A Biannual Publication of
Western Farmers Electric Cooperative

Spring / Summer 2023

EnerCom

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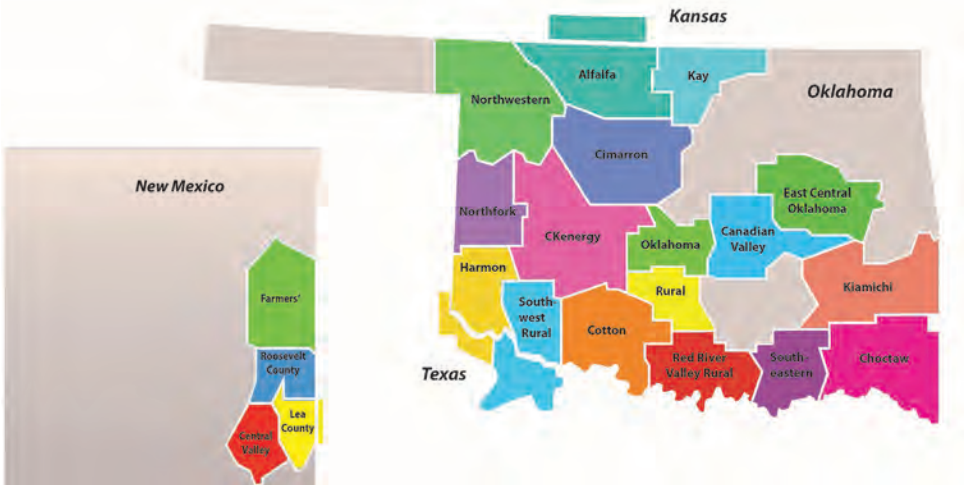
Cover Photo:

Spring and summer months are known to bring about warmer temperatures and showers, but they also help create a variety of colorful flowers for butterflies and other insects.

Photo by
Sondra Boykin

WFEC Service Territory



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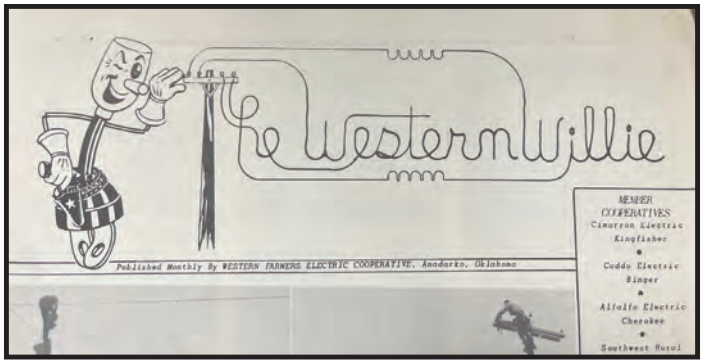
The end of an era

Printed EnerCom coming to a close; new digital publication to launch

Article by Sondra Boykin
Research by Maria Crowder

Western Farmers Electric Cooperative's (WFEC) - Communication Department - has always valued the interaction with employees and member cooperatives, through continuous forms of the WFEC EnerCom. In fact, over 60 years of printed publications have provided articles on WFEC projects and events, industry-related topics, employee and cooperative member information and much more.



April 1960 - October 1961

However, the rise of digital media and technology has transformed the way news and information are accessed. Since the dawn of the internet, many have indicated the departure of print media. The days of glossy printed magazines received at your home by mail are becoming obsolete.

With these changes in mind, WFEC is modifying communication efforts to accommodate a growing consumer preference for digital content. This will be the final issue of a printed biannual *EnerCom* magazine.

Also, a factor in this decision - news is usually "what's new" and "what's next." Something that happened last week or last month is not big news because it is not well-timed. Since the *EnerCom* has been printed twice a year for the past several years, some articles are from the past, by the time of publication.

Timeliness is not a one-size-fits-all factor. Different articles demand different ways of using time effectively. For most of the articles in the *EnerCom*, timeliness has not always been an issue, however, current news does face a time factor.

New Publication

Despite the end of the *EnerCom*, a new email publication will take its place. This bi-weekly news source will provide up-to-date articles on WFEC and its member cooperatives, along with today's industry issues, legislative activity and much more.

The WFEC Communications group is looking forward to this new biweekly publication, *The Link*, which will begin in August. We hope that the information provided through this expedited format will be beneficial, but most importantly – timely.

Just think, eventually, the entire population will have been born and raised with the internet available to them. It is an ever-changing world today - and people want news or information almost instantly.

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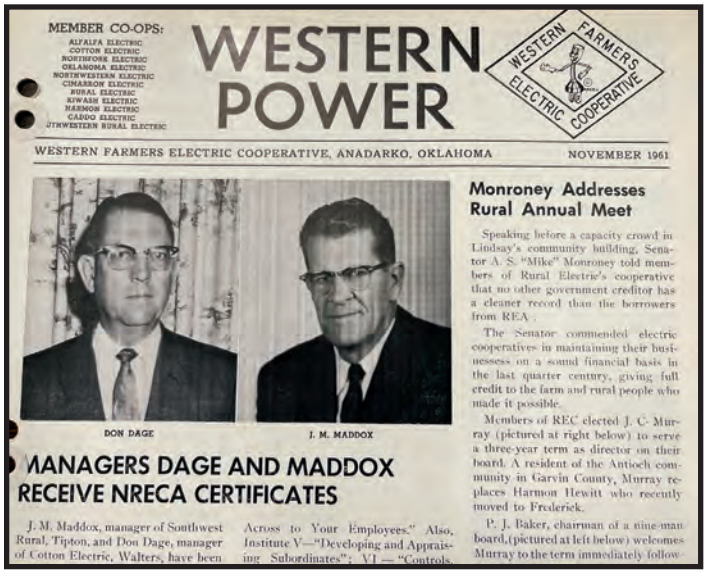

MEMBER CO-OPS:
ALFALFA ELECTRIC
COTTON ELECTRIC
NORTHFORK ELECTRIC
OKLAHOMA ELECTRIC
NORTHWESTERN ELECTRIC
CIMARRON ELECTRIC
RURAL ELECTRIC
KIWASH ELECTRIC
HARMON ELECTRIC
CADDO ELECTRIC
SOUTHWESTERN RURAL ELECTRIC

WESTERN POWER

WESTERN FARMERS ELECTRIC COOPERATIVE

WESTERN FARMERS ELECTRIC COOPERATIVE, ANADARKO, OKLAHOMA — NOVEMBER 1961

DON DAGE — J. M. MADDOX

MANAGERS DAGE AND MADDOX RECEIVE NRECA CERTIFICATES

J. M. Maddox, manager of Southwest Rural, Tipton, and Don Dage, manager of Cotton Electric, Walters, have been

Across to Your Employees." Also, Institute V—"Developing and Appraising Subordinates"; VI — "Controls.

Monroney Addresses Rural Annual Meet

Speaking before a capacity crowd in Lindsay's community building, Senator A. S. "Mike" Monroney told members of Rural Electric's cooperative that no other government creditor has a cleaner record than the borrowers from REA.

The Senator commended electric cooperatives in maintaining their businesses on a sound financial basis in the last quarter century, giving full credit to the farm and rural people who made it possible.

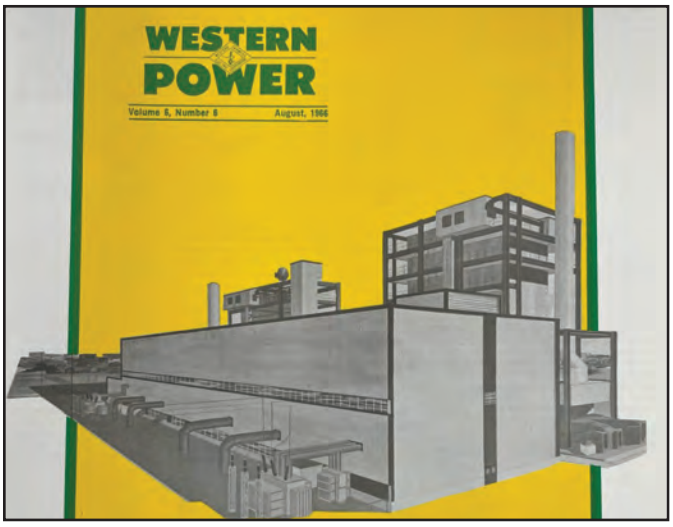
Members of REC elected J. C. Murray (pictured at right below) to serve a three-year term as director on their board. A resident of the Antioch community in Garvin County, Murray replaces Harmon Hewitt who recently moved to Frederick.

P. J. Baker, chairman of a nine-man board, (pictured at left below) welcomes Murray to the term immediately follow-

November 1961 - January 1983

(Information continued on Page 4)

EnerCom (continued)



November 1961 - January 1983

Stay connected to WFEC with access to *The Link*

Since *The Link* will be emailed, it may take some time to effectively add others, who are not typically included on the manager or executive, communication or marketing or board member lists, for example.

Once *The Link* has been emailed (late August), please help update and increase availability to others within your respective cooperative. If someone is interested in being added, please let us know at sondra.boykin@wfec.com.

WFEC employees will automatically receive this publication by email.

WFEC retirees are also eligible to receive this email publication. If interested, please send a request to maria.crowder@wfec.com.

Also, this bi-weekly publication will be posted to WFEC's corporate website at www.wfec.com in the Media Center section.

Digital technologies have advanced more rapidly than any innovation in our history, sources have said. Your support for this change is appreciated, as WFEC continues moving its communication format in the way of the future.

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From the past...

The oldest printed publication that could be located in files is the *Western Willie* employee newsletter, which began in April 1960, continuing through October 1961.

Next was *Western Power* that was published from November 1961 to January 1983.

The name changed to *Insider* in August 1985 and continued until February 1989.

A change in April 1989, brought about the *Interconnect*, a publication that was printed until August 1996.

The *EnerCom*, a printed magazine, was introduced in 1997 and has continued through this current Spring/ Summer 2023 edition.

An internal publication, *Unplugged*, began as a mailout, but was transformed to a digital format that was emailed to WFEC employees, starting in the early 2000s.

Some of these printed publications were for WFEC employees only, while others were also mailed to member cooperative staffs.

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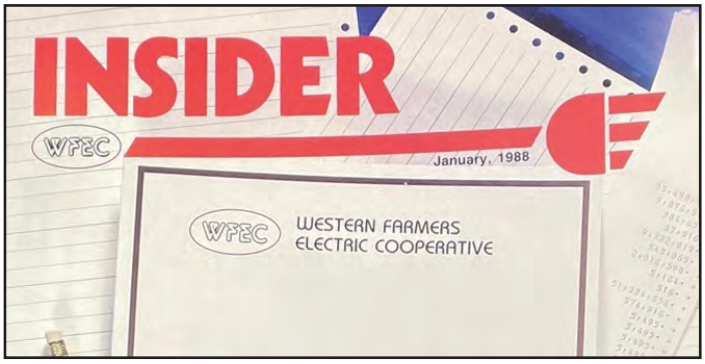

August 1985 - February 1989

April 1989 - August 1996

Rapid growth of distributed generation leading to challenges for utility industry

Article by Sondra Boykin
Photos courtesy of Farmers' Electric Cooperative

The electric utility industry, overall, is in the midst of rapid transformation, and WFEC and its member distribution cooperatives are certainly not exempt from these changes. In fact, some are becoming major challenges. It's a different world today, with current and upcoming issues expected to bring about new ways of doing business, one of which is distributed generation (DG).

Vice President, Marketing & Member Relations Mark Faulkenberry (front) presents an overview of Policy 9-5 (Interconnection with and purchases from Small Power Producers, Cogenerators and Certain Other Generators) during a workshop for New Mexico cooperative managers and staff. This workshop was hosted July 11 in Clovis.

Even though electric cooperatives have a history of integrating DG sources, the rapidly growing presence of DG on the grid is leading to numerous changes across the industry. Net metering policies, which are determined by each state, include a mechanism that allows consumers to use their own grid-connected DG from on-site renewable energy systems to offset a portion of their electric energy consumption.

It also allows the consumer to receive credit for any excess energy that is transmitted into the distribution cooperatives' distribution system. This behind-the-meter generation, which is the meter on the customer side that is interconnected to the utility distribution system located on the utility side of the meter, has increased in popularity over the past few years. New opportunities have also expanded, along with new regulations being passed. However, behind-the-meter generation is also creating challenges for WFEC and its members.

In 2022, to better understand the overall impact of behind-the-meter DG, WFEC worked with its member cooperatives to conduct an in-depth load profile analysis whereby pre-installation & post-installation data was collected on 10% of the homes that had installed a distributed resource behind the meter. This was a massive undertaking and the findings are still being reviewed. However, early results indicate a need to re-think historical rate recovery methodology in the future, as well as minimize the cross-subsidization that these types of interconnected distributed resources can create.

WFEC has been working with members, along with C.H. Guernsey, which has developed a template and guide to help bring each cooperatives' interconnect policies up-to-date.

An excerpt from an article published by The National Renewable Energy Laboratory regarding grid-connected DG, explains – "Installing a DG system can have financial implications for utilities and ratepayers in addition to system owners. Utilities often experience lost electricity sales under metering & billing arrangements that allow DG system owners to self-consume electricity prior to export.

Self-consumption allows DG system owners to reduce or eliminate the variable charge portion of their electricity bills. This may lead to an under recovery of the utility's fixed costs because utilities often recover some of the costs incurred for maintaining the network from the volumetric energy charge component of their electricity tariff."

(Continued on Page 6)

Please note:

With so many segments involved with distributed generation, such as residential, commercial and industrial, renewable sources, and others, a series of articles that will divide up these issues is being planned to be a part of WFEC's new publication – *The Link* – which will be introduced in August. *The Link* is intended to offer shorter articles focusing on one particular topic, rather than a longer article that includes all aspects.

New Mexico cooperative managers and staff attended a workshop at Farmers' Electric Cooperative in Clovis, N.M., regarding Policy 9-5 that addresses interconnected distributed resources. Following an in-depth review of the policy, a question & answer session was hosted.

ROW vegetation management crucial for maintaining system reliability

Article, photos by Howie Jackson

Perhaps one of the most underlooked part of reliability on the electrical transmission system, from the public's view, is vegetation maintenance of the right-of-way (ROW). This ROW area is a determined amount of land on either side of the center of the structures that support the lines. It is 25 feet either way from the center of a single pole and 50 feet from the center either way for a double pole or H-frame structure.

There are different amounts of maintenance required depending on the terrain. In more lush, green areas with abundant vegetation, more frequent maintenance is required. Other areas with a drier climate can go longer in between intervals. No matter the location, WFEC has year-round, ongoing vegetation management projects.

System reliability issues come from two different aspects. First, prevention of contact with the lines and vegetation, which could help prevent an outage. This aspect is also very important to federal and national standards as there is a possibility of a $10,000 fine if the ROW vegetation causes a bump in the line, from a tree or tree limb.

Kubota skid steer tree chipper / mower

Jarraff Industries extended boom tree trimmer

The second aspect is in restoration efforts. If there is an outage caused by a failed transmission structure, from weather or other event, it is of utmost importance that crews be able to access the areas with trucks and other equipment to restore service as quickly and safely as possible.

WFEC maintains more than 3,700 miles of transmission line in Oklahoma. Some sections of line are outsourced to contractors, with the majority of those going through urban and suburban areas. The contractors maintain specific equipment and crews for this type of vegetation maintenance.

WFEC crews primarily take care of lines located in rural areas, where the terrain is often unforgiving to the crews responsible for vegetation management. They routinely encounter steep climbs, canyons, ravines and even must find ways to cross fences, creeks and other bodies of water.

"No matter how rugged the terrain is, we have to somehow, some way, find a way to get across it," according to Light Equipment Operator David Salyer.

Salyer and Light Equipment Operator Michael Greer recently provided Communication staff a first-hand look at untouched ROW, in progress ROW and finished ROW.

(Continued on Page 8)

Vegetation management *(continued)*

As shown on the previous page, if maintenance on the single pole structure poking through the vegetation was needed on the untouched ROW, access would be difficult.

Two pieces of equipment WFEC crews were using on this particular day for a project near Noble, included a Kubota skid steer tree chipper / mower and a Jarraff Industries extended boom tree trimmer. (shown on previous page)

Geo Boy tree mower

WFEC also has a Geo Boy tree mower (shown at left) in inventory that is used for vegetation maintenance. Greer cuts the tree line even with pre-marked ribbons and flags, so that only the necessary amount of vegetation is trimmed. Once the limbs are down, Salyer, in the Kubota skid steer, comes by and "mows" them into chips. The Kubota machine is also able to mow down small trees as well.

As with any equipment, maintenance is required at different intervals. The Kubota trimmer head received a round of blade turning on this particular day. The cutting blades are double sided. The first side is worn down and Salyer uses an impact wrench to loosen bolts holding the blades. Greer comes behind his work and turns the blades around so the second, sharp side of the heads can be used. Salyer then tightens the bolts. This entire process takes about 30 to 40 minutes. (shown below)

Other maintenance intervals include fluid changes, fluid refills and air cleaner maintenance. And at times, a hydraulic hose needs to be procured and replaced.

WFEC has four crews assigned to vegetation maintenance. Two work out of Anadarko and two work out of the southeastern area transmission crews. Maintaining over 3,700 miles of transmission line is a continuous endeavor. Thousands of man hours are dedicated each year for this - with one end result: reliability.

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WFEC Light Equipment Operators David Salyer and Michael Greer perform equipment maintenance on the Kubota trimmer.

WFEC crews primarily take care of the lines located in rural areas, where the terrain is often unforgiving to the crews responsible for vegetation maintenance. They routinely encounter steep climbs, canyons, ravines and even must find ways to cross fences, creeks and other bodies of water.

WFEC adds 30 MW nameplate solar project to its diverse fuel portfolio

Article, photos by Sondra Boykin

Western Farmers Electric Cooperative (WFEC) recently added 30 megawatts (MW) of nameplate solar capacity* to its diverse fuel portfolio, bringing its solar resources to 83 MW. This addition was celebrated with the June commissioning of New Mexico's newest solar energy project – the Chaves County Solar II Energy Center in Roswell, N.M.

The Chaves County Solar II Energy Center that will generate up to 30 MW of solar energy, features more than 86,515 photovoltaic solar panels that convert the sun's energy into electricity. A subsidiary of NextEra Energy Resources built, owns and will operate the project. Together with its affiliated entities, NextEra Energy Resources, is the world's largest generator of renewable energy from the wind and sun, based on 2022 MW hours produced on a net generation basis.

WFEC will be purchasing the solar energy output* from this Chaves County Solar II Energy Center, through a Renewable Energy Purchase Agreement signed in October 2021.

Solar panels as far as the eye can see at the recently commissioned Chaves County II Solar Energy Center, near Roswell, N.M. **(above photo taken from drone contracted by NextEra Energy Resources)**

WFEC is the wholesale power provider for four rural electric distribution cooperatives in New Mexico, including Central Valley Electric, headquartered in Artesia; Farmers' Electric, located in Clovis; Lea County Electric in Lovington; and Roosevelt County Electric, headquartered in Portales.

WFEC is also the power provider for 17 electric distribution cooperatives located across Oklahoma, and Altus Air Force Base.

With the Chaves County Solar II project, and existing solar and wind projects already in service, WFEC's New Mexico member cooperatives are well positioned to meet their state's renewable goals.

In addition to the 83 MWs of solar*, WFEC also has 956 MWs of wind energy* available through Power Purchase Agreements from 14 wind farm sites, across Oklahoma and New Mexico.

"Western Farmers Electric Cooperative, over the past 20 years, has focused on strengthening advancements towards renewable energy or zero-carbon energy, with development and growth playing essential roles in

(Continued on Page 10)

Solar project *(continued)*

providing a diversified portfolio," said Gary Roulet, WFEC chief executive officer. "This Chaves County Solar II Energy Center will not only provide affordable energy to our member cooperatives, but it will also help us continue to reduce the carbon dioxide emissions associated with supplying power. It's the type of project where everyone wins."

The Chaves County Solar II Energy Center will not only provide clean energy to support WFEC customers, but will also provide millions of dollars in additional tax revenue to Chaves County and New Mexico.

"This solar energy center will generate low-cost, homegrown energy and provide millions of dollars in additional tax revenue to Chaves County and New Mexico over the life of the project," said J.D. Rulien, director of development at NextEra Energy Resources, the world's largest generator of renewable energy from the wind and sun, and a world leader in battery storage.

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The Chaves County Solar II Energy Center in Roswell, N.M. was officially commissioned with a ribbon-cutting ceremony in early June. Those taking part included (from left) Cabinet Secretary Sarah Cottrell Propst (New Mexico Energy, Minerals and Natural Resources Department), Ashley Sgaliardich (Senior Project Manager, NextEra Energy Resources), Donnie Bidegain (President, WFEC Board of Trustees), Representative Greg Nibert (District 59, New Mexico State Legislature) and JD Rulien (Director of Development, NextEra Energy Resources).

**WFEC purchases or produces energy from various wind & solar resources. However, WFEC has not historically, nor may not in the future, retain or retire all the renewable energy certificates associated with the energy production from these facilities.*

Red Solo Cup event benefited cancer research

The Red Solo Cup event, sponsored in part by Western Farmers Electric Cooperative, raised more than $4,330 for cancer research during an event hosted in late-May. This concert, which took place at the Okie Tonk Cafe in Moore, featured Chicago-based touring Toby Keith tribute artist Paul Wenzel, and his band Made In America. Proceeds from the event benefited OU Health Stephenson Cancer Center.

Local band, Minco, performed prior to Paul Wenzel and the Made In America band.

Paul Wenzel and the Made In America band

Paul Wenzel, Toby Keith tribute artist

Cybersecurity efforts & experience lead to award for WFEC employee

The significance of cyber security in a digital world cannot be understated, as a single security breach can have extensive consequences in today's interconnected world. The volume and complexity of cyberattacks are constantly increasing, due in part to a dependence on increasing technology. As this dependence grows, so does the vulnerability to these attacks.

Nowhere is cybersecurity more important than in the energy sector, sources have said. The convergence of growing energy demand, integration of renewable energy technologies and grid modernization continue to transform the energy sector.

Advancing energy access is central to the mission at the U.S. Agency for International Development (USAID), who partnered with the U.S. Energy Association (USEA) to develop tools and resources to improve cybersecurity in the energy sector. These efforts resulted not only in a cybersecurity webinar series, but also in the publication of the *Electricity Sector Cybersecurity and Digitalization Handbook*.

Michael Meason speaking at the U.S. Energy Association annual membership meeting.

WFEC's Vice President of Information & Security Michael Meason was a key contributor to both the webinar series (to educate utilities on cyber standards, trends and best practices) and this publication that was released in 2021.

His work was recently recognized, as Meason was named the 2023 recipient of the Individual Energy Volunteer award from USEA, in recognition for his contributions to the Energy Utility Partnership Program (EUPP).

USEA sponsors international energy programs between U.S. utilities and regulatory commissions and their counterparts in developing countries and emerging economies. Through these programs, U.S. energy executives have donated their time and shared their expertise and business "best practices" to other nations.

Meason has been a long-time partner and expert volunteer for the Energy Technology and Governance Program (ETAG), EUPP, and now for the Advancing Modern Power through Utility Partnerships (AmpUp). He has been active in helping utilities around the world understand the importance of developing robust cybersecurity architecture to prevent and mitigate cyberattacks and ransomware.

He was one of the very first speakers for EUPP's online course titled *Improving Cybersecurity and Digitalization for the Energy Sector.* Since then, he has continued to serve as a volunteer sharing his knowledge with entities in Ukraine, Vietnam, Latin America and the Caribbean, plus mentoring overseas utilities to better understand how business processes can effectively enhance utility operations. He also made a presentation at the Utility Cyber Security Initiative (UCSI) workshop for transmission and distribution utilities from Armenia, Georgia, Moldova, Ukraine and Albania.

Meason began his career at WFEC in 2009 as a senior network engineer and has also served as the manager of Technical Services. He has 14 years of

(Continued on Page 12

Those presenting the 2023 Individual Energy Volunteer of the Year award to Michael Meason, included USAID Senior Energy Advisor Jamila Amodeo (left), and Sheila Hollis, former acting executive director, USEA.

experience in the electric utility industry, with areas of influence including information technology, operational technology, telecommunications engineering, network engineering/operations and cybersecurity. He also has 10 years of experience in enterprise information technology and cybersecurity within the financial services sector.

In Memoriam

John C. Johnson Jr., a senior information security analyst at WFEC, passed away at the age of 64 at his home in Norman on May 30.

Johnson had been employed with WFEC since February 2013. Prior to joining WFEC, he worked in several information technology and security positions.

He leaves behind his wife, a son and a sister.

He will be greatly missed at WFEC.

Through working with these various national and international organizations and programs, Meason has used the experience gained to help reinforce the work that WFEC does onsite. Also, there is a realization that all utilities face the same challenges.

Information and security staff at WFEC are constantly on high alert to watch for and isolate any potential threats that may affect the company.

"WFEC has dedicated personnel ensuring the security of (cyber or technology) operations," Meason pointed out.

In an excerpt from the *Electricity Sector Cybersecurity and Digitalization Handbook*, in the section, *Forging a Cybersecurity Defense for Utilities*, Meason, along with other contributors, wrote:

"Utility cybersecurity works to protect industrial controls systems (ICS) and operational technology (OT). The inputs are zeroes and ones; the outputs are physical actions (like opening a switch). Many ICS and OT technologies (motors, sensors, controllers, etc.) are used in multiple sectors.

"OT differs from information technology (IT) in that it must be operational 24 - 7. Also, OT has a lifecycle of up to 30 years. It is not readily replaceable, and the threats may have changed significantly since the OT was first deployed. For an effective cybersecurity strategy, organizations need to be mindful of their environments - what works and what doesn't, based on what they're trying to protect."

For a utility, a cyber intrusion is not about credit card numbers or bank routing codes; it's about impacts in the physical world - powering the grid.

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Switch training teaches proper ways to work on & near WFEC's system

Article, photos by Howie Jackson

Switches on the Western Farmers Electric Cooperative (WFEC) system are not allowed to be opened or closed without the proper training and instruction to ensure that safety is a key factor. WFEC hosts a certification training that teaches personnel on the proper communication, switching, hot line and clearance procedures when working on or near WFEC's system.

Annual Switch Certification Training was hosted in Anadarko, April 17 -20, for WFEC personnel and member cooperatives. Two, two-day sessions were presented, each consisting of a full day of classroom instruction, and another day dedicated to field training.

This training takes place at WFEC's training substation, which was specifically designed and built for training purposes, including various components and pieces of equipment that crews could experience in substations across WFEC's transmission system.

(Continued on Page 19)

Cooperative crews are shown installing jumpers to change out a high side fuse during the field training portion of Switch Certification Training, hosted at WFEC.

Cooperative crews practice opening switches during a recent training exercise at WFEC. (top photo)

WFEC Lead Station Technician Ty Carlson (center) teaches a group of cooperative employees proper switching techniques prior to hands-on training at a substation training site.

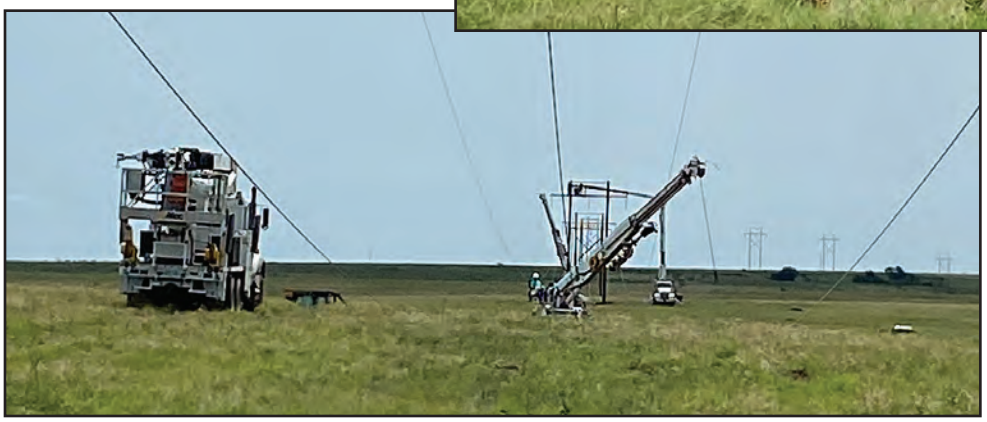
Strong storms, tornadoes wreaking havoc on WFEC service territory

Article by Sondra Boykin
Photos by WFEC crews

Multiple severe thunderstorms, with large hail and high winds, plus several tornadoes, have damaged portions of Oklahoma during June and July leaving paths of destruction in several areas of Western Farmers Electric Cooperative's (WFEC) service territory.

The first thunderstorm system hit on Thursday, June 15, with high winds, large hail, heavy rain and several reported tornadoes hammering portions of southwest Oklahoma, particularly the Lawton and Duncan areas. Crews quickly responded to restore service and rebuild transmission structures across the affected areas.

Several member distribution cooperatives also suffered heavy damage that resulted from these dangerous storms, that produced four tornadoes across WFEC's service area. F0 tornados were reported in Comanche County, near Faxon and Geronimo, in the southwestern part of the state. Another F0 tornado was reported in the Arnett area, located in Ellis County in northwestern Oklahoma.



WFEC crews work on repairing damage in the Loco area of southwestern Oklahoma. The 138 kV Loco to Comanche line suffered damage from an F2 tornado that was confirmed in this area. Some 15 H-structures were downed in this June 15 storm. Shown above is one of the piles of wooden poles from the damage along this line.

However, the Loco and Comanche areas suffered an F2 tornado, which left a path of destruction, including some 15 structures that were downed along WFEC's 138 kV Loco to Comanche line, in Stephens and Jefferson counties. Also, in the Duncan and Jimtown areas, a total of 13 structures were damaged or destroyed.

As of the following afternoon (June 16), some 34 structures were reportedly downed in portions of the service territory.

Crews were able to sectionalize damaged transmission lines in these areas in order to restore power to the majority of the affected substations by late Thursday (June 15) evening. Some substations were also backfed during these efforts, which helped to return most of the electric service to the members in the affected areas in a timely manner.

And, this storm was only the first, as the service area was struck again on Sunday, June 18. This storm downed some 31 transmission structures and caused damage to several crossarms, with the Laverne Junction to Laverne 69 kV line suffering the most damage, with some 20 structures downed. An EF1 tornado was confirmed in this area of Harper County, in northwestern Oklahoma, along with high winds and hail.

Also, in this northwest portion of the state, five

WFEC crews are shown repairing damage in the Fargo area of northwestern Oklahoma. The Fargo Junction to Fargo line had five structures downed in the June 18 storm. (right & below photos)

structures were downed along the Fargo Junction to Fargo line. Single transmission structures were also downed along other lines in northwest and southwest parts of the state.

Overall for WFEC, through preliminary damage estimates from the back-to-back June storms, around 65 transmission structures were downed or heavily damaged along both 138 kV and 69 kV transmission lines. Since some are single pole structures and others have two or three poles, the total included 90 poles being replaced from these two storms, in addition to 102 damaged crossarms.

Based on these preliminary assessments, WFEC's damages could total or exceed around $622,000 in the eight affected counties, with Stephens County leading at $294,000.

Collectively, for Oklahoma Cooperatives, preliminary storm damage for the same period was slightly over $6 million, with 1,240 poles, 448 cross arms and 139 transformers replaced across the state. (Based on Oklahoma Association of Electric Cooperatives (OAEC) data*, for the period between June 15 to 18, included. At the height of the outage over 76,750 cooperative members were without service (at 3:02 a.m. on Sunday, June 18), according to OAEC information.

**(Information was received from 18 cooperatives, including several WFEC members, plus some cooperatives outside of the service territory of WFEC.)*

And, if the June weather events were not enough, another round of high winds and thunderstorms came in with a bang a day before the July 4 holiday, with high winds causing damage in a couple of areas in WFEC's service territory.

Preliminary damage indicated six 138 kV structures were downed along the Perry Junction to Perry line, with an additional 11 single poles requiring replacement on the Washita SW to Hydro line. Some substations were backfed while repairs were being made in the area. All repairs were completed by early to mid-morning July 4. An estimated 17 structures were downed or damaged.

The thunder rolled again early Sunday morning, July 9, with severe storms and high winds sweeping across the state, causing outages once again in WFEC's service area.

The line most impacted by this storm was the Franklin Switch to Sunshine Canyon, located in the surrounding areas of Moore and Newcastle. Some 21 structures were down across this single pole 138 kV line, with numerous substations affected by this damage. Several were able to be backfed, plus some lines were sectionalized to return service.

Along the Weatherford to Hydro line, 10 138 kV H-structures were downed by the heavy storms. WFEC crews responded to these two areas to wreck out the damaged structures and clear the roads of debris. Flooding was also an issue in some areas. A few single structures in surrounding areas also received damage, along with broken crossarms and insulator issues.

Overall, some 38 structures, both single pole and H-structures were downed by the July 9 storm.

Damage from the latest storms is still be evaluated, with only preliminary estimates available at this time.

(photos continued page 18)

Storm damage photos *(continued)*

Damage from June & July Storms:
(below & center right) Weatherford to Hydro line / (top middle) Laverne Junction to Laverne line / top right) Okeene to Eagle Chief line / (bottom) Fargo Junction to Fargo line

All line & structure damage & repair photos were taken by WFEC crews.

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Switch training *(continued)*

An estimated 75 attendees took part in this certification class, including several employees from WFEC Transmission and Distribution and power plants, plus member cooperatives. Cooperative dispatch personnel were given the opportunity to sit alongside WFEC system operators to learn how to issue clearances and switching instructions from the control room.

WFEC performs switch training to maintain compliance with OSHA and NERC and to train field personnel on the proper procedures when working on or near WFEC's system.

The switch training is only one part of certifying and authorizing field personnel to perform switching. Once the initial certification class has been completed, certified personnel will be recertified annually with a written exam. Prior to receiving "authorized switchman status", certified personnel must also complete on-the-job training, which at times may take several years before they gain the experience necessary to be considered an "authorized switchman".

There is a lot of personnel involved before the switch swings open or closed. The safety of the personnel operating the switch is of utmost importance and WFEC's number one priority. The integrity of the bulk power system is the responsibility of WFEC and all who work on it.

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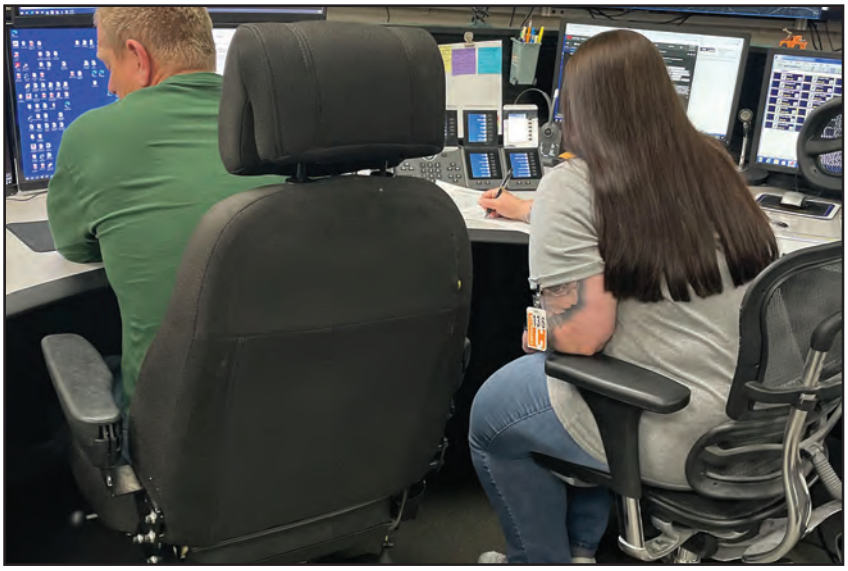
Journeyman Station Technician Danny Briscoe (left center) instructs students taking part in WFEC's Switch Certification Training during the field training portion of the two-day session.



WFEC System Operator Cory Green (top) explains procedures as cooperative dispatch personnel were given the opportunity to sit alongside WFEC system operators to learn how to issue clearances and switching instructions from the control room.

WFEC's training substation (left), is specifically designed and built for training purposes and includes various components and equipment.

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