

Cooperative Connections



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How Smart
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South Dakota Electric Cooperative Connections

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- West Central Electric, Murdo, S.D.
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Brenda Kleinjan, Editor
Dawn Trapp, Communications Specialist
Jocelyn Romey, Staff Communications Professional

Creating Connections, Building Success Together

Electric cooperatives were born in challenging times and early leaders quickly realized that the success of electric co-ops would hinge on the collective efforts and commitment of each of their members. It's true at the local cooperative level, and it's true for your statewide association.



Ed Anderson

ed.anderson@sdrea.coop

The connections made between our cooperatives gives us a strong network when it comes to safety, communications and in the legislative arena.

At its very core, the cooperative business model forces people to work together for the common good of the cooperative. Just as it was when your cooperatives were first formed, today when your board members walk into their monthly board meeting, they must take off their respective hats and settle in to make decisions that are in the best interests of ALL the co-op members. The same holds true when the directors who represent your cooperative head to Pierre. They work together to advance cooperatives statewide. And to work together they have to know each other and know the needs of

the cooperative back home. It's a simple business model. One that Congress would be well served to follow.

One of SDREA's principal responsibilities is to represent its members before Congress and the South Dakota state legislature on issues of importance to our members and our industry in general.

We began 2017 with the uncertainty of the Clear Power Plan still hanging over our heads but with hope that a new administration would follow through on a commitment to take a more pragmatic approach to addressing climate change. In deference to the new President, the Supreme Court put the CPP in a holding pattern to see what he would propose in regards to the existing plan and its potential replacement. As you know a proposed rule to gut the CPP was submitted early in the new administration and the Environmental Protection agency is working on a replacement. As the existing plan and the proposal to do away with it continue to work their way through the courts, and details of the new plan emerge, we must remain engaged and be ready to tell the co-op story at every opportunity.

Electric co-ops in South Dakota already have one of the most diversified and renewable energy dependent power generation portfolios in the country. Our strict reliance on coal-based generation has been on a steady decline for years and our coal-based plants are some of the cleanest and most advanced in the nation. The percentage of renewable generation in our portfolio continues to grow. Your electric co-op has been a leader in energy conservation and efficiency programs for decades, which are two critical approaches to addressing climate change almost completely overlooked in the CPP.

At the state level we welcomed another new batch of legislators in 2017. One of the most touted benefits of term limits is the forced introduction of new faces and new ideas to the legislative process. From that perspective alone I'd say mission accomplished. While not always the case, term limits have generally brought a younger and more diverse mix of people to the South Dakota legislature, offering both opportunities and challenges for us. Over the years our issues have rarely been easily pigeon-holed on a party basis and that is proving to be particularly true with younger legislators when it comes to issues involving our climate. While the legislature as a whole loses the benefit of experience and leadership to term limits, our principals and our message are timeless and transcend the party politic.

Weathering a Winter Storm

When ice and heavy snow bring down limbs and power lines, safety is a consideration indoors and out. Make sure you know how to weather the storm.

When outside, stay away from downed power lines:

- A power line does not need to be sparking or arcing to be energized. Equipment near power lines can also be energized and dangerous.
- Lines that appear to be "dead" can become energized as crews work to restore power, or sometimes from improper use of emergency generators. Assume all low and downed lines are energized and dangerous. If you see a downed or sagging line, contact your utility.
- Motorists should never drive over a downed line as snagging a line could pull down a pole or other equipment and cause other hazards.
- Be careful approaching intersections where traffic or crossing lights may be out.
- If you plan to use a generator, know how to operate it safely

Before a winter storm, you should have supplies on hand and know how to stay warm:

- Always keep a battery-powered radio or TV, flashlights and a supply of fresh batteries. You should also have water, blankets and non-perishable food.
- When power goes out, it often comes back in spikes. This can damage electronics. Keep your electronics safe by unplugging them when the power goes out. Leave one lamp or switch on as a signal for when your power returns.
- To prevent water pipes from freezing, keep faucets turned on slightly so that water drips from the tap. Know how to shut off water valves in case a pipe bursts.
- Never use a charcoal grill to cook or heat with inside the home. Burning charcoal gives off deadly carbon monoxide gas. Charcoal grills should only be used outdoors.
- If you live with a child or elderly person, you may need to take them somewhere with power so they can stay warm. If you are healthy enough to stay home safely, there are ways to stay warm: stay inside and dress warmly in layered clothing.
- Close off unneeded rooms.
- When using an alternate heat source, follow operating instructions, use fire safeguards and be sure to properly ventilate.

Source: safeelectricity.org

DESIGNER ELECTRICITY

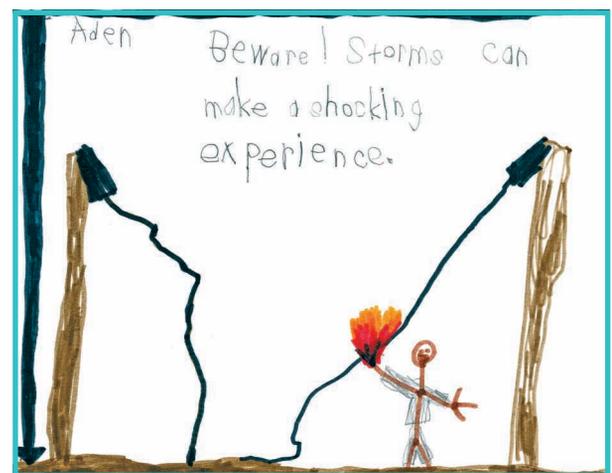
Consumers now have more options in how they use electricity, which means big changes for electric utilities. Here are a few of the major trends and developments:

Energy Efficiency

Efficient lightbulbs and other appliances have actually reduced electricity sales, even as the population increases, the economy improves and we use more electronic devices.



KIDS CORNER SAFETY POSTER



"Beware! Storms can make a shocking experience."

Aden Schaeffer, 6 years old

Aden is the son of Travis and Jessica Schaeffer, Tabor, S.D. They are members of Bon Homme Yankton Electric Cooperative, Tabor.

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.

Hiring the Right Contractor



Pat Keegan

Collaborative Efficiency

Your electric co-op may be able to provide a list of approved contractors in your area.

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency. For more information on thermostats, please visit: www.collaborativeefficiency.com/energytips.

Sources

¹ <https://energy.gov/energysaver/insulation>
² <https://insider.energytrust.org/technical-tip-explain-heating-efficiency-ratings/>
³ <https://energystar.zendesk.com/hc/en-us/articles/212111387-What-is-SEER-EER-HSPF->

Dear Pat: We're wanting to make renovations to our home that will improve aesthetics and overall energy efficiency. How can we make sure we hire a contractor who will do a good job and stay within our budget? – Bridget and Neil

Dear Bridget and Neil: Great question! Renovations can be the perfect time to improve your home's energy efficiency. To make sure you get those energy savings, it's important to do some planning right from the beginning.

The first step is to educate yourself so you can be in control of your project. Helpful, easy-to-understand energy efficiency information is available for virtually any area of your home and any renovation project. Just be sure to use reputable sources, like energy.gov, energystar.gov or your local electric co-op.

You'll need that knowledge so you can judge the solutions each potential contractor proposes. Some products or methods that are sold as effective energy efficiency solutions may not work as well as they claim or may be too expensive relative to the energy savings they provide.

It's important to talk to your local building department to find out if your project requires a permit and inspections. Some contractors may suggest doing the work without a permit, but unpermitted work can cause problems if you need to file an insurance claim down the road or when you get ready to sell your home.

You can also use your newfound knowledge to ask the right questions of potential contractors. Ask about the product to be installed, the energy savings it should yield and whether it will improve comfort. Because energy efficiency installations and construction are specialized, most measures are unlikely to be installed correctly unless the installer has experience and hopefully some appropriate training or certification.

Finding a contractor can be a challenge, especially in rural areas. To find them, use your online search engine to “find a contractor in your area.” If you're in a sparsely-populated area, the right contractor may be located an hour or two away. Your electric co-op may be able to provide a list of approved contractors in your area. You can also check with a local energy auditor for contractor names.

You may decide you'd like to hire a small specialty contractor or a larger general contractor. Either way, it's crucial to hire someone with a contractor's license, a local business license and three types of insurance: liability, personal injury and workers' compensation. Check references to verify the contractor has a solid history of cost-control, timeliness, good communication and excellent results, including significant energy savings. You might learn that your lowest bidder has a tendency to increase the price after the job has begun.

As you choose between contractors, quality should be an even more important consideration than price. Poor-quality energy efficiency work will not deliver maximum savings.

Once you have settled on a contractor, be sure to get a written contract. It should include “as built” details and specifications that include energy performance ratings you have researched ahead of time, such as:

- The name of the individual doing the installation.
- The specific R value¹ if you're insulating.
- The make, model, the AFUE (annual fuel use efficiency) and COP² (coefficient of performance) ratings if you're replacing a furnace (and ask that an efficiency test be conducted before and after the work).
- The make, model and EER (energy efficient ratio) rating³ if you are replacing the air conditioner. (Some contractors are able to check for duct leakage in the supply and return ductwork with a duct blaster if you're doing any furnace or AC work.)
- Whether the contractor must pay for the necessary building permits.

Finally, be cautious about pre-paying. Keep the upfront payment as low as possible, set benchmarks the contractor must meet to receive the next payment and make sure a reasonable amount of the payment is not due until the project is completed, passes building inspections and you are fully satisfied. If you don't feel qualified to approve the project, you could even require testing or inspection by an independent energy auditor.

Then, enjoy your new energy efficient space!

Johnson Elected to Touchstone Energy® Cooperatives Board

Dick Johnson, West River Electric Association CEO/general manager, was elected to the Touchstone Energy® Cooperatives board of directors Dec. 14 during Touchstone Energy's annual electronic business meeting.

West River Electric is headquartered in Wall, S.D.

Johnson said he's humbled to be elected to the seat by fellow Touchstone Energy members.

"I will be a strong voice for cooperatives around the country, from the largest to the smallest," Johnson said. "I am passionate about Touchstone Energy and will work hard to move the brand forward and continue the tradition of providing the tools and services to help cooperatives engage with their member-owners."

Also elected to the board were Bob Perry, general manager, West Oregon Electric Cooperative; and incumbents Deb Mirasola, communications and marketing director, Dairyland Power Cooperative; and Doug Miller, vice president statewide services, Ohio's Electric Cooperatives.

Touchstone Energy's first 2018 board meeting will be held following the National Rural Electric Cooperatives Association annual meeting Feb. 25-28 in Nashville, Tenn.

Carrie Law, director of communications and government relations for Sioux Valley Energy in Colman, S.D., is also on the nationally-elected board.

Johnson had served as the chairman of the Touchstone Energy Cooperatives Standards and Best Practices Committee. Employees of Basin Electric Power Cooperative in Bismarck, N.D., also serve on national committees: Paul Cook (Brand Strategy Committee), Jeremy Woeste, (chairman of the Cooperative Relations Committee) and Chad Reisenauer (Energy Solutions Committee).

Touchstone Energy is the brand of America's electric cooperatives. Touchstone Energy Cooperatives represents a nationwide alliance of member-owned electric co-ops. Collectively, it delivers power and energy solutions to more than 750 unified local electric cooperatives across 46 states.



Dick Johnson

Fiegen Gains Leadership Position in RTO

South Dakota Public Utilities Commission Chairperson Kristie Fiegen has been named vice president of the Southwest Power Pool's Regional State Committee. The committee provides state regulatory agency input related to the development and operation of regional bulk electric transmission in 14 states in the central U.S. Fiegen previously served as the group's secretary.

SPP oversees the bulk electric grid and wholesale power market among its members in Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming. The Regional State Committee is charged with recommending cost allocation policies that determine the amount electricity customers pay for the cost of building and operating transmission lines that cross several states in the SPP region.

"The work of the Regional State Committee is particularly important now as transmission projects are being planned and developed across our region," Fiegen said. "The cost of transmission accounts for a significant portion of the rate electric customers pay. As state regulators, we are especially keyed into fairly weighing the electric reliability demands of our region and the impact to customer bills," she stated.

Fiegen is serving her sixth year on the PUC. She was appointed to the commission in August 2011 and won election to a six-year term in November 2012. Fiegen is a member of the National Association of Regulatory Utility Commissioners' Committee on Gas and Subcommittee on Pipeline Safety and serves on the Gas Technology Institute's Public Interest Advisory Committee.



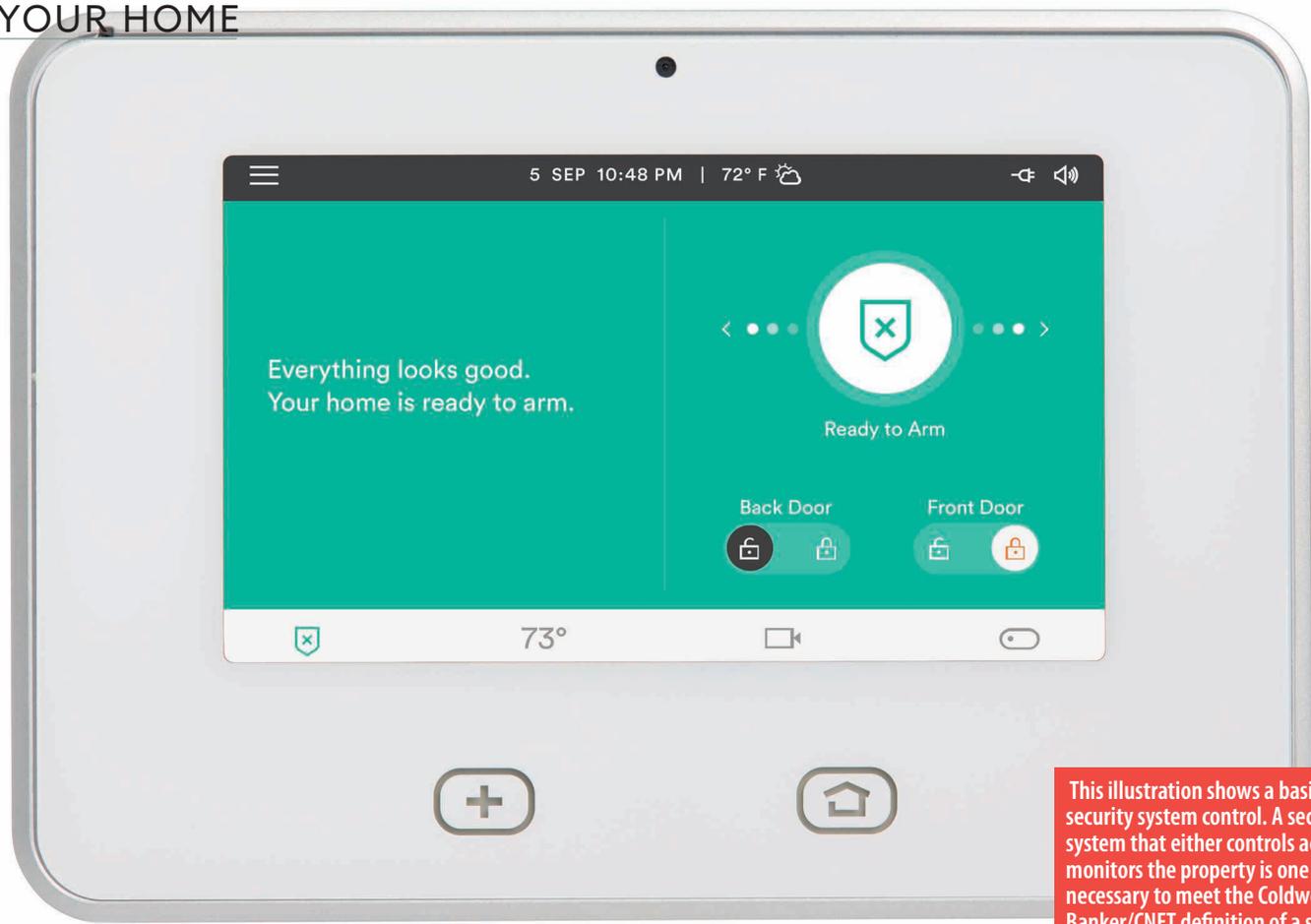
Kristie Fiegen



Putting Energy Where it Matters Most

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This illustration shows a basic security system control. A security system that either controls access or monitors the property is one feature necessary to meet the Coldwell Banker/CNET definition of a smart home. (Vivint Smart Homes)

WHAT MAKES A SMART HOME?

Terry Woster

Freelance Writer

Everyone has an idea about what the phrase “smart home” means, but experts recently defined and identified the basic features and systems that make a home fit the phrase.

A dependable Internet connection is an essential piece, necessary for the connections that make the features of the home interact with each other and with the homeowner to get the most from each feature, whether it’s the doorbell camera, the thermostat or the sound system.

“You can’t have a smart home if it can’t connect to smart appliances,” says David Sirot, vice president of North American Communications



An illustration of the Smart Home Staging Kit available from the Worthington Group to sellers who list with Coldwell Banker. The kit includes a Nest Learning Thermostat, Nest Protect smoke and carbon monoxide alarm, Nest Cam Indoor security camera, August Smart Lock, August Connect, and Lutron-Caseta Wireless Lighting Starter Kit. More information is available at SmartHomeStaging.com. (Illustration courtesy of Coldwell Banker)

You can't have a smart home if it can't connect to smart appliances.

for Coldwell Banker Real Estate. He also said more and more people are interested in smart-home features in the homes they buy and in the renovation projects they undertake.

To come up with a definition of a smart home, Coldwell Banker Real Estate LLC in 2016 collaborated with CNET, a media website that produces news and reviews of consumer technology.

“For a time, we were stumped,” Sirotty said. “There simply was no definition of what it was. It needed to be broad enough and simple enough to be understandable. If you have certain specific and basic features or systems, if I can call your property a smart home, I can market your home very differently. That’s significant.”

A commonly accepted definition of the term is important because it provides “a clear and unified designation to keep up with rapidly evolving technology in the home,” he said.

In a prepared release on May 10, 2016, Coldwell Banker and CNET outlined the definition they wrote:

Smart Home: A home that is equipped with network-connected products (that is “smart products,” connected through Wi-Fi, Bluetooth or similar protocols) for controlling, automating and optimizing functions such as temperature, lighting, security, safety or entertainment, either remotely by a phone, tablet, computer or through a separate system within the home itself.

To be considered a smart home, the property must have a smart security feature that either controls access or monitors the property or a smart temperature feature, in addition to a reliable Internet connection. The property also must have at least two additional features from the following list:

- Appliances (smart refrigerators and

You have the power with
Smart Home Technologies

- 1 Smart Hub/Bridge**
If you are looking to make your home smart without having to hire a company to install an interconnected system, then an internet-connected smart hub is the first thing you’ll need. A smart hub will allow you to control all your smart devices from one app by acting as a middle man that facilitates communications between all your smart home devices.
- 2 Smart Lighting**
Like most items in a smart home, smart lighting can be controlled with a few swipes of a smart phone app. But smart lighting is more than just convenient. Smart light bulbs are more energy efficient than standard incandescent bulbs. Some bulbs use GPS on your phone to determine your location, and can turn on or off depending on where you are located. Some bulbs are even voice controlled!
- 3 Smart Blinds**
Smart blinds can be useful for those who have tall, hard-to-reach windows; for those who have difficulty moving around the house; or for those who simply want

to smarten their home. Smart blinds allow you to schedule your blinds to open and close during certain times of day – a bonus if you are trying to be energy efficient – or control them via an app.

- 4 Smart Locks**
Smart locks allow you and anyone else you wish to enter your home with ease. Some smart locks let you open your doors with your cell phone. Some let you see who is coming and going while you are out of the house. Some even allow you to assign security privileges to certain people.
- 5 Smart Thermostat**
A smart thermostat is a great way to keep your home smart and energy efficient. Many smart thermostats can learn your heating and cooling behavior and will auto-schedule based on your preferences.
- 6 Smart Cooking Appliances**
Smart cooking appliances, like smokers, allow you to cook a perfect meal away from home, without burning the house down! Wi-Fi technology makes these cooking appliances smart!

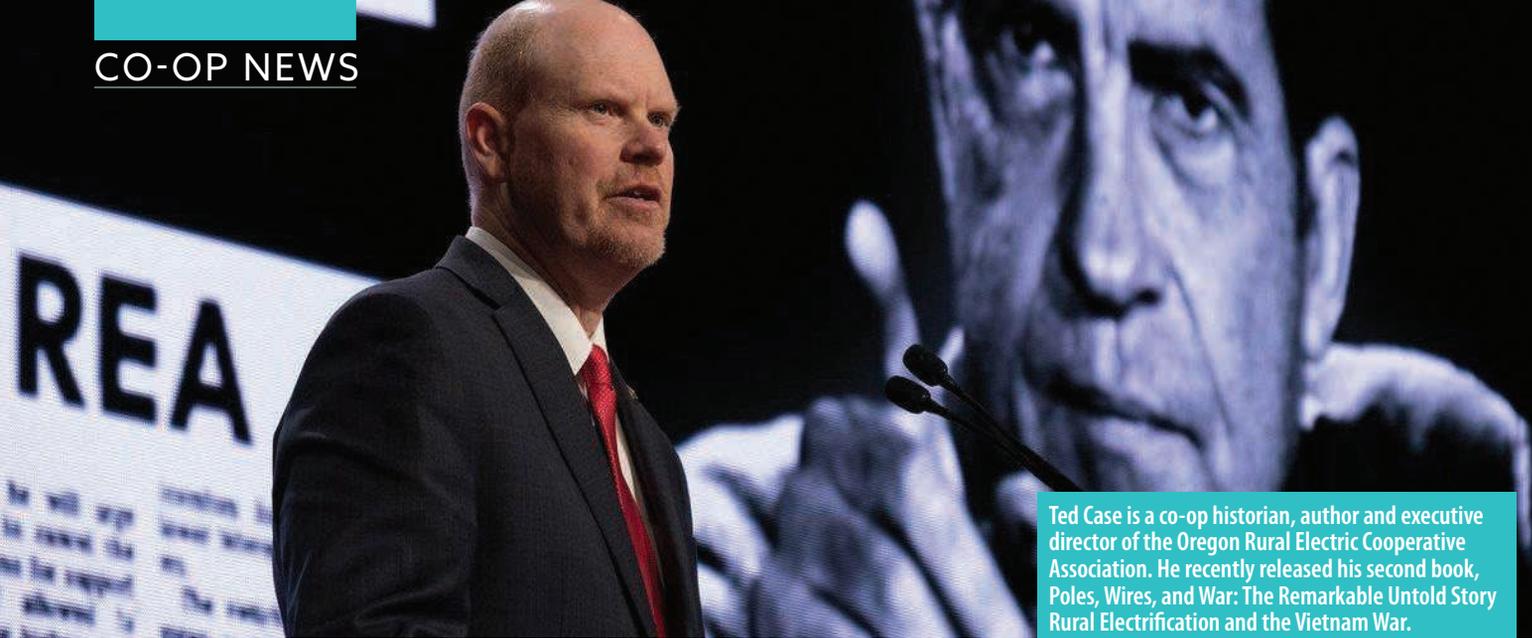
smart washer / dryers)

- Entertainment (smart TVs and TV streaming services)
- Heating/Cooling (smart HVAC system, smart fans or vents)
- Lighting (smart light bulbs and lighting systems)
- Outdoors (smart plant sensors and watering systems)
- Safety (smart fire/carbon monoxide detectors and nightlights)

- Security (smart locks, smart alarm systems or cameras)

- Temperature (smart thermostats)

- The term “smart home” can be intimidating and overwhelming,” Lindsey Turrentine, editor-in-chief of CNET.com, said in the prepared statement. “We want to make it easy for everyone to better understand what a smart home is, in order to simplify the process in helping them choose the right devices for their homes.”



Ted Case is a co-op historian, author and executive director of the Oregon Rural Electric Cooperative Association. He recently released his second book, *Poles, Wires, and War: The Remarkable Untold Story Rural Electrification and the Vietnam War*.

WHERE YOUR VOICE MAKES A DIFFERENCE

A Q&A with Co-op Historian Ted Case

Paul Wesslund

NRECA

Ted Case has spent the past several years diving deeply into unexplored parts of electric co-op history. He described how co-ops have affected national policy since the 1930s in his first book, *Power Plays: The U.S. Presidency, Electric Cooperatives, and the Transformation of Rural America*. His second, just-released book title describes itself: *Poles, Wires, and War: The Remarkable Untold Story Rural Electrification and the Vietnam War*.

Case is executive director of the Oregon Rural Electric Cooperative Association. He recently talked about what the history of electric co-ops means for their member-owners.

Question: How did you end up writing about electric co-ops in the Vietnam War?

Ted Case: It came out of my first book and the chapter on President Lyndon Johnson. In 1965, he received a letter from the general manager of the National Rural Electric Cooperative Association, Clyde Ellis, saying that NRECA could help win the war by putting electric co-ops in Vietnam. I was intrigued by that bold claim. Since Johnson was such an early and strong supporter of rural electrification in Texas, he embraced Ellis's proposal fully. Learning about that story led me on this quest to track down some of the men and women who had worked on it.

Q: Did NRECA start co-ops in Vietnam?

Case: It was a really good effort. Just 20 men went over there in a five-year period. These were the most difficult co-ops to establish in the history of the electric co-op program. The Viet Cong soldiers

that were fighting against the South Vietnamese tried to cut down the co-op lines and chop down their poles and blow up their dams and they did all those things. The people trying to start the co-ops faced rampant corruption and an inability to get poles and other materials. They got three co-ops up and running and brought light to thousands of villagers. But the program ended and they had to leave and the communists overtook the country.

Q: What lessons did you learn from researching the book?

Case: The support the U.S. co-op workers got from the Vietnamese villagers was not unlike the support from the farmers who started electric co-ops in the United States in the 1930s. The Vietnamese villagers wanted a radio. They wanted an iron and lights to read. Toward the end of the war when the communists were rolling through the country in 1975, they came to a town that was one of the co-ops' headquarters. The militia in the town rose up and fought against the communists in one of the most heroic battles of the war. They were fighting for their electricity. They were fighting for what they had built.

Q: Has researching these books changed your view of electric co-ops?

Case: I have a greater appreciation. Our heritage is so much a part of who we are and there's not many people who remember when the lights came on anymore, so that's different. But the core values of what co-ops do are the same as in 1936 when the Rural Electrification Act became law.

Q: What are those values?

Case: I think of one particular co-op, about medium-sized and close to an urban area. It has several thousand people who come

to the office to pay their bills. They don't need to do that – it's a lot easier to just toss the bill in the mail or pay online. But they go in because the co-op has this value beyond just electric service. It really is the center of everything in the town and economic driver. That sums up how the co-op is not just a power company. It's the center of their world.

Q: Does that kind of relationship really apply in this increasingly high-tech world in a high-tech industry?

Case: As I travel the country, I'm blown away by the technical acumen and the vision and the strategic abilities of co-op leaders to see into the future. Electric co-ops are getting involved in providing broadband internet connections at a time when nobody else will do it. It's the same innovation that brought electricity to rural areas.

Q: Can a co-op be successful providing technologies as different as electricity and broadband?

Case: Co-ops will embrace new technologies when that's what their members want. Members say they're interested in solar energy and other utility innovations, like developing advanced batteries that could increase reliability and store renewable energy for times when the sun isn't shining or the wind isn't blowing. Co-ops never strayed from that business model that listens and responds to their members, their customers, their owners.

Q: Can't some of these new ventures be risky?

Case: Definitely. And that brings out another strength of member ownership – the control is local. Providing internet and other services won't make sense for all of the more than 900 co-ops across the country. There are very difficult decisions being made in co-op board rooms and history shows there is tremendous wisdom that comes out of the discussions among the local co-ops and their members.

Q: How does that member-owned business model relate to the basic mission of keeping electricity reliable and affordable?

Case: Co-ops continue to be very competitive, in rates, service and reliability. And there are so many other things they do for their members. It comes back to that local connection. Members know the folks who work at the co-op. They know the directors. There's terrific customer service getting the lights back on after an outage. Electric reliability is very important and co-ops do that as well as anyone.

Q: One characteristic of electric co-ops is their not-for-profit nature. How does that affect the co-op members?

Case: A lot. Increasingly, institutions have fallen from grace because everybody believes there's this profit motive that's just out to milk you and there's such a lack of trust in a lot of the large institutions. Being not-for-profit is an attractive feature that means decisions are based on the best interest of the co-op and the consumer.

Q: So what should members know about their electric co-op?

Case: That they have the ability to influence their co-op more than they ever imagined. Co-op board members that I know are really interested in hearing from folks and getting feedback. One person can really make a huge difference. When somebody shows up at a co-op annual meeting and has a point to make, the boards take it seriously. The co-op's management takes it seriously. That's the value. It's pretty hard to get heard these days. But at a co-op, your voice makes a difference.

Lighting Up a War Zone

The story of electric co-ops in Vietnam

During one of the hardest chapters in American history, electric co-ops volunteered to win the war in Vietnam.

They didn't win the war, but in his new book *Poles, Wires and War, The Remarkable Untold Story of Rural Electrification and the Vietnam War*, author Ted Case tells a riveting story of how they tried. He argues that the success electric co-ops had in the conflict that divided our nation just might have helped that southeast Asian nation recover more quickly by demonstrating the value of bringing electricity to the countryside.

Case brings authority to the book as executive director of the Oregon Rural Electric Cooperative Association. But he also makes good use of his masters degree in fiction writing to tell a compelling story of an audacious offer from Clyde Ellis, the head of the National Rural Electric Cooperative Association, to President Lyndon Johnson. Give the South Vietnamese electricity, said Ellis, and you'll win their hearts and minds in the fight against communism.

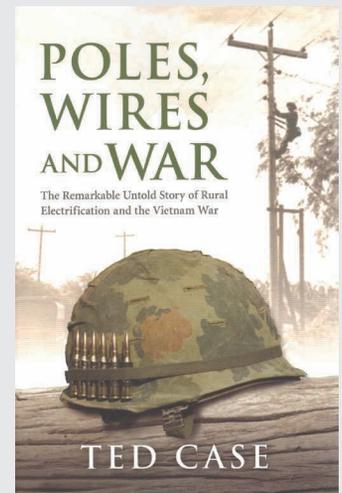
What followed was a classic battle of enormous personalities, foreign and domestic political and military maneuvering and a determined band of people who brought electricity to the American countryside, fighting the odds to bring light to a war zone halfway around the world.

Case creates a fast-paced narrative as the crews race the collapsing war to pass bylaws, organize the co-ops and tangle with corruption, bureaucracy, in-fighting, and oh yes, Viet Cong soldiers determined to destroy what they were creating. In the end, in less than four years, three electric co-ops were bringing electricity to more than 8,000 members.

It was a service the South Vietnamese villagers valued and owned. They even felt strong enough to literally fight for it, in a doomed battle against an assault from Viet Cong armored tanks.

Case creates a highly readable, deep and unique American history of overcoming the highest of hurdles to show people how they could bring power to themselves; first in America, and then to the world.

You can order the book online at TedCaseAuthor.com.



Case's second book, *Poles, Wires, and War: The Remarkable Untold Story of Rural Electrification and the Vietnam War*, tells a riveting story of how a determined band of people brought electricity to Viet Nam during the war.



Adding exercise to the daily routine is good for the heart.

HEART HEALTH

The Undeniable Truths of Heart Health: Diet and Exercise Remain Keys

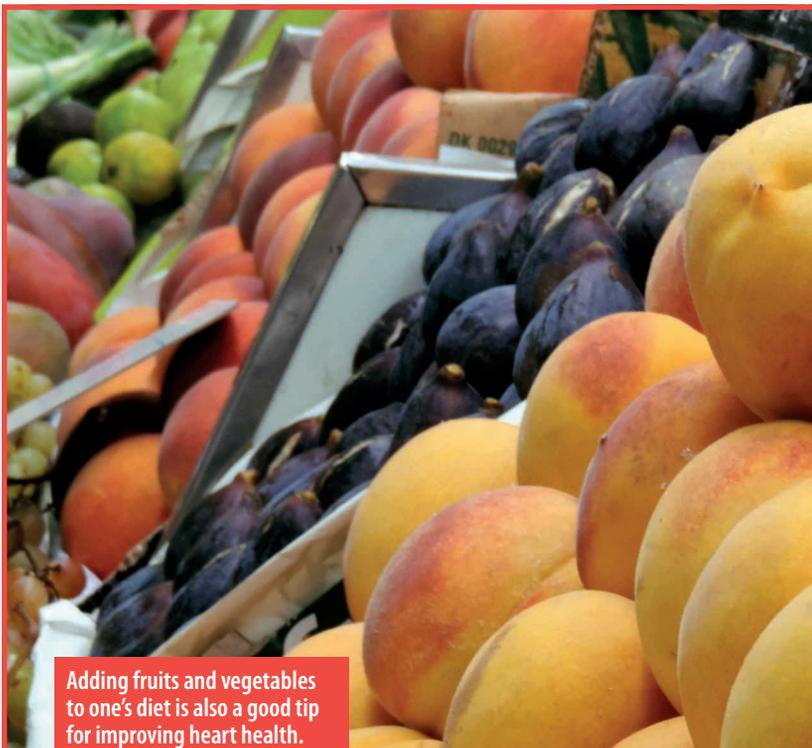
Debra Gibson Isaacs

Always consult your doctor for any matters relating to your health. This information is not intended to diagnose any medical condition or to replace your healthcare professional.

How to Sneak More Exercise into Your Day

Sonya Angelone, a registered dietitian nutritionist (RDN) who holds a masters of science degree, is on the other end of the phone, explaining ways to sneak exercise into already-crowded days.

Although most of us wish it weren't true and wish there were a magic pill to keep our hearts healthy, diet and exercise remain the undeniable keys to a healthy heart. We know that but ... we're too busy for one more thing, can't afford a gym membership, are too tired after work, want to spend



Adding fruits and vegetables to one's diet is also a good tip for improving heart health.

The key is to avoid just being sedentary.

what little time we have with our children.

“Incorporate subtle exercises into things you already do,” Angelone suggests, rejecting the notion that we have to have chunks of time or money to improve our heart health.

“For example,” she says, “do a wall chair when on the phone or while brushing your teeth.”

What I don’t know at the time is that she is practicing what she teaches as we talk. “I’m doing a wall chair as we speak, she tells me a bit later. “I just put my back against the wall, my feet on the floor, and slid down the wall until you could set a book on my knees or a child could sit on my lap. This is engaging my quadriceps, lowering my blood sugar from just eating lunch, burning extra calories and strengthening my legs so I am less likely to fall.”

Angelone, a spokesperson for the Academy of Nutrition and Dietetics and a practicing nutritionist in the San Francisco Bay area, has more examples – all simple and cost-free or very low cost.

“Lunge down the hall,” she suggests. “It only takes a few lunges a day to make a difference. Or alternately stand on your tiptoes and flat on your feet. This strengthens your lower legs.”

Another idea is to hold both arms out to your side with a book in one arm. Your body will look like a “T.” Hold that position until your arms shake. Stop and repeat.

How many can you do? It doesn’t matter, according to Angelone. The idea is to go from where you are to an ability to do more.

Another few examples:

- While sitting in a chair or watching television, contract your abdominal muscles 20 times.
- While sitting in a chair, lift your toes, put them back on the floor, and repeat. This strengthens your shins.
- While sitting at the table, pedal a foot cycle.

“The key is to avoid just being sedentary,” the nutritionist says. “If you have a sedentary job, get up every half hour. Do something. Go outside and walk around the building, go up and down a flight of steps. Engage your muscles.

Important Note: *The only caveat is to make sure you have no limitations or injuries. If you do, check with your physician before trying any of these ideas.*

How to Sneak More Nutrition Into Your Diet

Eggs are packed with protein; they are good for you. Egg yolks have cholesterol; eggs are not good for you.

Butter is better than margarine or is it that margarine is better than butter?

What is the difference between monosaturated, saturated, partially hydrogenated and trans fats?

Confusion abounds about nutrition. Sometimes it is hard to keep up with the latest science, sometimes the science changes and sometimes we just can’t remember what the science says.

Sonya Angelone, a registered dietitian nutritionist (RDN), spends her days counseling people in the San Francisco area about nutrition. Before she reveals the answers to some of the biggest nutritional conundrums, Angelone says there is one important point to remember about nutrition: There is no one-size-fits all. Each of us is different and can process food differently. Age and activity level make a difference. Medical conditions can also alter nutritional recommendations.

Now, drumroll please, here are Angelone’s answers to two of the most common and perplexing questions about nutrition:

Eggs

Although the newest dietary guidelines remove the limit of eggs and dietary cholesterol, they still recommend avoiding excess. Eggs are a nutritious food, but whether they are good or bad depends on the person. Genes help determine how someone metabolizes nutrients, including cholesterol. Some people absorb excess dietary cholesterol and should limit eggs (one of the richest source in our diets). But, most people can consume eggs regularly. They just need to be sure it isn’t cooked in excess oil and doesn’t come with bacon, hash browns, white toast and butter!

Also, the recommendations are different for a healthy person wanting to eat a healthy diet versus someone with heart disease who is trying to reverse their disease. For the latter, I limit dietary cholesterol, including eggs. The American Heart Association is a good site for great information.

On Balance: Neutral.

Suggestion: Ask your physician to run a cholesterol balance test. This will tell you whether your high cholesterol is because your liver makes too much cholesterol or because you absorb too much cholesterol.

Butter or Margarine

I do not like margarine ever. It has trans fats. That simply means that something has been artificially added to make the margarine harden into a stick or tub. The producer transformed liquid oil into a solid fat by adding hydrogen atoms – thus the term hydrogenated. This process changes the fat into an unhealthy fat.

Now there has been so much pressure from the government that producers are going back to using transformed fats. While they are not using palm oil, which is not healthy, coconut oil is not healthy either. The liver uses saturated fats to make cholesterol.

Some people believe that coconut oil is not bad because of a study. There were two groups, one which substituted sugar for fat and another group which substituted coconut oil for fat. It wasn’t that the coconut oil was better. It was that the sugar is so bad.

On Balance: Butter is always the best choice.

Suggestion: Try nut butter instead.

Youth Entrepreneurship Is Alive and Well

BIG Idea Celebrates 10th Anniversary

Kelly Weaver

www.BIGideaSD.com

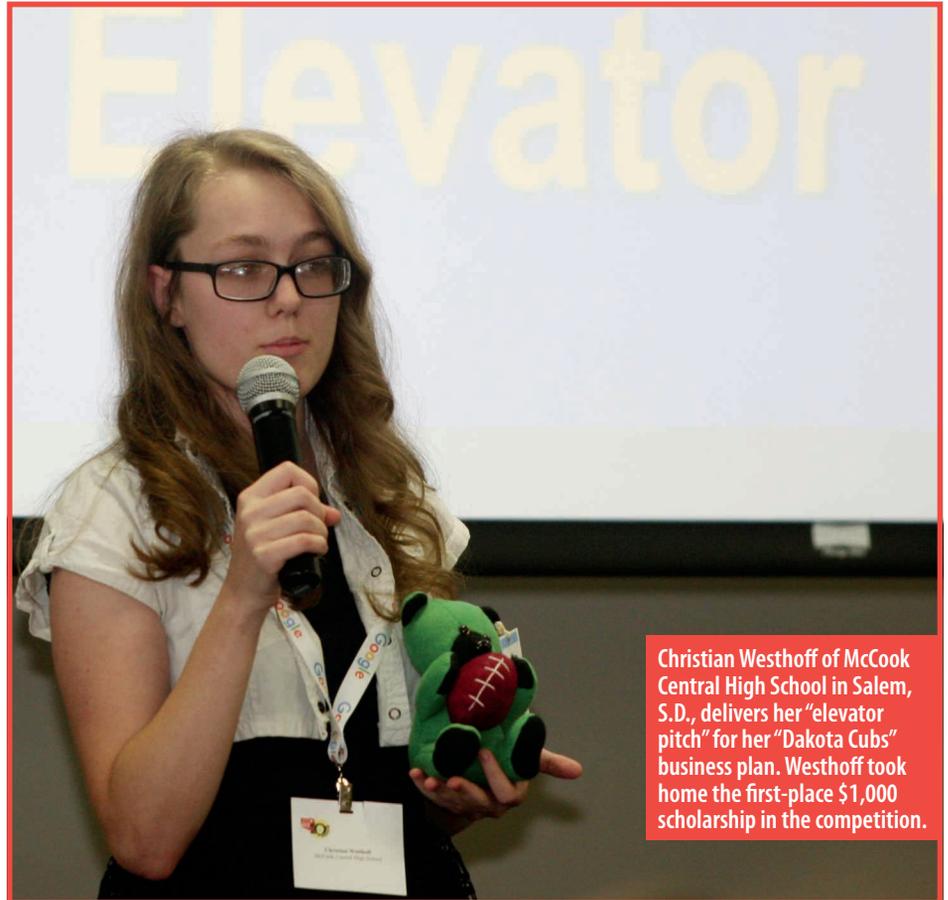
South Dakota student entrepreneurs compete for scholarships with their big plans.

The 10th Anniversary BIG Idea Competition was a BIG success with 243 entries involving 357 students from 37 schools. The event wrapped up Thursday, Dec. 7, at Northern State University.

Christian Westhoff of McCook Central High School took first place with Dakota Cubs, customized and handmade teddy bears. Second place went to Soap Opera Laundromat & Dry Cleaning by Julia Neuharth of Eureka High School, offering laundry services not currently available in a 75-mile radius. Third place was awarded to Taylor Evans of Pierre T. F. Riggs High School for Hot Look, an app that suggests an outfit from your wardrobe to wear based on the weather. The Marketing Design winner was Learning 101 by Meadow Smith from West Central High School, Hartford, and the Wellness Award went to Personal Plate by Conlan Rendell of Pierre T. F. Riggs High School. The winners were awarded more than \$5,000 in cash and scholarships.

Other finalists included Pribyl Pool by Morgan Selchert, Lexi Pinkert and Reed Hartman from Milbank High School; Anti-social-Eats by Michael Crawford, Angelica Jones and Kaelin O'Leary from Lead-Deadwood High School; Safe Haven Shelters by Jasmine Gengerke of Groton High School; Hire a Ranch-Hand by Colt Brink of Pierre T.F. Riggs High School; Know-How by Danielle Eliason and Bess Seaman of Warner High School; and Kharel's Colors by Dhvani Kharel from Brookings High School.

In celebration of the 10th anniversary, Michael Grabham with



Christian Westhoff of McCook Central High School in Salem, S.D., delivers her "elevator pitch" for her "Dakota Cubs" business plan. Westhoff took home the first-place \$1,000 scholarship in the competition.

The Package Guard from Seattle was the featured keynote speaker along with local business owners Heath Johnson with Dakota Plains Companies and past BIG Idea winner Ellen Schlechter, creator of the Calving Book app. Grabham advised the students to 'celebrate your weirdness' and build your network and emphasized that conviction and compassion are critical for a successful business launch.

Students from the following high schools participated: Aberdeen Central, Belle Fourche, Bowdle, Brookings, Canistota, Chester, Custer, Deuel, Doland, Eagle Butte, Edmunds Central, Ethan, Eureka, Faulkton, Gregory, Groton, Hamlin, Ipswich, Madison Central, McCook Central, Milbank, James Valley Christian, Lead-Deadwood, Leola, Mobridge-Pollock, Montrose, Northwestern, Pierre T.F. Riggs, Sully Buttes, Sunshine Bible Academy, Vermillion, Wagner, Warner, Watertown, Waverly/South Shore, West Central and Yankton.

For more information about the BIG Idea competition, visit www.BIGideaSD.com; on Facebook at @BIGIdeaSD or on YouTube at <https://www.youtube.com/user/BIGIdeaSD/playlists>



BIG idea winners and sponsors pose for a photo. Pictured are: (standing from left) Kelly Weaver, BIG Idea Committee; Andrew Miller, Presentation College; Christian Westhoff, 1st Place; Troy McQuillen, McQuillen Design; Julia Neuharth, 2nd Place; Brian Carda, Sanford Health; Taylor Evans, 3rd Place; Kila Legrand, Sanford Health and Dr. Tim Mantz, Northern State University and (seated) Meadow Smith, Marketing Design Winner and Conlan Rendell, Wellness Award.

What is the BIG Idea Competition?

To promote entrepreneurship, spur creative thinking and encourage students to start a business.

- A business idea competition for high school students
- A 1,075-word description of a business idea
- An optional Marketing Design competition which includes an ad for their idea
- An opportunity to learn about business concepts and entrepreneurship
- A chance to win cash and scholarships

This competition, launched in 2007, was created through the collaborative efforts of many organizations in South Dakota. This competition is about exposing youth to new ideas and innovation in the hopes that you will view entrepreneurship as an option for your future. Rather than leaving the region to look for a job, you can have the confidence to create your own opportunities close to home and know that there is support for you should you choose to do so. Homegrown businesses are key to the success of our rural communities.

Contest Timeline:

Completed online business ideas are due in October. Students who are selected as finalists will be invited to present their ideas to entrepreneurs and the awards ceremony will take place that same day. The final competition is in early December.

What is in it for Students?

- Learn about business development and planning
- Meet with other students and future business

mentors

- Be a part of the cutting edge – young future entrepreneurs
- Be recognized for your business smarts
- Attend a wrap-up event with other participants
- Win great prizes

What is in it for Teachers and Schools?

- Specially developed resources to enhance entrepreneurship or business studies
- Recognition for your school team's efforts
- A networking and learning opportunity for like-minded educational professionals
- A chance to help area youth explore their options!



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December 15-March 31

South Dakota snowmobile trails season, Lead, SD, 605-584-3896

January 17-25

Winter Art Show, Spearfish, SD, 605-642-7973

January 19

Portland Cello Project Concert, Spearfish, SD, 605-642-7973

January 19-20

Media One Funski, Sioux Falls, SD, 605-339-0000

January 19-20

ISOC Deadwood SnoCross Showdown, Deadwood, SD, 605-578-1876

January 20

Bark Beetle Blues, Custer, SD, 605-440-1405

January 21

REO Speedwagon, Deadwood, SD, 605-559-0386

January 26-February 4

Annual Black Hills Stock Show and Rodeo, Rapid City, SD, 605-355-3861

January 27

Sioux Empire on Tap, Sioux Falls, SD, 605-367-7288

January 27

Lakota Games on Ice, Mitchell, SD, 605-996-5473

February 3

Don McLean, Deadwood, SD, 605-559-0386

February 3

Tomahawk Snow Jam, Deadwood, SD, 605-569-2871

February 6-10

Winter Farm Show, Watertown, SD, 605-886-5814



Photo courtesy: Winterfest of Wheels

February 9-11

Black Hills Sport Show and Outdoor Expo, Rushmore Plaza Civic Center, Rapid City, SD, 605-394-4111

February 15-17

Sno Jam Comedy Festival, Sioux Falls, SD, siouxfallssno-jamcomedyfest@gmail.com

February 16-18

2018 National Pheasant Fest and Quail Classic, Sioux Falls, SD, 651-209-4933

February 16-18

Annual Frost Fest, Brookings, SD, 605-692-6125

February 24

Snow Jam, Lead, SD, 605-569-2871

February 24

Farm and Home Show, 10 a.m. to 3 p.m., Presho, SD, 605-895-9445

February 24

Annual Outhouse Races and Chili Cook-off Contest, Nemo, SD, 605-578-2708

March 3-6

2018 Summit League Basketball Championship, Sioux Falls, SD, 605-367-7288

March 10-11

2018 Gun Show, American Legion Hall, Saturday 9 a.m. to 5 p.m., Sunday 9 a.m. to 3 p.m. MST, Philip, SD, 605-859-2280 or 605-441-8466

March 16-17

28 Below Fatbike Race, Lead, SD, 605-584-3435

March 16-17, 23-24

60th Annual Schmeckfest, Freeman, SD, 605-925-4237

March 17

Annual Ag Day at the Washington Pavilion, Sioux Falls, SD, 605-367-6000

March 27

Socks in the Frying Pan Concert, Spearfish, SD, 605-642-7973

March 31

Eggstravaganza, Rapid City, SD, 605-716-7979

April 5

McCrossan's Wildest Banquet Auction in the Midwest featuring A Night Out with the PBR, 5:30 p.m., Arena, Sioux Falls, SD, Tickets: \$75 each, 605-339-1203, www.mccrossan.org

April 6-8

Professional Bull Riders Built Ford Tough Series, Sioux Falls, SD, 605-367-7288

April 20-21

Craft Beer Fest, Deadwood, SD, 605-578-1876

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.