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POWER CIRCUIT

JANUARY 2022 PUBLISHED FOR THE MEMBERS OF VERDIGRIS VALLEY ELECTRIC COOPERATIVE A SUPPLEMENT TO OKLAHOMA LIVING WWW.VVEC.COM





Washington Youth Tour

June 17-23, 2022

Essay Topic

In your words, explain how electric cooperatives originated and how we benefit from them in our communities.

Essay Guidelines

600-800 words (typed, double spaced)



Scan for more Youth Tour information!

Win a trip!

VVEC's 2022 student essay contest for eighthgraders and high school juniors is now open

fter being canceled last year due to COVID-19, YouthPower Energy Camp and Washington Youth Tour are back! Energy Camp is a four-day camp experience in late May and early June, at Canyon Camp in Hinton. It is for students who are eighth-graders this year. Youth Tour is an all-expenses-paid, week-long visit to Washington, D.C., in June. It is for students who are juniors in high school

this year. Based on the highest-scoring essays, VVEC will send two eighth-grade students to Energy Camp. Two junior students will go to Washington, D.C., and the 1st and 2nd runners up will be awarded \$1,000 and \$750 scholarships, respectively. VVEC membership is not required for participation in these programs. For more information, visit www.vvec.com and click on "Community Programs."

APPLY BY FRIDAY, FEBRUARY 25 AT 4 P.M.

YouthPower Energy Camp

May 31-June 3, 2022

Essay Topic

What is the electric cooperative story?

Essay Guidelines

300 words minimum. Students may write individually or in a two-person team.



Scan for more Energy Camp information!



VVEC BOARD OF TRUSTEES

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Dispatching top-quality service

Ron Cornett has devoted decades to serving co-op members

on Cornett began his coop career in 1989 at a small cooperative in southwest Oklahoma. He transferred to VVEC in 2004 and served as a journeyman lineman until 2019 when he became dispatcher.

As dispatcher, Ron coordinates and handles multiple issues concerning power outages. After outage calls come into the outage management system and are recorded, he helps to determine the resources needed to restore power while providing information to the members regarding their service and outages.

"What I enjoy most about my job is talking with the members," Ron says.

When asked if he misses his old job working outside, he replies with a chuckle, "No more ticks, chiggers, or fleas."

Ron is married to Carolyn, his "lovely wife," who teaches at Collinsville Public Schools. Together they have 10 grandchildren and two great-grandchildren.

Thank you, Ron, for your service to VVEC and the members!

"What I enjoy most about my job is talking with the members."

- Ron Cornett, VVEC dispatcher

EMPLOYEE ACHIEVEMENTS



From left: VVEC linemen Evan Hale-Umbarger, Dillon Cox, Corey Harvick and Reese Howard celebrate their newly achieved journeyman lineman status during the Oklahoma Association of Electric Cooperatives Lineman Graduation on December 2, 2021.

Becoming journeymen

VVEC linemen celebrate career milestone

ecoming a journeyman lineman is a four-year process that requires extensive reading, several tests and thousands of on-the-job hours as an apprentice lineman. The journeyman lineman status is a career milestone that signifies competence in leading the installation, maintenance and repair of electric power systems.

Four Verdigris Valley Electric linemen recently graduated from Northwest Lineman College and achieved journeyman status: Dillon Cox in 2019, Corey Harvick and Reese Howard in 2020, and Evan Hale-Umbarger in 2021. Congratulations on your achievements!

CO-OP PRINCIPLE #5 Education, Training and Information

We support education for employees because it enables them to effectively contribute to the development of the cooperative.

If your power goes out, pick up the phone—but don't make a call!

he fastest and easiest way to report outages is via the SmartHub application. The free smartphone app is available to all VVEC members, and can be downloaded on the App Store (iOS users) or Google Play (Android users). Or, access SmartHub via the web at https://vvec.smarthub.coop.

With SmartHub, you can instantly see if your account is affected by an outage that has been reported. If the outage has not been reported, you can report it from the app within seconds. Using SmartHub will save you the hassle of getting caught up in clogged phone lines because hundreds of members are trying to call in at the same

In the event of an outage, be sure to check VVEC's Facebook page for updates: www. facebook.com/VerdigrisValleyElectric/. When outages occur, rest assured that VVEC is working hard to restore your power as quickly as possible.

Scan here to download the SmartHub app!





'Epic Failure'

Texas blackouts a cautionary tale for Oklahomans

By Robert Bryce

This past February, residents of Texas suffered through rolling blackouts during a period of unprecedented extreme cold. While power went out there and elsewhere across the Midwest, it continued flowing for members of electric co-ops served by power supplier Associated Electric Cooperative. This article from energy expert Robert Bryce serves as a cautionary tale we would ignore at our peril. For this reason we are reprinting it this month with his permission.

s the postmortem of the blackouts that slammed the state back in February continues, it's apparent that Texans narrowly averted a catastrophe that could have resulted in what biologists call a mass mortality event.

At about 2 a.m. on Feb. 15, the Texas grid came within four or five minutes of a system-wide failure that could have plunged nearly the entire state into a blackout at a time when temperatures were plunging, it was snowing sideways and the roads were impassable. Recovering from such a failure and executing what's known as a "black start" could have taken the Electric Reliability Council of Texas (ERCOT) days or even weeks. Had that occurred, Winter Storm Uri would have killed thousands, even tens of thousands, of people.

As it was, the February snowpocalypse likely cost the state some \$200 billion, according to estimates by economist Ray Perryman, and the final death toll, according to an analysis by BuzzFeed News, could be as high as 700.

The February blackouts should have been a neon-bright wake-up sign for the state's politicians and regulators that the structure of the Texas energy grid is deeply flawed and that fundamental changes are needed. Alas, the legislature and Gov. Greg Abbott have largely kicked the electric can down the road. That's a mistake.

The electric grid is the Mother Network. Our most important networks, including food delivery and storage, communications and GPS, depend on the electric grid to deliver cheap, abundant and reliable flows of energy 24/7/365. A prolonged electricity outage due to extreme weather, or malicious actors, would have dire effects on Texas, and because the state provides much of the country's food and fuel, it would also short-circuit much of the American economy.

I've been obsessing about ERCOT and the causes of the blackouts

since February when my wife, Lorin, and I, who live in central Austin, were blacked out for about 45 hours. The government failed us, and there are three things government needs to do to assure that the state has reliable and affordable electricity.

Before going further, a caveat: The blackouts were the result of several interconnected factors and failures. Thus, there are no simple or quick solutions, particularly when it comes to a system as complex as the electric grid. That said, the blackouts were caused by flaws in the way the state's electricity market was designed and how it has evolved since it was deregulated two decades ago. And that leads to my first point.

The blackouts were due to government failure of epic proportions. The most obvious example of government failure was the decision by the Public Utility Commission to set the clearing price of electricity in ERCOT at \$9,000 per megawatt-hour—and to leave it at that extremely high level for several days despite the fact that it did not bring more generation into the market.

The result of that blunder: Texas electricity consumers were overcharged by roughly \$26.3 billion. The burden of paying for those costs will fall most heavily on regular Texans, who will see surcharges on their utility bills for years to come to pay down the bonds the state is issuing to spread out the cost of those overcharges.

Second, deregulation wasn't a boon for consumers. That conclusion is controversial, but studies have shown that Texans paid more for the electricity they used than they would have in a regulated market. A recent Wall Street Journal analysis estimates that Texans paid \$28 billion

more for home electricity in the 20 years of deregulation than they would have, if they had only been charged the average regulated rate for the rest of the country.

The deregulation of the Texas electricity sector opened up the utility sector—an industry that is at root, a power-plant-poles-and-wires business—to "retail electric providers." In a flash, entrepreneurs could get into the electricity game, with no hard assets or knowledge of how the electric grid works required.

One hundred and forty years ago we had Thomas Edison. Deregulation gave us Griddy.

The deregulation of the electricity sector resulted in a market in which the buck doesn't stop anywhere. Under the old regulated utility model, when big companies owned all of the components of the grid, there was accountability. After the blackouts, all we've seen is finger-pointing. That's not a bug; it's a feature of a market that's so complex that no one understands how it really works. As Ed Hirs of the University of Houston has noted, "The 1,876 pages of regulations and rules contained in the ERCOT Nodal Protocols apparently mean nothing."

Deregulation distorted the type of generation that was added to the ERCOT grid. Over the past two decades, the generation capacity added to the grid wasn't built for reliability or resilience, it was built to collect subsidies.

Since 2006, about \$66 billion was spent building wind and solar capacity in Texas. Over that same time period, according to a recent report by Bill Peacock of The Energy Alliance, Big Wind and Big Solar collected roughly \$22 billion in subsidies of one kind or another, including state tax breaks and federal tax credits. But when the ERCOT grid was on the brink of collapse on Feb. 15, that \$66 billion was worth next to nothing. There was no solar production, and of the 31,000 megawatts of wind capacity installed in ERCOT, only about 5,400 megawatts, or roughly 17% of that capacity, was available when the grid operator was shedding load to prevent the state's grid from going dark.

The \$66 billion spent on wind and solar resulted in big changes in the state's generation capacity. Between 2006 and 2020, the amount of electricity generated with wind went up by about 20% and coalfired generation fell by about the same amount. Meanwhile, thanks to booming population growth and increased electricity demand in the Permian Basin, electricity use was soaring.

Over that same time, according to the Energy Information Administration, electricity use in Texas jumped by about 67 terawatt-hours per year, far more than any other state in the country. (For comparison, North Dakota, which had the second-largest demand growth over that time frame, saw electricity use rise by about 10 terawatt-hours per year.)

The surge in electricity demand put more strain on the ERCOT grid, which was not maintaining enough reserve generation capacity, that is, standby generation that can be utilized during peak times. Making matters worse, no new dispatchable capacity is being built. Instead, ERCOT is adding more weather-dependent generation. About 24,000 megawatts of solar and 11,000 megawatts of wind capacity

When the ERCOT grid was on the brink of collapse on Feb. 15 ... there was no solar production, and of the 31,000 megawatts of wind ... only about 5,400 megawatts, or roughly 17% of that capacity, was available.

"Electricity isn't like **sneakers** or **hot dogs**. Electricity is a **critical service**." - Robert Bryce



are slated to be added to the ERCOT grid between now and 2023. Thus, over the next two years, the amount of renewable capacity in Texas will nearly double.

So what must happen to assure reliability and resilience?

First and foremost, the state must step up its oversight and regulation of the energy sector. The electric grid and natural gas grids have merged. The February blackouts proved, again, that the electric and gas grids are deeply intertwined and interdependent.

Since 2001, when Enron went bankrupt, the amount of natural gas consumed by the U.S. electric sector has more than doubled. Despite that fact, the two grids are not being regulated to assure that they are singing from the same hymnal. During the February blackouts, some gas infrastructure froze. Some gas processing plants and pipelines had their electricity cut off. That, in turn, reduced the amount of fuel available to produce power when electricity was needed the most.

In the wake of the 2011 winter storm, the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation issued a report that warned about the "interdependency of the electric and natural gas industries" and urged "regulatory and industry bodies to explore solutions to the many interdependency problems which are likely to remain of concern in the future." It's well past time for state regulators to heed that warning.

Second, the lavish federal tax incentives for wind and solar energy production—the production tax credit and the investment tax credit—should be eliminated immediately. Between 2010 and 2029, those tax credits will cost the federal treasury about \$140 billion.

Designed to stimulate nascent industries, the production tax credits and income tax credits have become blatant examples of the crony corporatism that is undermining the integrity of the electric grid. The subsidies reward weather-dependent generation at the cost of dispatchable generation. In 2015, Congress agreed on a five-year phaseout of the PTC. After that deal was struck, Sen. Charles Grassley, an Iowa Republican and alleged deficit hawk, said, "As the father of the first wind-energy tax credit in 1992, I can say that the tax credit was never meant to be permanent."

But the PTC keeps getting extended, including yet another extension granted recently by the Internal Revenue Service. For years, Big Wind and Big Solar have claimed that they can produce the cheapest electricity. It's time for them to prove it.

Third, the Texas Legislature will have to pass measures that incentivize companies to build and maintain plants that can be dispatched during times of peak demand. Those incentives should include provisions for on-site fuel storage at power plants. This was one of the recommendations put forward by ERCOT in its 60-item "Roadmap to Improving Grid

Reliability" report that was released on July 13.

During the February disaster, the most reliable power plants were the ones that had on-site fuel: the coal and nuclear plants. Thus, the state should give incentives for fuel storage near power plants. For instance, diesel fuel can be stored easily and relatively cheaply. That fuel could be used in turbines or quick-start reciprocating engines like the ones made by outfits like Caterpillar, Cummins and Wärtsilä.

In summary, the mistake made by Texas regulators was to treat electricity as a commodity. That's wrong. Electricity isn't like sneakers or hot dogs. Electricity is a critical service. The grid is the backbone of modern society, a complex and delicate machine that connects all of our homes and businesses to each other. Without reliable power, modern society falls apart.

The February blackouts were the result of a government failure to properly manage our most important network. If Texas' elected officials don't fix the problems in ERCOT, more blackouts, and even cost burdens for low- and middle-income Texans, are certain.

Robert Bryce is a Texas-based author, journalist, podcaster, film producer and public speaker who often writes about energy issues. This story first appeared Aug. 1 in the Dallas Morning News and is reprinted with permission.

SUBMIT ADS to classified@vvec.com or send to Attn: Classified, P.O. Box 219, Collinsville, OK 74021. Ads must be in writing. Your account number, name, address and a phone number is required on all ads.

The deadline for all ads is the 1st of the month. Ads submitted by the 1st of the month will run in the following month's newsletter.

Classified ads are a free service to VVEC members only. As many ads as space allows will be included in each issue. VVEC reserves the right to delete or shorten items or descriptions.

- Dog grooming. Professional, personalized, at your home. Certified master groomer with over 40 years' experience. Most dogs only \$40. Contact 918-381-1170.
- Crosby music box with wood cabinet. Play CDs, cassettes, records or radio. \$50. Contact 918-381-1170.
- Native Bluestem Prairie Hay. No chemicals. Square baled. \$8. Contact 918-504-6264.

- Old fashioned porcelain dolls. Most only \$20. Contact 918-381-1170.
- White chenille bedspread. Full/queen. \$20. Contact 918-381-1170.
- Bits, spurs and other tack. Contact Kenneth Dotham at 918-695-0344.
- Depression glass cameo "ballerina" green. Over 60 pieces. Contact Howard Denegar at 918-857-3336.

CLASSIFIEDS

COMING SOON: Calendar of Events!

VVEC will now feature a Calendar of Events in the monthly Power Circuit newsletter.

If you have an event you would like to appear, include the date(s), time, location and a contact number. Submit your event to classified@vvec.com or send to Attn: Classified, P.O. Box 219, Collinsville, OK 74021.

WEC reserves the right to edit or omit events.

Is it time to ditch your old space heater?

f you can't remember when you purchased your space heater, it might be time to replace it. Just like the flip phones of yesteryear have progressed into today's modern cell phone, portable space heaters have come a long way too. Most of today's models have built-in safety features, such as non-exposed coils and sensors that detect overheating or touch, as well as an automatic shut-off feature in case it gets tipped over.

Regardless of whether your space heater is fresh out of the box or several years old, it should be used safely, since most home heating fire deaths (86%) involve using one, according to the National Fire Protection Association. In fact, heating equipment is the second-leading cause of U.S. home fires, right behind cooking.

Be sure to keep clothing, papers, rugs and other flammable items at least 3 feet away from a space heater. More than half of the heating-related home fires start when items are too close to the heat source, according to the NFPA, including upholstered furniture, clothing, a mattress or bedding.

VVEC recommends these additional space heater safety tips:

- → Read all instructions and only use as recommended.
- ✓ Do not leave a space heater unattended.
- ✓ Plug it directly into an outlet; most power strips and extension cords are not equipped to handle the energy spikes caused by a space heater cycling on and off.
- ✓ Unplug any other item from the

outlet you are using; also try to use a dedicated circuit to avoid overload.

- ✓ Keep children and pets away from space heaters.
- ✓ Turn them off before you leave the room or go to sleep.
- ✓ Do not use a heater in disrepair or with a frayed cord or damaged plug.
- ✓ Place them on flat, level surfaces and never place on furniture, counters or carpet, which can overheat.
- ✓ Always use a space heater with care!



86% of home heating fire deaths involve space heaters.

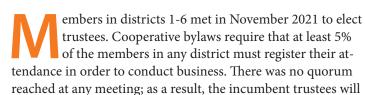
Source: National Fire Protection Association (NFPA)

REPRESENTATION









retain their positions.

Trustees Retain Board Positions







Due to the COVID-19 pandemic, elections were suspended for 2020; as a result, the following trustees will serve a two-year term (pictured on top row, from left): District 1–Jim Brackett, District 3–Vernon Lewis, and District 5–Jimmy Lambert.

Regular elections were held for District 2–Jack Bogart, District 4–John Hibdon, District 6–Dennis Lenox (pictured on bottom row, from left). These trustees will serve a standard three-year term.

WINTER RESIDENTIAL RATES

October through March usage; November through April billing

Customer Charge | \$30.00 Energy Charge | \$.07772/kWh

A power cost adjustment (PCA) will be applied to all bills when the actual cost of power purchased exceeds or is less than 59.87 mills per kWh.

In addition, a gross receipts tax of 2% of revenue will be included, plus additional taxes if applicable.

This institution is an equal opportunity provider & employer.

IN CASE OF AN OUTAGE

- First, check your fuses or circuit breakers. Every service is different. You may have fuses or circuit breakers in your house, on the side of your house, under your meter, or all three places. Check to see if your neighbors have electricity.
- Then, call the co-op at 371-2584, or 1-800-870-5948. Have your account number, name as it appears on the account, and address handy to give to the dispatcher. If you should get a recording, leave your information; every message will be answered.
- Download the SmartHub app at www.smarthubapp.com to report outages from your smartphone.





REPORT OUTAGES WITH SMARTHUB

Scan here to download

