

St. Patrick's Day Storm



MESSAGE FROM GENERAL MANAGER AND CEO JERRY D. WILLIAMS

EVERY YEAR, ON MARCH 17, our Irish friends often celebrate by wearing green and consuming a lot of alcohol. St. Patrick's Day is even a public holiday in Ireland. Whatever festivities were scheduled to occur in Lamar and Red River Counties on this day in 2016 were most likely cancelled or delayed. Around 9 AM on March 17 the conversation turned to weather when winds exceeding 100 miles per hour swept thru Lamar County, spawning more than one small tornado. Around our office in Paris, the sound of numer-

edge of the radar system for the NWS in Shreveport. They simply do not have information on weather located near the edge of their radar coverage unless it is very high in the sky. Our distance from Fort Worth or Shreveport makes the earth's curvature an additional challenge. Each of these two weather service organizations knows where their jurisdiction ends and they stick to it. This is why you will notice warnings from NWS in Fort Worth seem to stop at an imaginary line just east of Paris. All the Dallas TV channels get their information from the NWS

in Fort Worth, so most of Lamar and Red River Counties are simply left out. When it comes to weather, we are simply in a no-mans' land.

In less than an hour the microburst and tornado's had moved out of Lamar/Red River Counties, leaving 77 Lamar Electric distribution poles broken, 20 Oncor Transmission poles broken, thousands of large Cedar Trees broken over, barns and house roofs reduced to rubble. A lot of barns lost pieces of tin but none of the poles I observed were broken due to flying debris or trees. Typical storms for our area will result in trees blown over with the



CODY BACHMAN

ous high voltage fuses blowing could be heard as debris hit power lines and high voltage wires started to hit the ground. A power line fuse sounds like a shotgun blast when the fuse blows.

It certainly looked like a super cell was upon us as we began to experience microburst of winds of over 100 miles per hour. The attached picture will help you recognize part of the super cell. A microburst occurs, where cooled air rushes rapidly toward the ground and then spreads out at very high speeds. Damage from microbursts can be similar to damage from tornadoes. In our case, the super cell also spun off at least two small tornados in rural areas near the county line. If you expect the National Weather Service (NOAA or NWS) or some other group to warn of such weather in our area, you would be wrong. The National Weather Service comments for the day were "There is a slight risk of severe thunderstorms today from East Texas to Alabama." There was also a comment of "Some Super Cell Structure."

The problem is that Paris is on the very edge of the radar system for the NWS in Fort Worth and Clarksville is on the very

tree breaking power poles, but this storm was not typical.

Most broken poles were either 35 to 40 foot class 4 or 5 poles, and had been inspected and re-treated by Osmose within the past 3 years. Osmose is one of the largest pole inspection companies in the United States and are very accurate in finding wood poles that need replaced. With the exception of two security light poles, all of our broken poles were healthy poles. So why did they break? The answer is simple: Microburst of wind exceeded the design strength of the poles.

Most broken poles were on major three phase lines, which mean there are three hot wires, one neutral wire and the width of the pole to catch the wind. The width of the pole and the amount of wires produced enough stress to break the poles. The poles were not bad and neither was the line design. Design and constructions of overhead power lines must be in accordance with the National Electrical Safety Code (NESC). The NESC specifies certain load conditions that must be considered in line design and these conditions include extreme weather events including wind and combined ice and wind.

What we experienced was never contemplated.

Fifty year old cedar trees were snapped off after surviving years of strong winds. This told me the storm was out of the ordinary. Our power line engineering design leads me to believe that wind gust speeds were likely between 115 and 144 miles per hour. A 35 foot class 4 wooden pole, supporting four wires is designed to withstand a maximum wind speed of about 144 mph. Normal weathering and assumed deterioration could logically reduce pole strength by as much as 20 % and cause them to break at 115 mph. Microbursts are typically less than a mile wide which would explain why the broken poles were in bunches less than a mile wide. There are no official estimates of the intense wind speed because local weather reporting stations were not blasted.

It only took a few minutes after the storm tore thru the Paris/Reno area for us to conclude our electrical substation at Reno was off. This substation serves most of the rural areas of North Lamar County as well as the City of Reno; some 5,000 meters. Coop crews were in a safety training meeting which quickly adjourned. Linemen immediately began assessing the damage to distribution lines connected to the Reno substation, while other crews began to patrol the 138,000 volt transmission line that brings power from the grid to our substation. Our part of the transmission line, which has concrete poles, was ok but Oncor's wooden transmission poles southeast of Paris, near Pattonville, did not fare so well. Their 138,000 volt wires were on the ground with 14 transmission poles broken. An attempt was made to feed our Reno substation from a transmission line originating at Rivercrest and connecting to our Sherry substation south of Clarksville. Crews scrambled toward Clarksville when it was determined the Rivercrest line was shorted out.

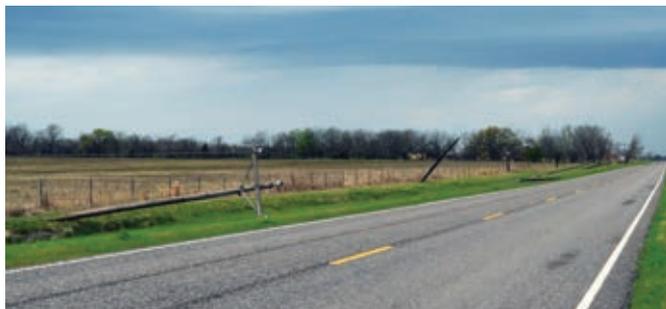
With the Sherry and Reno substations dark, we now had about 8,000 meters without power. Upon arrival south of Clarksville, our crews discovered broken poles on each distribution circuit out of the Sherry substation. Oncor was able to energize the transmission line up to our Sherry substation, but they had 6 transmission poles on the ground just north of our substation. In this situation, our Reno substation as well as the City of Clarksville would be in the dark till either the 14 poles or 6 poles were replaced. Plans were started to replace the 6 transmission poles, which were located in a muddy pasture.

As damages were being tallied, it became apparent that our twelve coop linemen were not going to be enough. H & H Construction does a lot of underground construction for us and they were immediately activated. Their track mounted mini excavator proved useful in muddy locations. A large crew of workers with Utilities Power Line Services had been working



on a construction project near the Red River and was still in town. They happened to have a skid steer that could dig holes and set poles. They regrouped and went to work on broken poles near Clarksville. Techline Construction out of Van Alstyne Texas moved two crews to the Bagwell area where 12 poles were broke along FM 2120. Their track mounted equipment would be very useful before the night was over. Their general foreman Byron Rushing is very familiar with the Red River County area, partially because his wife is the Mayor of Clarksville. Seven poles were on the ground along FM 910 south of our Sherry Substation. We called upon our sister Cooperative, Wood County Electric Cooperative. Wood County sent a large group of linemen and lots of equipment, and immediately went to work on FM 910.

By midafternoon on Thursday, crews were spread from the Reno area to Avery. A dozen poles were snapped off south of Annona but only off road equipment could reach them. Several poles were broken north of Avery as well as the major three phase line feeding the English area. As reports kept coming in, the common factor was major feeder lines (poles with 4 wires) were on the ground, while poles with a single hot wire and neutral were left standing. It was hard to believe that two additional wires and a cross arm would catch that much more wind. In addition, almost all of the broken poles were on lines generally in a north/south direction, with poles falling to the east. Coop management employees that no longer climb poles were patrolling hundreds of miles of line to determine exactly where the damage was located as well as materials and equipment needed for each site. Pictures of some of the damage were used to keep members updated on Facebook. Our new Communications Director, Katie Morris, did a great job of posting Facebook and website updates as she traveled the area. She quickly discovered that delivering materials to job sites was also part of her work load. It is amazing how people without electricity in their home are still able to communicate on Facebook. One of our first Facebook post was viewed by 40,492 people. Fifteen to twenty three thousand views were fairly common. To keep prospective; we only have 12,200 active meters.



Some members offered to pull digger trucks to the broken pole but it was quickly determined that even large four wheel drive tractors could not drag a large truck across a boggy pasture. It seemed the wind had picked up speed in pastures without trees to slow it down. There was discussion about how long the men could continue with this steady work load, before taking a rest period. Small store workers stayed open using hand held flashlights and allowed line workers to buy packaged food so they could keep working. As the nighttime advanced, it seemed nobody wanted to interrupt their project. Around 1:30 AM the contractor for Oncor had completed the six poles and was ready to turn the transmission line on. This seemed to invigorate everyone. At last we could energize several of the circuits fed from the Reno substation. All crews were still working when daylight came Friday.

Approaching storms could be seen in the West as work continued Friday. Around noon Friday a massive lightning storm with hail swept across the area. A large transformer at a step down substation that serves the Direct area took a direct hit of lightning. This area had escaped the broken poles but now set in the dark due to lightening. Employees answering calls from

members continued their duty as they viewed their personal cars being pummeled with hail in the parking lot.

As work continued into Friday night, two crews from Techline were relieved with fresh crews brought into the area. The fresh crews would work through the night till all power was restored. Some of the Coop crews took a short break and were back at work shortly after daybreak.

On Saturday morning most major lines were up and energized. This allowed us to concentrate on the scattered broken poles serving fewer meters, and individual houses. The lightning storm on Friday had caused many individual outages when the transformer fuse blew in an attempt to keep the lightning from entering the transformer and member's house. Shortly after 7 pm on Saturday March 19 every house that was ready for power had power restored. A big job done, with no injuries! Calls continued throughout the weekend as members got their meter loops repaired and could receive power.

This storm was one for the history books, and that is exactly where I want to leave it. No repeats. We appreciate the patience of our members as they suffered through this situation along with all the workers. If another storm comes our way, you can be sure your Coop family will be here to get the light back as fast and safely as we can. We will continue to provide updates on Facebook and the website. We will also have a live person for you to speak with over the telephone, but sometimes you will get a busy signal when everyone calls at the same time. You can make life easier by reporting outages by Text. We can handle hundreds of text at the same time. It is easy and you even get a confirming text that your outage has been reported and another text when power is back on; in case you are not at home. Go to our website; www.LamarElectric.Coop for directions on signing up for texting.

Deposit Refunds Go Unclaimed

LAMAR ELECTRIC COOPERATIVE IS ATTEMPTING to locate former members who have not cashed refund checks issued in March 2012 through February 2015. The checks are for deposits, final bill refunds or membership fees.

“Many of these checks go unclaimed because members fail to provide us with a forwarding address. These checks are returned to us by the postal service,” said Director of Communications Katie Morris. Lamar Electric is only allowed to hold funds for a certain amount of time and is required by law to send unclaimed money to the state of Texas. If the refund check is not claimed at Lamar Electric in the next couple of months, a person will need to file a claim with the state of Texas to receive the money. A full list of names is available below. This list is also available at our office or on our website, lamarelectric.coop. If your name appears on the list or you are the legal heir to the estate of an account listed, please contact Lamar Electric at (903) 784-4303 to claim your check.

\$10.71 BAILEY, RETA G	\$16.84 GILLEAN, BRICE L	\$5.00 OWENS, LEOLA
\$153.96 BILAL, SYED	\$126.96 GORDON, JAMES H	\$1.36 PETET, STEVE
\$5.00 BONNER, GEORGE	\$5.00 HAUSLER, ADOLPH	\$25.00 REESE, KATHIE H
\$15.66 BOOTHE, STEVEN A	\$5.44 HOSKINS, MANDRED E	\$7.95 SHOEMAKE, ASHLIE N
\$23.53 BRYANT, CHARLES R	\$7.59 HOWLAND, CALLIE M	\$25.00 SKIDMORE, ROBERT G
\$19.61 CALDWELL, ED L	\$5.00 HUGHES, ELIZABETH	\$10.00 SMITH, NELLIE A
\$4.77 CARRINGTON, B. T.	\$5.00 IRBY, ROBERT LYNN	\$193.57 SNOW, KIMBERLY D
\$25.00 CARSON, ANGELA M	\$1.44 JETT, RAYMOND M	\$9.45 STEVENS, LAURA
\$5.00 CLEBURN, VINETA K	\$5.00 JOHNSON, JIMMY	\$25.00 SUMMERFORD, GLADYS M
\$45.00 CRANFORD, MICHAEL S	\$157.66 JOHNSTON, STEPHEN C	\$10.42 THACKER, COOPER L
\$151.43 DARDEN, JOHN	\$39.30 JONES, KAYLEE	\$5.00 TOWNES, JOHN T
\$5.00 DICKERSON, ALLEN	\$4.71 KOUNOVSKY, PAUL E	\$25.00 TRAPP, RYAN T
\$8.63 DYCK, KATHARINA G	\$25.00 LUPER, PATSY	\$5.00 WALKER, CURTIS
\$137.69 EASTON, MARY A	\$19.66 MACHADO, ANTONIO	\$17.30 WARD, C L
\$25.02 FENNEL, LOYD	\$8.93 MANNING, LAWRENCE E	\$5.00 WHITE, GEORGE
\$13.78 FIELD ASSET SERVICES, LLC	\$45.00 MCFRAZIER, LAWAYNE	\$120.82 WILSON, JUSTIN K
\$2.09 FISHER, SHARON	\$25.00 NANCE, CHARLES L	\$26.25 WOOTEN, JOE E
\$118.45 GIBBS, KATHRYN E	\$25.00 OATES, GERALD P	
	\$6.91 OFFUTT, SANDRA K	



1485 N. Main St. • P.O. Box 580
Paris, TX 75461

GENERAL MANAGER AND CEO

Jerry D. Williams

BOARD OF DIRECTORS

Allen Branch, President, *Sumner*

Lyle Yoder, Vice President,
Pattonville

Mike Williams, Secretary-Treasurer,
Detroit

Matthew Albus, *Roxton*

James D. Floyd, *Annona*

Jeremy D. Hamil, *Sumner*

Harry R. Moore, *Clarksville*

Ron E. Tippit, *Clarksville*

George M. Wood, *Blossom*

Member Benefits

- Level billing
- Automated meter reading
- Free bank draft service
- E-Bill
- Visa and MasterCard accepted

Your Local Pages

This section of *Texas Co-op Power* is produced by LEC each month to provide you with information about current events, safety, special programs and other activities of the cooperative. If you have any comments or suggestions, please contact the local office.

CONTACT US

CALL US

(903) 784-4303 local or
1-800-782-9010 toll-free

FIND US ON THE WEB

www.lamarelectric.coop



MEMORIAL DAY MONDAY, MAY 30

Lamar Electric thanks all veterans for their service. Our office will be closed in observance of the holiday.

ISTOCKPHOTO | THINKSTOCK