlines."

TERRY JOBE
President, CEO of RushShelby Energy

Votes were received electronically and through the mail. The election results were announced followed by a "Chat with the CEO" session. Members were able to send questions through the RushShelby website or during the Facebook Live session.

The use of Facebook is not new to some cooperatives, but before the coronavirus pandemic, Facebook was a bonus source of information that quickly became a necessity as it became one of the easiest ways to reach consumers.

Members were able to watch the event live or return to the co-ops' Facebook page and watch at their convenience. Allowing online and drive-through voting increased the number of members that were able to participate. EL

Training on underground power systems

Co-op employees headed out to the Franklin Training Center to learn how to work efficiently and safely with an underground power system.