



Cooperative Connections



**New Solar
Coming to S.D.**

Page 8

**Saving Lives:
Grain Bin
Safety**

Page 12

Electricity Brings Everyday Value



Jeff Birkeland, CEO

jeff.birkeland@wce.coop

Given how electricity powers our modern lifestyle every day, it's a great value, especially when compared to other common services and expenses.

Even though I work in the energy industry, like most people, I still don't think much about the electricity I use. I expect the lights to turn on when I flip the switch and the coffemaker to work each morning. Because electricity is so abundant, we don't think much about it. Since many of us have been spending more time at home over the past few months, we have likely been using more energy. And yet, we still expect an endless supply of power with uninterrupted service 24/7. The only time we really think about electricity is when the power goes out or perhaps when the monthly bill arrives.

Given how electricity powers our modern lifestyle every day, it's a great value, especially when compared to other common services and expenses. For example, think back to the cost of a gallon of gasoline 20 years ago. Consider the cost of groceries or a cup of your favorite specialty coffee from a few years back. In comparison, the cost of electricity has remained largely flat, unlike most other consumer goods.

Like many of you, I have a cell phone to stay connected, and I subscribe to cable channels so I can enjoy more viewing options. Many of us consider these necessities for modern day life. We can see what we're getting for our money, and we pay the price for those services. In contrast, when we use electricity, we don't necessarily "see" all that we're getting for our money.

But considering what electricity does for us, it's a tremendous value for our quality of life as well as our budgets. For comparison, consider that the average rent increase was nearly 4 percent (from 2014-2019) according to the Bureau of Labor Statistics Consumer Price Index (CPI). The cost of medical care was increased 3 percent during this time, and education was not too far behind at 2.6 percent. So, where did electricity rank? According to the CPI, electricity increased by less than half a percentage point, 0.4 percent.

The bottom line: electricity brings everyday value. In fact, West Central's members experience an average of one outage lasting just 100 minutes each year. Considering that electricity is something that we all use around the clock, I'm very proud of our track record. At the same time, we are striving to increase our service reliability, reduce those brief interruptions and reduce costs. We are continually working to improve our operations to ensure a smarter grid and exploring more renewable energy options where possible.

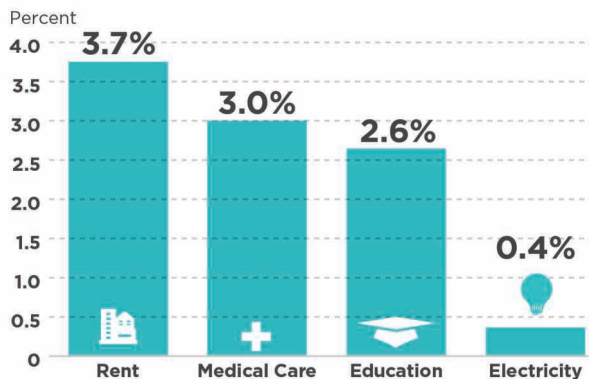
West Central provides the reliable service you expect and deserve as valued members of the co-op. And as your trusted energy advisor, we want to help you save energy and money.

We recognize that the past few months have been challenging for many of our members and we're here to help. If you have questions about your account or are looking for ways to save energy at home, please give us a call. West Central Electric is your electric co-op and our sole purpose is to serve you and the needs of our community. That's everyday value.

ELECTRICITY REMAINS A GOOD VALUE

The cost of powering your home rises slowly when compared to other common expenses. Looking at price increases over the last five years, it's easy to see electricity remains a good value!

Average Annual Price Increase 2014-2019



Sources: U.S. Bureau of Labor Statistics
Consumer Price Index

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Design assistance by SDREA

Demand Vs. Energy



Jessie Tucker

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Demand can be explained as the capacity that is required to serve a load. As an example, think about the loads that can be on at the same time in your home. The water heater is 4.5 kW, the oven is about 4 kW, the clothes dryer is 5 kW, so you would need a generator with a capacity to handle a demand of $4.5 + 4 + 5 = 13.5$ kW. Likewise, we would need to have a transformer at your home sized to meet this combined load also. Overall, higher demand loads require more service from the utility including, generating plant capacity and more expense in lines, transformers and substation equipment.

Energy can be explained as the power delivered to your loads over a period of time. Using the above example, if all the loads were on continuously for three hours, $13.5 \text{ kW} \times 3 \text{ hours} = 40.5$ kWh. If you checked your electric meter before and after, you would see an increase in the reading of 40.5 kWh.

One of the best analogies to help understand the difference between demand and energy is by “filling a bucket.” Suppose you want to fill a five-gallon bucket with water. You can use a smaller inexpensive hose hooked to a little faucet that would supply the water at 1 gallon per minute, and it would take five minutes to fill the bucket. Rather than using the smaller hose you can get a larger more expensive hose and faucet that would fill your bucket at a rate of five gallons per minute. This would only take one minute to fill. In this example the consumption (energy) of filling the bucket with five gallons of water is the same but the flow rate (demand) would be much different.

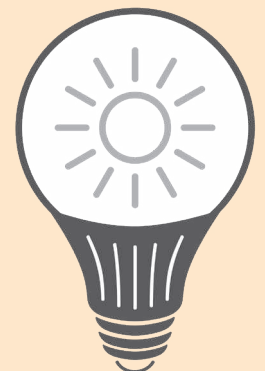
Your home energy bill is typically based on the number of kWh that you consume. West Central Electric, on the other hand, must pay a cost for the maximum kW (demand) that we supply during the month, as well as the energy delivered in kWh. A larger kW figure means our power supplier had to have enough generation capacity running to meet our peak load. More kW at the peak means more generators running. The more generators running means more expense and cost to supply the short-term peak load.

Base load or load that is basically continuous, is met with constant running coal plants. Load that rises above that level for shorter periods is met with short-term peaking plants that utilize natural gas or fuel oil. These plants are higher maintenance and greater expense. Therefore, we pay for the maximum monthly peak load. A lower peak means a lower use of more expensive generation sources and a lower cost to meet the load. That means a lower wholesale power cost and the savings pass on to our members!

Energy Efficiency Tip of the Month

Installing a smart power strip is a quick and easy way to start saving money while making your home more energy efficient. Smart power strips can actually cut power off to save energy since they are able to detect when a device is in standby mode.

Source: energy.gov



Focus on These Safe Practices Away From the Workplace

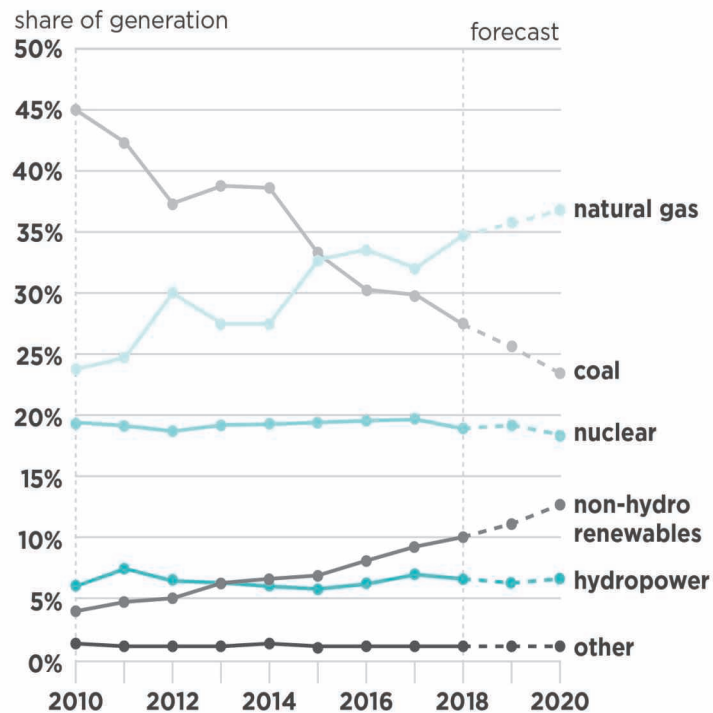
While your local electric cooperative often focuses on electrical safety and provides reminders to keep you free from harm, there are many other dangers lurking out there that don't necessarily pertain to electrical power.

Read on to see the National Safety Council's list of the top causes of preventable injuries and death away from the workplace. Keep these in mind and help protect you and your family from danger.

- **Poisoning.** In 2011, accidental poisonings overtook car crashes for the first time as the leading cause of unintentional injury-related death for all ages combined. Poisoning deaths are caused by gases, chemicals and other substances, but prescription drug overdose is by far the leading cause.
- **Vehicle crashes.** Roadway crashes are the second-leading cause of unintentional injury-related death overall in the U.S. Impaired driving, distracted driving, exceeding the speed limit and inexperience can often cause a life to be cut tragically short in the blink of an eye.
- **Falls.** Falling is the third-leading cause of unintentional injury-related death over all age groups across the country, but it's the No. 1 cause of death for those who are 65 and older who sometimes have health complications and problems with balancing.
- **Choking and suffocation.** Choking on food or other objects is a primary cause. Suffocation and choking rank higher among the elderly and infants.
- **Drowning.** This is the No. 1 cause of death for children ages 1-4, mostly due to children falling into pools or being left alone unattended in bathtubs.
- **Fires and burns.** Fires often start at night, when families are asleep and most vulnerable. A working smoke alarm will cut in half the chances of dying in a fire.
- **Natural and environmental incidents.** Weather-related disasters claim hundreds of lives per year. You should learn all you can about emergency preparedness and always have an emergency kit on hand.

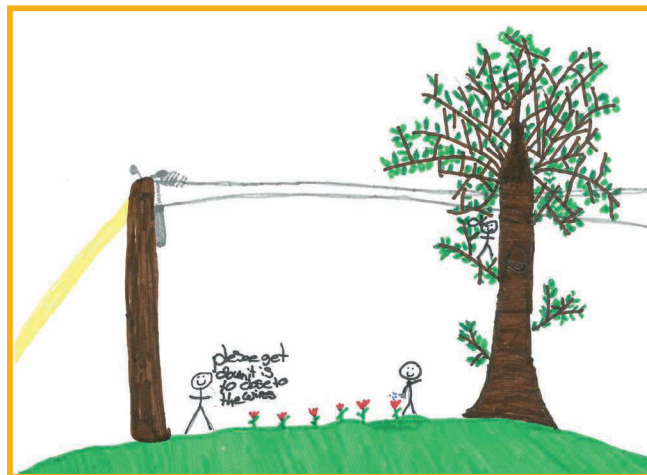
Source: National Safety Council

U.S. ELECTRICITY GENERATION BY ENERGY SOURCE (2010-2020)



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, January 2019
 Note: Confidence interval derived from NYMEX options market information

KIDS CORNER SAFETY POSTER



"Please get down - it is too close to the wires!"

Forrest Hawk, 9 years old

Forrest Hawk is the grandson of Steve and Pru Hawk. They are members of Lacreek Electric Association, Inc., Martin, S.D.

Kids, send your drawing with an electrical safety tip to your local electric cooperative (address found on Page 3). If your poster is published, you'll receive a prize. All entries must include your name, age, mailing address and the names of your parents. Colored drawings are encouraged.



Protein-Packed Salads

Ranch, Bacon, Parmesan Salad

1 16 oz. Farfalle (bowtie) pasta	½ cup shredded Parmesan cheese
1 cup prepared ranch dressing	1 carrot, peeled and diced
6 slices bacon	1 stalk celery, diced
	1 red onion, diced

Fill large pot with lightly salted water, bring to rolling boil over high heat. Once water is boiling, stir in bow tie pasta and return to boil. Cook pasta uncovered, stirring occasionally, until pasta has cooked through, but still firm to the bite, about 12 mins. Drain well in a colander set in the sink. Transfer to a bowl, refrigerate until cool, at least 30 mins. Place bacon in a large, deep skillet, cook over med.-high heat, turning occasionally, until evenly browned, about 10 mins. Drain bacon slices on a paper towel-lined plate, let cool, and chop. In a large salad bowl, stir together the ranch dressing, bacon, Parmesan cheese, carrot, celery, and red onion. Lightly stir in cooled pasta to coat with dressing, and refrigerate 2 hours.

Cortney Reedy, Tea, SD

Rotini Salad

1 box rotini	sliced turkey, deli style
celery, green pepper, radishes, cucumber, onion, carrots	mushrooms, chopped
	cheddar cheese, shredded

Cook rotini as directed on package. Chop vegetables. Put all ingredients into a large bowl. Add 1 bottle zesty Italian dressing. Let chill, enjoy. Can add almost any fresh vegetable.

Mary Jessen, Holabird, SD

Broccoli Bacon Salad

Dressing:	2 T. vinegar
1 cup real mayo	Brown 1 pkg. bacon, break into pieces
¼ cup sugar	

Wash two fresh heads of broccoli and cut into bite size pieces. Add ½ cup raisins, ¼ cup purple onion, 1 cup shredded cheese, pepper to taste. Mix well.

Karen Jacobs, Tolstoy, SD

Ring Tuna Salad

1 pkg. ring macaroni cooked and drained	1 cup green olives sliced
4 green onions chopped	2 6 oz. cans Albacore tuna
1 cup frozen peas cooked and drained	2 T. salad dressing mixed with 1 tsp. olive oil

Cook, drain and cool macaroni. Mix first 5 ingredients then add salad dressing and olive oil, which has been whipped together. Store in refrigerator.

Darlene Price, Prairie City, SD

Chicken, Onion, Quinoa Salad

Dressing:	1 tsp. canola oil
¼ cup apple cider vinegar	1 white onion, sliced
2 T. olive oil	3 cups baby kale
1 T. lemon juice	1 red skinned apple, chopped
1 tsp. honey	2 cups cooked chicken, chopped
1 tsp. Dijon mustard	½ tsp. salt
1-½ cups red quinoa, rinsed	¼ tsp. pepper
2-½ cups vegetable broth	

To make the dressing: In a large bowl, whisk vinegar, olive oil, lemon juice, honey and Dijon mustard until well combined. Set aside. In a saucepan, bring quinoa and broth to boil. Simmer, covered, for 12-15 minutes, or until all of the broth has been absorbed. Let cool completely. In a medium skillet, heat canola oil over medium-high heat. Saute onion for 3-5 minutes, or until it is softened and translucent. Remove from heat; let cool completely. In a large bowl, toss onion, kale, apple, chicken, salt and pepper with dressing. Stir in cooled quinoa. www.onions-usa.org.

Please send your favorite vegetarian, garden produce and pasta recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2020. All entries must include your name, mailing address, telephone number and cooperative name.

Sealing Air Leaks Step-by-Step



Pat Keegan

Collaborative Efficiency

Exterior doors and windows that open deserve your attention.

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency.

For more information on sealing air leaks, please visit: www.collaborativeefficiency.com/energytips.

Dear Pat and Brad: I love my older home, but it's drafty and uncomfortable at times. What can I do to reduce drafts that won't cost me an arm and a leg? – Cris

Dear Cris: This is a common problem, particularly in older homes. In many homes, about half of the conditioned air leaks to the outside every hour. The good news, especially if you don't want to spend a lot of money, or if you're hesitant to invite contractors into your home right now, is that you can seal air leaks on your own with a little time and effort.

Here are three steps to get you started.

Step 1: Find the Leaks

The first step is a thorough search of the interior and exterior of the home. Look for gaps and holes in exterior walls, flooring and ceiling. These will often occur where different building materials meet, such as the top of cement foundation walls or around windows and doors. Another common source of air leaks is where pipes or wiring penetrate a wall, floor or ceiling. Ductwork located in unheated crawl spaces or attics can also contain air leaks.

Exterior doors and windows that open deserve your attention. Open each door or window and place a dollar bill between the door or window sash and the frame. If you can pull the bill out easily when the door or window is closed again, the seal is not tight enough. Also, a window that rattles when it's closed or when it's windy probably isn't sealed sufficiently.

The best way to find all air leaks is to hire an energy auditor to do a blower door test. The blower door is a large fan mounted in a doorway to depressurize the house. The auditor can then find the leaks and may even be able to recommend ways to seal them.

It's possible to conduct your own pressure test. The Department of Energy provides detailed instructions at www.energy.gov/energysaver/weatherize/air-sealing-your-home/detecting-air-leaks.

Step 2: Gather the Materials You'll Need

Here's a quick list of materials to get you started:

- **Caulk:** You'll need a caulk gun (\$4+) and caulk (\$4-\$10). We recommend indoor/outdoor waterproof silicone or latex caulk that is water-soluble until it cures and is paintable when dry.
- **Expanding spray foam:** One can typically costs \$4 to \$6. This is an effective way to plug leaks, but keep in mind, it's a messy job.
- **Weather stripping:** Prices vary depending on type and length of the materials, but there's a variety of weather stripping options made of vinyl, metal and felt, or open-cell foam.
- **Pre-cut foam socket sealers:** You can typically purchase a pack of 24 sealers for about \$3.
- **Chimney plug balloon:** Prices range from \$50 to \$90. You may need one of these if your chimney flue doesn't seal well. Buy a square or round one to match the shape of your flue.
- **Adhesive plastic window insulation sheets:** Prices range from \$2 to \$14 depending on size. You may use these later in the year for windows that can't be sealed and don't have storm windows.

Step 3: Do it!

If you are unfamiliar with how to apply any of these materials, we recommend watching online tutorial videos. Sealing air leaks is one of the best ways to boost your home's energy efficiency. Whether you're a DIY pro or novice, with a few simple steps (and low-cost materials), you'll be well on your way to a sealed, more efficient home.



The Woman Suffrage Monument, located in Nashville's Centennial Park, features five women who were in Nashville during the final ratification effort: Anne Dallas Dudley, Frankie Pierce, Sue Shelton White, Abby Crawford Milton and Carrie Chapman Catt. Photo by Robin Conover

Co-ops Celebrate the 19th Amendment

Women Played Instrumental Role in Cooperative Movement

The 19th Amendment to the U.S. Constitution was approved by Congress on June 4, 1919, but it took more than a year for the measure granting women the right to vote to gain ratification by 36 states. On Aug. 18, 2020, the nation marks the centennial of this human rights milestone.

Rural America was built on family-run farms and businesses. While dads and husbands are often celebrated throughout history and heritage, wives and mothers have been full partners in creating thousands of communities. In fact, electric co-ops have served as incubators for the leadership skills that guide our communities today.

“Historically, rural wives were isolated and only had interaction with their husbands and children, but they helped run farms, ranches and their homes,” said Betsy Huber, CEO of the National Grange.

Founded in 1867, the Grange chapters took root as fraternal community organizations committed to promoting sound agricultural concepts.

“Women could hold any office in the Grange,” said Huber.

By the early 1900’s, organizations like the Grange were providing rural women meaningful leadership opportunities and fueling passions for full engagement in public life that included political participation.

With the rise of suffragist sentiments, in the early 20th century, the Grange routinely included women in governance decisions. When electric cooperatives were organized years later, many of the principles honored by rural organizations were among the fundamental tenets included in co-op charters. Family memberships were vested in heads of households, regardless of gender, and women were among the founding members of many co-ops.

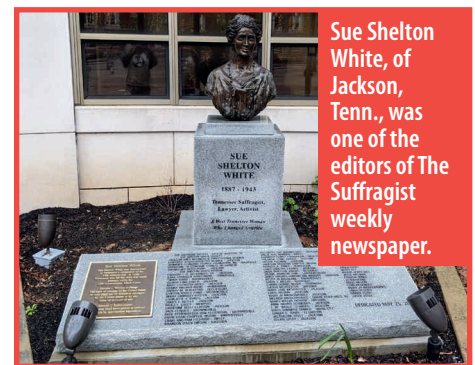
When President Franklin Roosevelt created the Rural Electrification Administration in 1935, farm magazines published stories about the news. Maye Shaw of Quitman, Texas, was a former teacher and regular reader who knew life on the farm would be easier with electric power.

She wrote Rep. Morgan G. Sanders for information and persuaded her husband Virgil Shaw to look into it. By 1937, they both were riding through the surrounding countryside recruiting members and collecting \$5 sign-up fees. Mr. Shaw eventually became the founding general manager of Wood County Electric Cooperative, which now serves nearly 36,000 meters.

Today, America’s electric cooperatives support Co-ops Vote, a grassroots movement designed to encourage voter registration, political engagement and participation in local, state and national affairs for everyone.

“We provide the information to co-op consumer-members to find out how, where and when to vote, and information on the issues that affect rural communities,” said Laura Vogel, an NRECA senior political advisor. “We do not tell people who to vote for, and we don’t endorse candidates.”

Many electric co-ops are supporting National Voter Registration Day,



September 22, to encourage political participation leading up to the November elections.

“With so many uncertainties brought on by the COVID-19 pandemic fueling concerns about how voting will proceed this fall, electric co-ops can play vital roles in reminding members of important dates and explaining rule changes,” said Vogel. “There will be great opportunities to meet community needs.”



Wild Springs Solar Farm will capture the sun's rays to produce electrical power for South Dakota homes, farms and businesses.

CATCHING RAYS

Wild Springs Solar Farm to Produce Renewable Power

Billy Gibson

Contributing Writer

Business leaders know that diversification is the key to containing costs and surviving sharp economic slumps over the long haul.

That's especially true when it comes to producing the power that keeps South Dakotans supplied with the juice they need to run their homes, farms, irrigation pumps, offices and shops.

Those utilities tasked with keeping the power flowing day and night look for diversification when determining the raw materials they'll use to generate electricity.

The ability to draw from a variety of available resources – coal, natural gas, solar, wind, hydro, biomass, etc. – stabilizes the production process and helps to levelize costs as market rates for any or all of these resources rise and fall over time. This “all-of-the-above” strategy, in turn, makes it easier for producers to engage in long-range forecasting, planning and purchasing for the ultimate benefit of consumers.

That's why it made perfect financial sense for Basin Electric to strike a power purchase agreement with Geronimo Energy, a renewable power generation developer based in Minnesota.

Geronimo Energy is in the early phases of constructing a solar farm called Wild Springs that is expected to generate 128 megawatts (MW) of clean renewable power. When construction is completed in 2022, the \$190 million facility will be the largest grid-scale solar installation in South Dakota.

According to Basin Electric officials, the not-for-profit wholesale power provider jumped at the opportunity to join forces with Geronimo Energy and expand its renewable power portfolio.

“We are excited about adding large-scale solar to our already



Vic Simmons, CEO of Rushmore Electric, delivers a presentation on the Wild Springs Solar Farm.

diverse generation mix,” said Basin CEO and General Manager Paul Sukut. “The board’s decision to add solar to our resource portfolio is to continue with our all-of-the-above strategy, as well as solar generation becoming a more economic energy source.”

Basin Electric transmits electricity to 141 member co-op distribution systems in nine states. It also transmits wholesale power to two South Dakota generation and transmission (G&T) co-ops: Rushmore Electric and East River Electric. Those two G&Ts then transmit the power supply to their respective distribution cooperatives. Rushmore Electric is the power provider for West River Electric, which is the closest distribution co-op in proximity to the solar farm. West River Electric owns more than 2,500 miles of power lines and poles in western South Dakota.

Wild Springs will be built on more than 1,000 acres within West River’s service area near the town of New Underwood in Pennington County and will help stabilize costs for thousands of

ratepayers throughout the region.

West River CEO/General Manager Dick Johnson said he's happy to have a new neighbor and that the project has garnered the support of community leaders as it will create roughly 150 construction jobs. But he said he's even happier for the members who will benefit from the renewable power generated by the solar farm.

The facility is expected to reduce carbon dioxide emissions by 85,000 metric tons annually, which is the equivalent of taking 18,000 cars off the road every year.

"We're excited that West River's service area will be home to the Wild Springs Solar Project," said Johnson. "This solar energy project will benefit our cooperative family, as well as our local communities. As not-for-profit co-ops that are owned by our members, everything we do goes back to the people we serve."

Johnson pointed out that the project is expected to produce \$17 million in economic benefits through its first 20 years in terms of tax revenue, job creation and contributions to charitable funds. The list of benefits also includes an education fund that plans to donate \$500,000 to local school districts.

Officials at Rushmore Electric said the power purchase agreement is a perfect fit in line with the cooperative's mission and long-term strategy.

"Our cooperative network is always looking to ensure we have a mix of power resources to meet the needs of our membership and renewable energy is an important part of that strategy," said General Manager Vic Simmons. "This project is an important strategic step as we look to the future in continuing our strong history of providing safe, affordable and reliable power."

Geronimo Energy recently completed the 200 MW Crocker Wind Farm in Clark County and also developed the Pierre Solar Project, a joint effort with the City of Pierre and Missouri River Energy Services in Hughes County.

Geronimo Energy President David Reamer said industry analysts often tend to doubt the viability of solar power in the region, but he said the Wild Springs project shows that consumers in more northern climates can also benefit from the renewable resource.

7 Efficient Home Improvement Projects to Help Save Money

The best home upgrades make spaces more livable and energy-efficient and are also cost-effective. Making energy-efficient improvements is a savvy way to save money on utility bills, curb energy consumption and add to the house's value. Consider a variety of home improvement projects, both big and small, that can reduce the financial burden of maintaining your home throughout the year and improve energy efficiency.

Add Insulation - A cost-effective way to save on heating and cooling bills is adding a layer of insulation in the attic where heat loss is typically greatest due to hot air rising. While many newer homes are adequately insulated, those that are several decades old (or older) may benefit from an upgrade in not only the attic but other common problem areas where air can escape such as basements, crawl spaces, fireplaces and ductwork.

Seal Doors and Windows - Windows and doors are common culprits for energy loss. While a complete replacement of doors and windows can be pricey, adding exterior caulk and weather stripping to fill in gaps where air can escape around these openings can make a noticeable difference for a fraction of the cost and make it cheaper to heat and cool your home.

Install Skylights - Skylights are a cost-effective option for transforming any room with natural light while also saving energy. For example, Sun Tunnel Skylights can be installed in 90 minutes and funnel natural light from the roof through the attic and into the room below with an aesthetic that resembles recessed lighting. Customizable with six diffuser film styles to complement interior design, the skylights can make a home more energy-efficient by reducing reliance on artificial lighting.



Reflective Window Film - When the sun shines through windows, it can heat up the home's interior quickly and trigger the air conditioner to turn on. Window coverings, such as blackout curtains, can help, but adding low-e reflective window film to your windowpanes, particularly southern-facing ones, can provide an additional shield from the sun and reduce energy costs.

Install a Programmable Thermostat - A programmable thermostat is an efficient way to control the climate inside your home. Today's smart thermostats not only let homeowners control temperatures from their smart devices but can also learn daily habits and adjust the temperature accordingly with no other manual adjustments necessary.

Replace Appliances - Because appliances like refrigerators and ovens are major energy users, investing in more efficient models provides both cost and energy savings. Additionally, homes more than 15 years old could benefit from updates to the air conditioner or heater as systems 15-20 years old or older may be candidates for replacement.

Ceiling Fans - In comparison to running your air conditioner consistently, the cost of running a ceiling fan (or several) is significantly less. Particularly on days that may not require cooling the entire house completely, fans can provide a gentle breeze and circulate air in the spaces you use most often. Simply adjust the switch to the counterclockwise position to ensure it's pushing air downward during warmer months.

For more information and home improvement ideas, visit whyskylights.com/livelifghter.

What Causes the Lights to Blink?



Kit Talich

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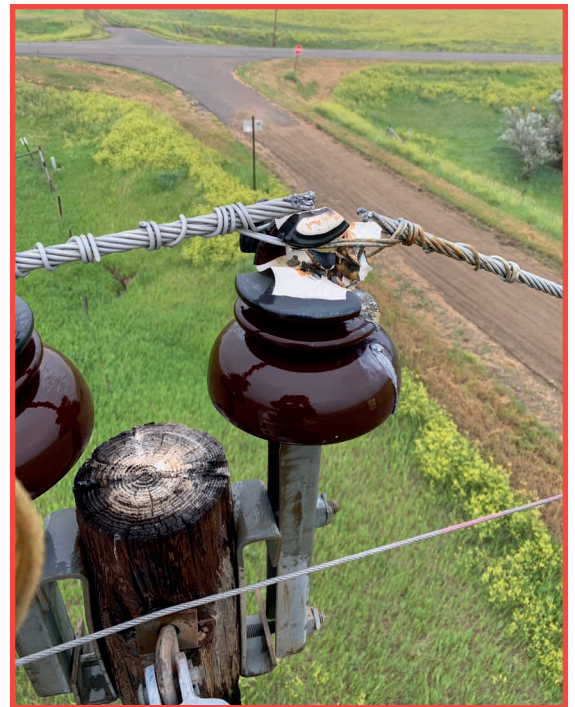
Here at your Electric Cooperative, we understand that an occasional blink in power is a nuisance that we can probably live with. Still, we can all agree that blinking lights that happen continuously can be very frustrating. While blinks can happen any time of the year, late spring/early summer is usually the time of year the system sees the most blinks. Let's take a closer look at the typical causes to see why:

A blink of the power is caused by a piece of equipment on the system called a recloser. Its job is to see a fault on the line and open up, or "operate." The device then waits a short amount of time (usually no more than a second or so at the longest) and closes back in to see if the fault cleared the line. If there is no fault, it stays closed and life is good. If the fault remains, the device will open again and repeat the process a set number of times. Ultimately, if the fault does not clear, the device will remain open (or "lockout") and the linemen have to go find the problem.

A vast majority of blinks are caused by a specific event, a 'one-off' kind of thing. An excellent example of that would be an accidental contact where equipment brushes the neutral wire up into the phase. Storms are also a good example. Wind may lift the neutral into the phase, or a tree branch or other debris being blown around may impact the line and cause the wires to get together. Outside of those causes, animals occasionally get into the line, and that will cause the recloser to operate. The most common critters in our part of the world are raccoons, birds, and snakes. Newer construction methods minimize these kinds of contacts with coverup material, perch diverters, 10' cross arms, and pole wraps to prevent critters from climbing up.

Sometimes areas of the systems will experience events that cause many blinks over a few days or weeks. Several things can cause these persistent blinks. Let's dive into these a little deeper:

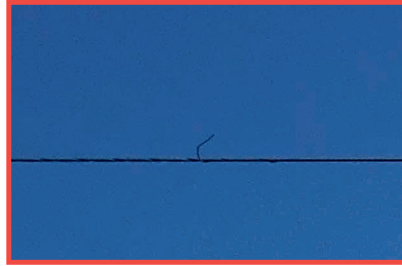
- Equipment failures can be one cause. One source of an issue can be a piece of equipment called a regulator. A regulator is a type of transformer that will adjust as needed to keep the voltage in a specific band. Inside the regulator is an arm that sweeps between contacts to adjust the output. On rarer occasions, one of these contacts can become pitted and can cause a voltage fluctuation every time the arm sweeps over it. Another piece of equipment that can cause many blinks is an insulator or arrestor. When these fail, they can sometimes hang in there until moisture comes along, and then the rain allows the electricity to short across, operating the recloser. Of course, this arcing evaporates the moisture, and the recloser will close in and not see the fault anymore. Keeping everything on until it rains again!



- Animals can also cause these persistent blinks. As we all know, cattle love to rub. Occasionally we will come across an old pole that has been rubbed so much that the diameter near the ground is three quarters or less than the rest of the pole! This hard rubbing at the bottom of the pole can cause the top of the pole to start oscillating, and the wires attached will get enough movement that they can get together in the middle of the span and cause

the recloser to operate. Birds can be another culprit. When the flocks of blackbirds take off from perching on a line, it can be enough to get the wires together. The other place a flock of birds can cause problems is if they congregate around an older transformer service with the minimal coverup. One may make contact and operate the breaker to cause a blink and then close in fine until another bird gets into the same place!

- Frays on the line can be caused by something going through the line during a storm (like we discussed above) or by gunshots. To understand a fray, we have to look at the conductor. The



conductor your Co-op uses is stranded and twisted composed of some steel wire in the middle for strength surrounded by aluminum wires on the outside for the current-carrying abilities. When something damages one or some of the outside aluminum wires, they can come unwrapped from the rest of the conductor, especially when the wind gets the wire moving. Eventually, once the wire comes unwrapped enough, it will get into the other conductor and cause the recloser to operate.

This will burn off the end of the frayed wire, and the recloser will hold until the wind unwraps more!

- Trees that grow too close to the power line is probably the easiest of all these to find. If a tree grows into the line, it can burn the end of the branches as some of the energy finds a path to the ground through the tree. As the wind blows the branches around, they can get close enough to cause an operation on the recloser. When patrolling the line, these are easy to see and fix with a quick trim of those branches.

As you can now understand, the storms in the spring and early summer and wildlife returning are more likely to cause blinks during those time frames. These situations where a line keeps blinking can be quite hard to find for the linemen because, by the time they get on-site to patrol line, the temporary fault has cleared. It can also be nearly impossible to see a faulty insulator or a single strand sticking out when it is 30+ feet in the air! Sometimes the crews find the problem the first time they run the line, but sometimes they don't see anything, and not being able to find the problem can be almost as frustrating for us as it is for you!

If you are experiencing continuous blinks, that do not seem reasonable (i.e. no storms in the area), we encourage you to call us to report. We can investigate and get it remedied before something fails and causes an outage or damages equipment or property.

Member Messages

Thank You's

To everyone at West Central, I wanted to take this opportunity to express my sincere gratitude towards all of you for making the West Central Electric Scholarship possible. I am sincerely honored and blessed to have been chosen as one of the recipients of your generous scholarship.

The financial assistance you all provided will be of great help to me in paying for my educational expenses and will allow me to concentrate more of my time towards school and studying. Thank you all again for your generosity and support. I promise that I will work very hard next year and hopefully one day give back to others, both as a citizen and as a producer in the ag industry. God's love and thanks,

Corwin Mohr-Eymer - Reliance

We would like to thank West Central for the rebate on the mini-split heat pump. It's much appreciated!

Dennis and Julie Moore - Murdo

Thank you so much for the opportunity to receive this scholarship! It is very much appreciated.

Ella Hand - Midland

West Central Electric Cooperative, I am sincerely honored to have been selected as a recipient of the West Central Electric Cooperative scholarship. Thank you for your thoughtful and generous gift.

Taryn Smith - Philip

Thank you so much for choosing me as one of your scholarship recipients. It means a lot! Thank you for everything you guys have done for me, especially the D.C. trip. By far, one of my favorite trips!

Josie Rush - Philip

Thank you for choosing me as a recipient of your scholarship. These funds will help with expenses as I attend Mitchell Tech for Radiologic Technology this fall. Your generosity is appreciated.

Kacie Wagner - Presho

Thank you for the \$1,000 scholarship. I really appreciate it. I will be attending South Dakota State University to major in Ag and Biosystems Engineering.

Thanks again!

Justice Jessop - Presho



GRAIN BIN SAFETY

Unusually wet year makes grain bin safety on the farm more important than ever

Susan Smith

Contributing Writer

Wet conditions during last year's harvest meant grain went into bins under conditions that aren't ideal.

Wet grain can cause crusting or bridging in bins. Producers try to scrape the crust away from the side, causing a landslide of grain sucking the producer in as it falls. Or they could be working in a bin not realizing they are standing on a bridge of grain that when it falls has nothing beneath it but air. This can also cause entrapment.

Many of these accidents happen in winter and early spring, said Beth Locken, director of safety and environmental at Agtegra Cooperative in Aberdeen. She calls that time period the second harvest when farmers are cleaning out bins for the coming year's crops. While South Dakota and North Dakota don't see the number of entrapment accidents as corn-belt states like Iowa and Illinois, grain bin entrapments are not picky, Locken said.

"We've already seen one (death in South Dakota) in 2020 already and that's too many," she said.

During the third week in February 2020, decreed by U.S. Secretary of Agriculture Sonny Perdue as National Grain Bin Safety Week, Christopher Bauman died at his farm near Elkton while emptying corn. Bauman had a wife and three children.

After Bauman died, Locken and Scott Wheelhouse, safety director of the Agfirst Farmers Cooperative in Aurora, began



talking about creating a local day-long seminar on grain bin safety. The morning would focus on a refresher course for first responders who already are trained to rescue someone trapped in a grain bin but maybe haven't had hands-on experience recently, Wheelhouse said. In the afternoon, producers from the area would get information on general grain bin safety and use of rescue equipment.

"We really want to emphasize we don't just want your business, we want your friendship," Wheelhouse said. "We want you alive."

AgTegra sold grain bin entry kits at cost to local producers this year, a service Wheelhouse would like to offer his customers as well. The kits sell for \$460 and include resources on how to use them.

"Mostly the benefit we get out of it is hoping we can educate the family and keep them safe," Locken said.

Purdue University releases an annual report on entrapment injuries and fatalities. The number increased by 9.8 percent in 2019. From 2017 to 2018 the number jumped 23 percent. In the last decade, 370 people died in grain bin accidents.

The number of grain bin accidents increased nearly 10 percent in 2019.



About 10 years ago, Agtegra donated to fire departments in its coverage area grain bin rescue tubes that fit around a submerged person. That includes about 70 departments in northeast and northwest North Dakota and areas along Highways 12 and 281 and I-90. Agtegra deployed a technical rescue team for the last 10 years.

Training paid off during a March grain entrapment.

The team membership and training is widespread for Agtegra employees and first responders.

"Immediate response is of the essence," Locken said. "If something happens on a farmer's bin site, they're not going to call AgTegra, they're going to call the fire department," Locken said.

That widespread training paid off during a March grain entrapment near Pierre.

"We were there providing guidance and additional equipment. We were inside the bin with the fire department just trying to get the victim out of there," she said. "We worked for about five hours and that was a successful response. Not all of them are like that, unfortunately."

The first rule of grain bin safety is not to go into the bin in the first place.

"We always say any time someone needs to go into a bin, stop and talk about it," Locken said. "Have absolutely more than one person there. Make sure the person has a harness and rope attached to the harness and to something attached to the bin that's not going to move."

Locken said turning off equipment like an auger is another good rule of thumb. That way grain isn't being pulled out of the bin as a person works in it.

John Keimig, SDSU Extension Youth Safety Field Specialist, conducts safety programs for 4-H youth. He educates children of producers so they know the rules and can keep an eye on their parents. Most producers know the risks of working around grain bins, he said, but might not consider them during the high pressure of a typical farm day.

"Adults know better," he said. "We get in a hurry. We don't always think and particularly in grain storage that can become very bad very quickly. By working together, we can help each other out if we have to go into a bin and we can save lives."

The risks of working around grain bins may be forgotten during the high pressure of an average work day on the farm.



State officials say the problem of meth addiction disproportionately affects women and Native American populations.

METH. WE TREAT IT.

Front Line Treatment Providers Stay Focused on Their Goal

By Billy Gibson

Contributing Writer

To a public growing desensitized to increasingly sensational news accounts, one particular police report stood out.

Probably because of the cattle prod.

Back in June, Sioux Falls police arrested a couple accused of using a cattle prod to discipline their four children, ages 11 to 17. The astonishing accusations also included the couple giving methamphetamine and marijuana to the youngsters in their charge.

It was another in a steady stream of stories serving as an indication of the widespread use of methamphetamine and the deleterious effects of drug abuse in the state.

Meth, especially, is a social and public health menace that has not mysteriously disappeared since the coronavirus outbreak, although it has morphed a bit as the pandemic has spread.

State and federal officials report that the impact of the virus has brought both good news and bad news.

On one hand, the curtailing of international and national travel, the economic downturn and the tightening of borders have all combined to reduce the supply of the powerful drug on city and rural streets.

On the other hand, the street price for the drug is escalating due to increased demand and shortened supply. As those hooked on the drug seek any means of securing it and as general anxiety levels rise, officials fear that a jump in criminal activity is inevitable.

In Los Angeles, for example, meth prices doubled recently as narcotic traffic from Mexican cartels slowed down significantly.



Price increases were also seen in states like Virginia, West Virginia, New Mexico, Kentucky, Tennessee and many others.

While the world turned its attention to the coronavirus earlier this year and now braces for a second wave, others dedicated to battling meth abuse over the long haul have never steered their focus away from their goals.

A statewide campaign to raise awareness of the meth problem was launched last fall as officials began recognizing that the manufacture, distribution and consumption of meth was becoming a plague for far too many South Dakotans. The troubling trend was placing both rural towns and the larger population centers at risk.

The campaign was in response to disturbing figures that painted the picture of a national and international progression that was finally at the point of breaching the state's borders in record numbers.

For instance, officials reported that in 2018 more than 3,600 individuals were arrested in the state for possessing, transporting or



COVID-19 has not slowed the problem of meth addiction

distributing a collective 100 lbs. of methamphetamine. The Centers for Disease Control proclaimed that meth was taking the lives of more South Dakotans than any other illegal drug and that twice as many teens from 12 to 17 years old were using meth compared to the national average.

Additionally, 83 percent of court admissions for controlled substances in 2019 involved meth, as the state saw a 200 percent increase in people seeking treatment with the primary diagnosis of meth addiction between 2014 and 2018.

Meanwhile, law enforcement seized 24 lbs. of meth in the Rapid City area in 2018, over 20 lbs. in Sioux Falls, and almost 1 lb. in Pierre. It takes just .0003 lb. of the drug to cause a fatal overdose. From January to August of 2019, there were 2,243 meth-related arrests across 50 counties. In 2002, that number was just 467.

More recently, figures show that meth is impacting Native American and female populations at a disproportionate level.

For instance, officials report that more than 90 percent of inmates at the South Dakota Women's Prison in Pierre are substance abusers. Overall, roughly



"Don't think you can't get help, because there are many options out there."

Carol Regier

one-third of those inmates incarcerated in the state prison system are there because of some form of drug addiction.

Recently, the female inmates have campaigned to push for more programs to help addicts within the system.

Inmate Heather Shooter, who belongs to the Cheyenne River Sioux tribe, is one of several convicts who have been instrumental in an initiative called Sober is Sacred, in which inspirational speakers, performers and other guests call for additional counseling and treatment programs to help those hooked on meth. The program follows a similar one launched at the Mike Durfee State Prison for men in Springfield called Fathers Against Meth.

Shooter said that when her time is served this fall she plans to enter the Full Circle Substance Abuse Center in Rapid City and spread the message of a drug-free life.

Dave Flute, the state's Secretary of Tribal Affairs and former Sisseton-Wahpeton Sioux Tribal chairman, has described the meth plague as having reached epidemic proportions on the state's reservations. He spoke last fall at the second State-Tribal Meth Summit in Mission and assured the audience that the governor's administration is working closely with Native American tribes to combat the problem.

Carol Regier, CEO of the Keystone Treatment Center with facilities in Canton and Sioux Falls, said her program often works with tribal communities in South Dakota and surrounding states. She echoed Flute's comments that the governor's office has been deeply engaged.

"We've had discussions with the governor and the state has been very supportive of our work, going back to the Rounds administration," she said, noting, "But we did make up our own catch phrase: 'Meth. We Treat It.'"

She pegged meth abuse as "by far" the most toxic culprit when it comes to addiction and the social maladies that

spring from it.

"Besides alcohol, meth is our number one problem. It's very addictive and caustic and people who get hooked rarely defeat it without qualified help," she said.

Regier said the in-patient program offered at Keystone typically lasts a month to 45 days and includes components of the 12-step Narcotics Anonymous plan. It also



focuses on spiritual, physical and mental health, she said. After therapy, patients are supported and encouraged to participate in after-care and continued counseling.

Keystone has 126 beds, and Regier said there is a steady stream of patients seeking treatment for their addiction. The pace hasn't slowed with the coronavirus.

"There was a period where it seemed people were afraid to come in, but they've started to come in now," she said. "We've seen an escalation in alcohol and drug abuse during the pandemic as people are having to deal with loneliness, joblessness, personal relationships and other drastic changes in their lives and in the country."

From her vantage point standing on the front lines of the drug addiction battle, Regier strikes a positive tone. She encourages those who feel they need treatment to get it. She assures that most treatment plans are covered by medical insurance and that grants and other resources are available to help addicts break free from the grip of addictions.

"Don't think you can't get help, because there are many options out there. We hear heartbreaking stories, but on the good side we see people who have turned their lives around," she said. "For all of us committed to helping drug addicts get well, we have the same commitment: getting people back to normal so they can live healthier, more fulfilling lives. Treatment works."

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Note: Please make sure to call ahead to verify the event is still being held.

September 3-5

South Dakota State Fair:
Perfect Vision of Fun,
1060 3rd St. SW, Huron, SD
800-529-0900
www.sdstatefair.com

July 21-25

98th Annual Days of '76 PRCA
Rodeo, Arena, Deadwood,
SD, 1-888-838-BULL,
www.DAYSOF76.com

July 26

15th Annual Car Show
Langford, SD, 10 a.m. - 2 p.m.
605-493-6597

July 31-August 1

Senior Games, Yankton,
SD, Contact Kristi Hauer at
605-665-4685

July 31-August 1

Plein Air & Arts in the Garden,
Wessington Springs, SD,
605-354-3826

August 1

Rockin' Ribfest BBQ
Competition, Wessington
Springs, SD, 605-505-1135

August 1

Foothills Classic, Wessington
Springs, SD, 605-350-1687

August 1, 22

The Murder of Miss Kitty
Comedy Mystery Dinner
Theatre, Holiday Inn Express
& Suites, Deadwood, SD,
605-580-5799

August 8-9

Threshing Show, Twin Brooks,
SD, www.threshingshow.com



August 8-10:
Red Power Round Up
Fairgrounds, Huron, SD
605-460-0197

Photo courtesy: South Dakota Department of Agriculture

August 8-10

Red Power Round Up,
Fairgrounds, Huron, SD,
605-460-0197

August 9

Online Only Bechyn Czech
Festival, Online Concert,
7 p.m., Bechyn,
Minn., 320-522-1218
www.facebook.com/Bechyn-
MinnesotaWorld

August 14-16

Astronomy Festival, Badlands
National Park, Wall, SD,
605-433-5241

August 21-22

Harvest Festival, Elkton, SD,
605-524-2681

August 22

World of Outlaw Sprint Car
Races plus Wissota MWM,
Dakota State Fair Speedway,
Huron, SD, 605-352-4848

September 7

Hidewood Valley Steam
Threshing Show, 1 p.m.,
47326 183rd Ave., Clear Lake,
SD, 605-881-8405

September 12-13

Fall Harvest Festival,
Delmont, SD, 605-928-3792,
www.twinriversoldiron.org

September 13

20th Annual Antique Tractor
and Car Parade, 1 p.m.,
Farmer, SD, 605-239-4498

September 25-27

Coal Springs Threshing
Bee Featuring Massy Harris
Tractors, Meadow, SD,
605-788-2229

September 26

10th Annual ROCS Fall
Festival, 9 a.m. to 2 p.m.,
Springfield, SD,
605-464-7379

September 26

Wheelin' to Wall, Wall
Community Center, Wall, SD

October 7-8

Energize! Explore Innovative
Rural Communities
Conference, Milbank, SD,
<https://extension.sdstate.edu>

To have your event listed on this page, send complete information, including date, event, place and contact to your local electric cooperative. Include your name, address and daytime telephone number. Information must be submitted at least eight weeks prior to your event. Please call ahead to confirm date, time and location of event.