Butte Electric

A Touchstone Energy" Cooperative

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CEO'S COLUMN

Appeal of Electric Vehicles Gaining Momentum



John Lee, CEO

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The appeal of electric vehicles is gaining momentum. The push for greater mileage in terms of MPG that began in the second half of the last century has been joined by the push for greater miles per charge. But before getting too far into this transportation evolution, a quick history lesson about EVs is in order.

The first known electric car was developed in 1837 in Aberdeen, Scotland. Early variants were powered by galvanic cells rather than rechargeable batteries. The lead-acid battery

was invented in France in 1859 with further French development leading to manufacturing of these batteries on an industrial scale in the early 1880s. This allowed a rechargeable battery to be installed on the vehicle.

Soon manufacturers were selling a wide array of EVs ranging from trams to trolleys, to cars, and even locomotives. Interest in electric cars blossomed in the late 1890s and early 1900s. As roads improved and became more extensive, demand for greater range emerged. A variety of solutions were put forth including the first battery exchanges by an electric utility in Connecticut in 1910 and the first hybrid automobile in 1911. It would not be long until America led the world in number of EVs on the roads.

But the rapid expansion of the country and the limitation of electricity to major cities and towns spelled the end of the electric car. The world wanted to be mobile and EVs simply did not have the range required. Enter Henry Ford and the mass-produced, affordable internal combustion engine, and the EV's fate was sealed.

Fast forward to modern times and EVs are dominating the automotive news. Thanks to the electric cooperative movement, electricity is available everywhere in the U.S., the majority of roads are paved and environmental concerns are increasing awareness.

While many drawbacks of EVs are gone, there is still a major concern limiting EV growth dubbed "range anxiety." This stems from the persistent limited range of all EVs. While the Tesla offering provides 270 miles for their all-wheel drive model and 355 miles on their standard models, that pales in comparison to most internal combustion cars. And, the lack of a rapid charging infrastructure is an ongoing impediment. Just like their 20th century predecessors, pure EVs are great "city cars."

Fortunately, advances in battery technology are hammering

away at the range issue. Range is steadily expanding and battery management systems are squeezing out more miles. At the same time, more companies and utilities are installing efficient charging stations at their places of business and in popular public locations.

Range anxiety notwithstanding, EVs have a bright future. Prices are dropping and range is expanding so owners can confidently drive nearly everywhere with a little bit of planning. On top of this, the cars are just plain cool. The Tesla Model 3 promises a minimalist interior with all the necessary controls and information presented on a large touchscreen in the center of the console as opposed to using the traditional instrument cluster.

Further, if you've never driven an electric vehicle, you are in for a treat. While an internal combustion engine must rev up to speed, an EV has full power at its disposal instantly. Of course, there are limits on this 0-60 mph capability to prevent inexperienced and over-eager drivers from launching themselves into accidents and speeding tickets. They are quiet, well-appointed inside and allow you to forever bypass the lines at the gas station – unless you are in need of some snacks and a slushy.

One final word, if you do purchase an EV, be sure to let your electric cooperative know. The service to your home is sized to meet the demands of your house as they existed when service was connected. Adding the EV charger creates a risk of overloading the wires and transformers powering your home. Overloaded services can fail and leave you in the dark with an uncharged EV.

Someday, we'll all be gliding silently – and cleanly – on our travels.

Director Sought

Effective as of Dec. 1, 2018, we will have an opening on our board of directors in District 2. If you have questions about qualifications or what district in which you reside, please contact our office at 605-456-2494. The opening will look to be filled by Feb. 1, 2019. Thanks.



CO-OP NEWS

Butte Electric Cooperative Connections

(ISSN 1531-1031) BOARD OF DIRECTORS

Cris Miller, Spearfish - President Dan Marrs, Whitewood - Vice Pres. Thomas Brunner, Nisland - Secretary Steve Smeenk, Newell - Assistant Sec. Daniel Hefner, Whitewood - Treasurer Directors:

Thomas Casteel, Vale James Mortenson, Spearfish Travis Schenk, Spearfish District 2 - vacant

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John Lee - CEO Darick Eisenbraun - Dir. of Finance Kim Wince - Office Mgr./Accountant Colleen Schreiner - Billing Clerk Angie Alexander - Administrative Asst. Lee Ann Gaer - Customer Service Rep.

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Brett Fosheim - Operations Manager Bart McLellan- Member Services Mgr. Adam Zvorak - Foreman Chuck Even - Foreman Dan Kenoyer - Operations Technician Jeff Hughes - Foreman Journeyman Linemen: Corey Hines Mike Davis Jacob Breidenbach James Gyles Elliot Rayman Dave Pietz Adam Willuweit John Branham Brad Kari - Apprentice Lineman Craig Douthit - Work Order Clerk

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POSTMASTER: Send address changes to Butte Electric Beacon, PO Box 137, Newell S.D. 57760 TELEPHONE (605) 456-2494; TOLL FREE 1-800-928-8839; FAX (605) 456-2496; E-MAIL butte@butteelectric.com

2019 Rate Schedule

The Butte Electric Cooperative board of directors have approved the 2019 budget and set the rate schedules for the coming year.

Among notable changes to the rate schedule:

- Residential Service Charge \$1 decrease per month
- Small Commercial Service Charge \$6 decrease per month
- All Accounts with demand \$.50 decrease per kW

Residential				
Service Charge:	\$44/month			
KWH:	\$0.1060 per kWh/month			
Residential	– All-Electric			
Service Charge:	\$44/month			
KWH:	\$0.1060 per kWh/month			
Metered Heat:	\$0.063 per kWh/mo.			
Residential – Demand				
Service Charge:	\$44/month			
Demand Charge:	\$ 9.50 per kW/month			
Energy Charge:	\$0.046 per kWh/month			
Seasonal/Residential				
Service Charge:	\$44/month			
KWH:	\$0.1060 per kWH/month			
Small Commercial				
Service Charge:	\$44/month			
750 KWH:	\$0.1520 per kWh/month			
Excess KWH:	\$0.1155 per kWh/month			
Metered Heat:	\$0.063 per kWh/month			

Large Commo	ercial – 3-phase		
Demand Charge:	\$17.50 per kW/month		
KWH/100 per KW:	\$0.085 per kWh/month		
Excess KWH:	\$0.081 per kWh/month		
Metered Heat Credit:	\$0.019 per kWh/month		
Month/ Minimum:	\$1 per KVA Capacity		
Irrigation/Pu	mping Services		
Service Charge:	\$12/HP/season		
Demand Charge:	\$17.50 per kW/month		
Energy Charge:	\$0.0451 per kWh/month		
Idle Facilities Charge:	\$6/HP/season		
Load Control Credit:	\$4/kW/month		
Grain	System		
Service Charge:	\$44/month		
Demand Charge:	\$17.50* per kW/month		
Energy Charge:	\$0.1060 per kWh/month		
*Demand waived for use during select periods.			
Effective - <u>01-01-2019</u>			

If you have an outage, call: 1-605-456-2494 or 1-800-928-8839

Generator Safety

Portable generators can provide a good, temporary source of power during electrical outages, but can become deadly if improperly installed or operated.

Generator Installation Safety Tips

- The Electrical Safety Foundation International (ESFI) strongly recommends that a licensed electrician install home generators to ensure they meet all local electrical codes.
- Do not connect generators directly to the household wiring without an appropriate transfer switch installed. Power from generators connected directly to household wiring can backfeed along power lines and electrocute anyone coming in contact with them, including utility lineworkers making repairs.
- Make sure your generator is properly grounded.
- Use a ground fault circuit interrupter (GFCI) to prevent electrocutions and electrical shock injuries. Portable GFCIs require no tools to install and are available at prices ranging from \$12 to \$30.

Using Your Generator Safely

- Make sure your home is equipped with a batteryoperated or battery back-up carbon monoxide alarm.
- Never operate a generator inside your home or in other enclosed or partially-enclosed spaces.
 Generators can very quickly produce high levels of carbon monoxide (CO), which can be deadly.
- Opening doors and windows or operating fans to attempt to ventilate a generator will not prevent carbon monoxide build-up in the home. Even with a working CO alarm, you should never use a gasolinepowered generator inside your home or in a garage.
- Position the generator outside the home and away from doors, windows and vents that can allow CO to enter the home.
- Carbon monoxide is the "silent killer." Get to fresh air right away if you feel dizzy or weak.
- Do not overload the generator.
- Plug appliances directly into the generator or use a heavy-duty, outdoor rated extension cord.
- Make sure extension cords used with generators are rated for the load and have three-pronged plugs. They should be inspected for damage, such as cuts and/or worn insulation before use.
- Turn off all appliances powered by the generator before shutting down the generator.
- Make sure fuel for the generator is stored safely, away from living areas, in properly labeled containers, and away from fuel-burning appliances. Before re-fueling, always turn the generator off and let it cool down.
- Keep children away from portable generators at all times.
- A generator is a temporary power source. Use a generator only when necessary to power essential equipment or appliances.

Source:esfi.org



KIDS CORNER SAFETY POSTER



"Never fly near power lines."

Cooper VanderWal, 8 years old

Cooper is the son of Thomas and Katy VanderWal, Brookings, S.D. They are members of Sioux Valley Energy, Colman, 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.



Male Chauvinist Chili

6 slices bacon	1 tsp. dry hot mustard				
10 oz. hot Italian sausage	1-1/2 tsp. chili pepper				
10 oz. lean ground beef	1 tsp. celery seeds				
1 large Spanish onion, cut in	1/2 tsp. salt				
CNUNKS	1-1/2 tsp. fresh black pepper				
1 bell pepper, cut in large pieces	6 cups Italian tomatoes, mashed with liguid				
2 cloves garlic, minced	1 (15 oz) can pinto beans.				
1/2 jalapeno pepper, diced	undrained				
(optional)	1 (15 oz.) can kidney beans,				
1 cup dark red wine	undrained				
1/2 cup Worcestershire sauce	1 (15 oz.) can garbanzo beans, undrained				

Brown bacon; drain, crumble and set aside. Brown sausage and ground beef separately; set aside. In a Dutch oven, cook onion, bell pepper, garlic and jalapeno pepper over low heat 2 to 3 minutes. Stir in wine and Worcestershire sauce; simmer uncovered for 10 minutes. Add mustard, chili pepper, celery seeds, salt and pepper; simmer 10 minutes. Add tomatoes and meats to onion mixture; heat to boiling. Reduce heat, cover and simmer 30 minutes, stirring occasionally. Stir in beans; heat to boiling; Reduce heat, cover and simmer 1 hour, stirring occasionally.

Ruth Schilberg, Viborg

Bacon Potato Chowder

8 slices bacon, cut-up	Salt and pepper to taste
1 cup chopped onion	1/2 cup sour cream
1 cup chopped celery	1-1/2 cups milk
2 medium potatoes, peeled and diced	1 (10 oz.) can cream of mushroom soup

1 cup chicken broth

In a saucepan, cook bacon, onion and celery until bacon is lightly browned and vegetables are tender. Pour off drippings. Add diced potatoes, broth, salt and pepper. Cover; simmer 12 to 15 minutes until potatoes are done. Stir in soup, sour cream and milk; heat through. Serves 6.

Mary Jessen, Holabird

Leftover Turkey-Sage Noodle Soup

2 tsp. oil	
1 cup chopped onion	
1 (32 oz.) container Kitchen Basics® Original Chicken or	

Turkey Stock 2 cups frozen peas and carrots

2

1-1/2 tsp. sage, rubbed 1/2 tsp. thyme leaves 2 bay leaves

1 cup medium egg noodles

2 cups chopped roast turkey

Heat oil in large saucepan on medium heat. Add onion; cook and stir 5 minutes or until softened. Add stock, peas and carrots, sage, thyme and bay leaves; bring to boil. Stir in noodles; cover and cook 10 minutes or until noodles are almost tender. Add turkey; cook 5 to 10 minutes or until noodles are tender and turkey is heated through. Remove bay leaves before serving. Makes 5 1-cup servings.

Nutritional Information Per Serving: Calories 209, Total Fat 5g, Protein 24g, Cholesterol 69mg, Sodium 444mg, Carbohydrates 17g, Fiber 3g

Pictured, Cooperative Connections

Dill Pickle Soup

5-1/2 cups chicken broth	1/2 cup flour
2 lbs. potatoes, peeled and diced	1 cup sour cream or Greek yogurt
2 cups chopped carrots	1/4 cup water
1/2 cup unsalted butter	2 cups pickle juice
1 cup diced dill pickles	Salt to taste
1/2 cup cooked, diced chicken	1/2 tsp. pepper

Bring chicken broth, potatoes, carrots and butter to a boil. Continue until potatoes and carrots are tender. Add pickles and diced chicken; continue to simmer. In a small bowl, whisk together flour, sour cream and water. Quickly stir into soup to thicken. Add pickle juice, salt and pepper. Continue cooking an additional 5 minutes.

Catherine Harts, Mission Hill, SD

Please send your favorite brunch, seafood, appetizer/ beverage recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in June 2019. All entries must include your name, mailing address, telephone number and cooperative name.

ENERGY CENTS

Keeping the Home Fires Affordable: Home Heating Options



Pat Keegan Collaborative Efficiency

A good first step, before making major changes to the heating system, is to look at the area you are heating.

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency. For more information, please visit: www. collaborativeefficiency.com/ energytips. **Dear Pat:** I have high energy bills, especially during the winter. My home is heated with a 20-yearold propane furnace. To make matters worse, I've also been paying the expenses on my mother's home, which is heated with electric baseboards and wall heaters. Should I upgrade to a different kind of system? – Ryan

Dear Ryan: You're really getting the double whammy, especially if you live in a cold climate. Fortunately, you have a few potential solutions.

A good first step, before making major changes to the heating system, is to look at the area you are heating. The amount of heated space and the efficiency of that space determine how large of a heating system you'll need. Air leaks and inadequate insulation might be a major cause of higher bills and correcting these problems might enable you to install a smaller heating system. An energy audit will provide the answers you need and give you an idea of how much you can save from weatherization measures and a more efficient heating system. Contact your local electric cooperative first to see if they offer energy audits or if they can recommend an auditor.

Let's talk about heating systems. Propane furnaces are expected to last 15 to 25 years, but if yours has been well-maintained, you may get more mileage out of it. Even if your furnace is still running well and has some life left in it, it may not be efficient. Propane, gas and oil furnace efficiency is measured by the Average Fuel Utilization Efficiency, or AFUE. This is indicated on a label which may still be attached to the furnace. Your 20-year-old unit might have an AFUE in the 70 percent to 80 percent range. A new high-efficiency furnace can have an AFUE rating of more than 95 percent, which can reduce the portion of your propane bill that goes toward heating by 15 percent to 20 percent. The AFUE doesn't account for any heat escaping through poorly insulated or improperly sealed pipes or furnace ducts, so you definitely want those issues taken care of first.

Instead of replacing your old propane furnace with a new one, you have two additional options. You could install an air-source heat pump, which would use your existing duct work, or a mini-split heat pump, which can heat up to four rooms. In the past decade, the efficiency of heat pumps has greatly improved, even to the point where they are solid options even in colder climates.

It's not surprising that your mother's electric bill is high. This is common for inefficient homes that rely on resistance heat using wall heaters, portable heaters or baseboard heaters.

Your mother's home probably doesn't have ductwork, which makes the installation of a central heat pump very expensive. Instead, I suggest getting a quote on a ductless mini-split heat pump. They are efficient for heating and cooling, so if your mother uses a window A/C unit (or two), she can save even more money. Mini-splits are usually installed to heat and cool the largest, most used area of a home. Your mother can continue to use baseboard heaters in the rooms she doesn't use as often. As efficient as the mini-splits are, they might not provide enough heat in a prolonged, extreme cold snap, so leaving a few baseboard heaters connected is a good idea.

Heating system upgrades have a big effect on comfort and the pocketbook for many years. Scheduling an energy audit and considering all your options gives you the best chance at making the right decisions.

Good luck and stay warm!



Here, Piggy, Piggy

Gas Pipeline Pigging At Deer Creek Station Provides Valuable Information

Deer Creek Station's gas pipeline was recently inspected for the first time since being put into service in 2012.

Deer Creek Station, located near Elkton, S.D., is a 300-net megawatt capacity combined-cycle power plant owned by Basin Electric Power Cooperative. The power plant uses natural gas delivered via the Northern Border Pipeline and a 13.1-mile underground pipeline to the plant. The gas is purchased from Dakota Gasification Company.

Pigging in the context of pipelines refers to the practice of using pipeline inspection tools or "pigs" to perform various maintenance operations on a pipeline. This is done without stopping the flow of the product in the pipeline.

According to Kevin Tschosik, Basin Electric's distributed generation manager, and Jeff Schuetzle, Basin Electric mechanical engineer, the reasons for arranging the inspection were two-fold: an initial pigging baseline

had not been established for the pipeline before putting it into use in 2012; and, a major power line had been constructed that ran parallel to the pipeline for about a two-mile stretch resulting in a higher potential of alternating current interference between the two, which could possibly affect the pipeline's integrity.

Before the inspection process could take place, Schuetzle said modifications were made to the pipeline to prepare it for pigging. Rosen, Inc. of Houston, Texas, conducted the pipeline pigging and is a German company with world-wide experience. "We collaborated with Dakota Gas pipeline staff to tap into their experiences with pipeline pigging," Schuetzle said. "They were very helpful and provided valuable direction."

The disc pig is the most aggressive pig out of the three cleaning pigs. It completely seals the pipeline and is equipped with a magnet for debris collection and a brush to clean the pipeline.

The pipeline pigging took place in two phases. At the end of September, a series of foam, brush and magnet pigs were sent individually down the pipeline to clean the pipeline, removing slag, oil, grease and debris. The smart pigging occurred in early October, when a deformation tool and magnetic flux leakage tool, or MFL tool, were sent down the pipeline individually.

The deformation tool was used to measure the pipe's shape. It finds dents, buckles and expansions. This tool was also outfitted with technology that provides GPS coordinates and elevation data. "We didn't have the GPS coordinates for the pipeline, so this information will be very helpful going forward," Tschosik said.



the pipe's shape. It will find dents, buckles and expansions. Right: The disc pig is the most aggressive pig out of the three cleaning pigs. It completely seals the pipeline and is equipped with a magnet for debris collection and a brush to clean the pipeline.



The MFL tool looked for internal and external metal loss to detect areas on the pipeline showing signs of corrosion, gouges and pitting.

Deer Creek Station operated during the pigging process, as the gas was needed in the pipeline to push the pigs down the line at about four miles per hour. Each pigging process took about four hours to complete, with crew members tracking the pig's progress and providing updates.

Preliminary results from all the pig runs showed no significant findings. "We've received the preliminary reports, which indicate no immediate action is necessary," Schuetzle said. "We are waiting for the final reports to confirm these findings, which we should receive by the end of the year."

Deer Creek is connected to the electric grid by less than one mile of 345-kilovolt transmission line. The plant features two turbine-generator sets: one turbine fired by natural gas; the other is driven by steam. Both of the turbines are connected to generators to produce electricity.



UNDER THE DOME

Co-op Leaders Elected to State Legislature

Brenda Kleinjan

editor@sdrea.coop

As legislators head back to Pierre Jan. 8 for the start of the 94th South Dakota Legislative Session, among the body will be a long-time electric cooperative director.

Rep. Tom Brunner, a farmer from Nisland, S.D., returns to the South Dakota House of Representatives after being re-elected to serve District 29, which encompasses portions of Butte, Meade and Pennington counties in western South Dakota. Brunner is entering his third term, having won elections in 2014 and 2016. The Republican had previously served in the House from 2005-2012, including a stint as a Majority Whip in 2007-08.

"I serve because I think it's my way of giving back to the community. I represent a lot of people who can't take the time or feel intimidated by speaking out in public. I hope I always bring an opinion that would make my constituents proud to have me represent them," said Brunner.

Brunner's service to community extends beyond the hallways of the South Dakota Capitol building. Since 1991, he has served on the Butte Electric Cooperative board of directors in Newell, S.D. Sen. Ryan Maher, right, converses with a fellow senator after Gov. Dennis Daugaard's final budget address in December 2018. On the Cover: Brunner, left, and Maher, right, pose for a photo outside of the South Dakota State Capital building.

And, Brunner has the distinction of being the longest-serving member of the South Dakota Rural Electric Association board of directors, having represented Butte Electric on the SDREA board since 1994. Brunner was the ninth individual to serve as the SDREA board president in the association's 77 year history, serving from 2001 to 2006.

On the other side of the Capitol building, Sen. Ryan Maher of Isabel is returning to the Senate representing District 28 in northwestern South Dakota. District 28 is the state's largest district geographically, extending from the Missouri River to the Montana state line. It includes Harding, Perkins, Corson, Dewey and Ziebach counties and much of northern and western Butte County. Like Brunner, Maher was a familiar face in Pierre prior to his re-election in November. Maher first served in the South Dakota Senate from 2009 to 2014 before returning in 2017. He served as the Republican assistant majority leader in 2018.

The bar and grill owner and insurance agent from Isabel is also a director on his local electric cooperative board. Maher was elected in 2017 to the Timber Lake, S.D.-based Moreau-Grand Electric Cooperative board of directors.

Also on the House side is District 26A Rep. Shawn Bordeaux, D-Mission. Bordeaux, who is the Director of the Institute

birector of the Institute of Tribal Lands at Sinte Gleska



Rep. Shawn Bordeaux D-Mission

University, serves on the board of directors for Cherry-Todd Electric Cooperative in Mission. This is Bordeaux's third term in the House where he represents Todd and Mellette counties in south central South Dakota.

The South Dakota Legislature is bicameral, consisting of a Senate, comprised of 35 members, and a House of Representatives with 70 members.

The main run of the 40-day legislative session goes through March 13. Lawmakers return to Pierre March 29 to consider gubernatorial vetoes.

South Dakota's Legislature

Each Legislative District in South Dakota is represented in Pierre by two members in the South Dakota House of Representatives and one Senator. (Districts 26 and 28 are split into an A portion and a B portion, with a specific Representative for that area.) Need to contact your legislator while they're in Pierre? Go to http://sdlegislature.gov/ From there, you can search your Senator or Representatives, see the committees which they are assigned



and send them an email. Need to reach them by phone? and leave a message with the senate at 605-773-3821 or with the House of Representatives at 605-773-3851. You can also send a fax to 605-773-6806.

MINNESOTA LEGISLATURE

Minnesota's 91st Legislative Session to Start Jan. 8

On Jan. 8, Minnesota's elected leaders head to St. Paul for the 91st Session of the Minnesota Legislature. Coverage of the session starts at 8 a.m. Tuesday on the Minnesota Channel, which is carried by Minnesota's six independent public television stations.

Legislative television programming is produced and created by the Minnesota House of Representatives and the Minnesota Senate.

The Minnesota Legislature has 67 senators and 134 representatives for a total of 201 members. The size of the Legislature has changed over time. Since statehood the lowest number of members was 63 and the highest was 202.



According to Minnesota Statute 3.011, the legislature meets at the seat of government on the first Tuesday after the first Monday in January of each odd-numbered year. It shall also meet when called by the governor to meet in special session. In the even numbered years, it convenes on a date set by joint agreement of both bodies. The state constitution limits the Legislature to meeting 120 legislative days during each biennium. In addition, the Legislature may not meet in regular session after the first Monday following the third Saturday in May of any year.

Contact Minnesota Legislators

For contact information on Minnesota House members, visit:

https://www.house.leg.state.mn.us/members/ hmem.asp

For contact information on Minnesota Senators, visit:

http://www.senate.leg.state.mn.us/members/ index.php?ls=%20-%20header

ENERGY NEWS

Give Holiday Lighting a Decorative Refresh



Tom Tate, NRECA

This year is rapidly drawing to a close and that means the holiday lighting season is back. If your home space is in need of a decorative refresh, here are some tips to take your artistic stylings to the next level. There are two areas to cover, so let's get started.

Safety is up first. If your lights are ground mounted or can be installed standing on the floor or ground, you can skip ahead. However, since most decorations involve some installation at height, you need to do the following:

- Have a ground crew (one or two people) to steady your ladder and pass up the decorations...an invaluable part of safety and for keeping you supplied with untangled light strings, fasteners and encouragement.
- Remember to keep a safe distance from your overhead electric service.
- Don't overreach. If you cannot get to a point with your body completely centered between the sides of the ladder, get down and relocate it.
- Don't overextend the ladder. If your ladder is too short, rent or borrow a longer one. A ladder extended beyond its working limits is dangerous as is standing on rungs too close to the top.
- Do not overload circuits by stringing more light sets together than the manufacturer recommends. Check the packaging for details.
- Check your wires for breaks and cracks in the insulation that can lead to shorts.

Most of these tips apply equally to inside and outside decorating activities. Light selection is next. If at all possible, invest in LED lights this season. Unlike the first versions to hit the market that were characterized by rather harsh and unattractive colors, the newest generation's colors are reminiscent of the incandescent lights of yore.

Why go the LED route? Longevity and cost of operation are the two key reasons. Unlike incandescent lights, whether the large or mini bulb, LEDs will last for many, many years. LEDs have no filaments to burn out. Aside from physically destroying the bulb, the LED is amazingly robust. Given the modest number of hours of operation, you can expect LEDs to last seven or more years.

Then there is the cost of operation benefit from LEDs. These gems of technological advancement truly sip electricity. A reasonable estimate of power consumption is 7 watts per 100 lights. How does that compare to the old incandescent? Each of those bulbs used 12 watts so a string of 100 devoured 1,200 watts.

Truly want to manage the cost of operating holiday lights? Invest in timers to turn the lights on and off automatically. Really into gadgets? Invest in a smart plug for your lights you can program and control from your smart phone.

Once you have your design finalized and installed, it is my recommendation to leave as much of the outside portion of lights in place. No, don't be that person who leaves the holiday lights on all year. Simply disconnect them after the holidays, protecting the plugs and sockets from dirt and debris. Think of the reduced stress and risk if you set and forget your design. With the longevity of the LEDs, you can enjoy this freedom and practically eliminate the risks associated with high-wire seasonal gymnastics.

Tom Tate writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-forprofit electric cooperatives.

Mission Statement

The mission of Butte Electric Cooperative, Inc., is to continually improve customer services; provide safe, reliable, and competitively priced electricity; and continue to lead in developing our communities for the benefit of our members.



Nondiscrimination Statement

This institution is an equal opportunity provider and employer. If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html or at any USDA office, or call 866-632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Ave., S.W., Washington D.C. 20250-9410, by fax 202-690-7442 or email at program.itake@usda.gov



Need \$1,000 for College?

Butte Electric will award a \$1,000 college scholarship to assist area students whose parents are a member-owner of the cooperative. The scholarship is for the 2019-2020 academic year and can be used at a variety of accredited, post high-school educational institutions.

The award is part of the Rural Electric Cooperative Scholarship Program funded by Butte Electric's power supply partner, Basin Electric Power Cooperative. Basin Electric operates the coal-fired plants in North Dakota that generate part of the electricity used by Butte member-owners.

To show commitment to the youth in our co-op communities, each of the 124 member cooperatives of Basin Electric will award a \$1,000 scholarship to a dependent of a consumer.

The scholarships must be used for educational costs and applicants must be enrolled in or entering higher education in the fall of the school year for which any scholarship is awarded. If the recipient is not enrolled as a full-time student during the fall semester after receiving the scholarship, they will forfeit the monetary award. The scholarships are a one-time award only. The award will be sent directly to the accredited post-high school institute that is indicated on the application.

Contact Angie at 605-456-2494 for more information on applying for the scholarship.

ENERGY NEWS

An Outlet for Energy Savings

Smart Outlets Offer Savings

Kaley Lockwood



using the energy-saving outlet and what you'll be using it for. Answering these questions will make it easier to choose the device that works best for you.

With smart plugs or smart power strips, a few clicks and swipes on your smart phone will enable you to fully shut down the electrical currents to your high-powered devices to prevent them from consuming electricity even when switched off. Several devices found inside your home are commonly referred to as "parasitic loads," "phantom loads" or "energy vampires." In fact, most entertainment systems consist of several parasitic loads, such as televisions, DVD players and video gaming consoles. These outlets can potentially curb these loads, which can cost the average household an extra \$200 per year.



options for smart, energy-saving outlets. Photo credit: Insteon®

NRECA

These devices afford the same surge protection as their predecessors, but also tie in the "smart" functionality of an internetconnected device.

Does the ebb and flow of your energy bill have you searching for an affordable way to reduce or better control your use? If you answered yes, then look no further because we're taking a quick dive into a practical and affordable device that allows you to better manage your home's energy use. We're talking about energy-saving outlets!

These next-generation devices afford the same surge protection as their predecessors, but also tie in the "smart" functionality of an internet-connected device.

There are several different kinds of energy-saving outlets available, but there are two factors you should consider. First is size; there are many different sizes ranging from a single external outlet to a power strip with multiple sockets. The second thing you'll want to consider is Wi-Fi connectivity; internet-connected outlets, commonly known as smart plugs, may enable you to fully realize the potential of these energy savings. This is because you'll have greater remote control of the outlet through your smart phone, tablet or home assistant (like Google Home or Amazon's Alexa).

You'll also want to consider where you'll be

In addition to preventing unnecessary



Convenience is also a major factor to consider when thinking about your next efficiency upgrade.

energy consumption, these energy-saving outlets are affordable for most folks who are looking to trim their use. The average smart outlet costs around \$10 to \$20 on Amazon.com and has the potential to pay for itself within two years or less depending on how often you use it.

As previously noted, convenience is also a major factor to consider when thinking about your next efficiency upgrade. Smart plugs typically come with simple instructions to download an accompanying app on your smart phone and then connect the plug to your home's Wi-Fi. The convenience in being able to turn the device on and off using your phone cannot be understated. Advanced smart plugs and smart plug apps also have the ability to automate the use with your schedule and even your presence in the home.

You can also have large-load devices turn off at a set time each night and turn on

every morning when you're ready to use them. If you want to use your television, for example, at a time that's outside of the preset hours, you can easily switch the device on through the smart phone app. Through automation, you're able to power down these energy-intensive devices and prevent unnecessary energy use.

For folks who are looking to optimize their energy use and eliminate vampire loads, smart plugs may be your best option. For others who want more of a hands-off option to save additional dollars, energy-saving outlets and power strips without the Wi-Fi connection may be a better choice. Either way, energy-saving outlets are just one of many energy efficient options out there and as technology continues to evolve, we'll likely see additional options emerge in the future.

Kaley Lockwood writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 local electric cooperatives. From growing suburbs to remote farming communities, electric co-ops serve as engines of economic development for 42 million Americans across 56 percent of the nation's landscape.



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FROM AN IDEA TO LAW

A Legislative Path in the Rushmore State

From the S.D. Legislative Research Council

http://sdlegislature.gov

When South Dakota's 105 legislators gather in Pierre Jan. 8, their main objective will be considering, debating and in some cases enacting new laws.

Here is the general path that an idea follows in becoming a law in South Dakota:

Idea

- A bill is simply an idea that someone would like to see become law.
- It could be anything from the penalty for committing a crime to the amount of money that can be spent on a state program.
- The idea can come from any one, but only a State Representative or State Senator can take the idea and guide it to final passage through the State Legislature.

Drafting

- The drafting of the idea into a bill is done by the Legislative Research Council, the permanent, non-partisan staff of the Legislature.
- A bill may be filed by any member of the House or Senate, and generally more than one legislator will sponsor a bill. The legislator whose name appears first on the bill is the "prime sponsor."

Introduction

- A bill is given to the Chief Clerk of the House or the Secretary of the Senate and is assigned a number. If the bill is sponsored by a Senator, it is a Senate Bill. If the bill is sponsored by a Representative, it is a House Bill.
- The bill is given a First Reading in the "House of Origin". The "House of Origin" is the chamber that sponsored the bill.

- At a First Reading the bill's number and title are read aloud.
- The Senate President Pro tempore or Speaker of the House then assigns the bill to a committee.

Committee

- A committee's responsibility is to examine a bill carefully, take testimony for and against the bill, and decide what to do with the bill.
- The committee has the following options:
 - Send the bill to the floor with a "Do Pass" recommendation,
 - Amend,
 - "Table" the bill, which kills the bill, unless the full body orders the committee to send the bill to the floor ("Smoke-Out"), or
 - Defer the bill to the day after the last Legislative Day, which also kills the bill.

Debate

- If a bill reaches the floor, it is debated and voted on by the body.
- If it passes, the bill is sent to the other body, where it goes through the same introduction and committee processes.

Law

- If a bill passes both the House and Senate, it is sent to the Governor.
- If signed by the Governor, the bill becomes law.
- If vetoed by the Governor, the Legislature has an opportunity to decide whether to override or uphold the veto.
- If the Legislature succeeds in overriding the veto, the bill becomes law.

CO-OPS VOTE

South Dakota Legislative Lingo

Here are a few of the terms you'll likely hear this session. For a full listing, check out the Legislative Research Council.

act - a bill passed by the Legislature.

amendment - any alteration made or proposed to a bill, motion, or clause thereof by adding, changing, substituting, or omitting.

appropriation – money set aside by formal action for a specific use.

bill - a proposed law introduced during a session for consideration.

calendar – a list of bills or other items reported out of committee for consideration by the legislative body.

caucus – an informal organization of members of each political party of the House or the Senate, or both, that exists to discuss issues of mutual concern and possibly to perform legislative research and policy planning for its members.

concurrent resolution – a form of legislation expressing the opinion of the Legislature. It does not have the force of law.

co-sponsor – a joint sponsor of a bill or resolution.

do not pass – the recommendation of a committee when the committee feels it is important for the bill to be considered by the entire house, but does not recommend its passage.

do pass - the recommendation of a committee when the committee recommends the bill pass in its original form.

do pass amended – the recommendation of a committee when the committee recommends the bill pass, not in its original form, but in an altered form adopted by the committee.

enacting clause - that portion of a bill indicating that all following material is to become law. By constitutional provision each proposed law must be preceded by this clause: "BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF SOUTH DAKOTA."

Executive Branch – the branch of government charged with the execution and enforcement of laws and policies and the administration of public affairs.

expenditure – an amount of money that is spent on something.

General Appropriations Act – an act passed by the Legislature and signed by the Governor that appropriates money for the ongoing, ordinary expenses of the three branches of state government.

Governor - the elected executive to head the State of South Dakota.

hoghouse – a procedure used in the Legislature whereby a committee or a member from the floor will move to strike everything after the enacting clause of a bill and insert in lieu thereof the substance of an entirely new bill.

House of Representatives - the lower chamber in the state's bicameral governing bodies.

joint committee - a committee that includes membership from both houses of the Legislature.

joint resolution used primarily to propose amendments to the South Dakota Constitution and to ratify amendments to the U.S. Constitution.

joint session - a joint meeting of both houses of a bicameral legislature.

Judicial Branch - the branch of government charged with the interpretation of laws and the administration of justice.

lay on the table – postpone a matter before the Legislature; may later be brought up for consideration by motion from the floor.

Legislative Branch - the branch of government having the power to make laws.

legislative committee – a subgroup of legislators who make an initial determination if the proposal should go forward in the Legislature.

legislative day - a day on which a formal legislative floor session is held.

Legislative Research Council - the nonpartisan staff that provide legal analysis, fiscal analysis, and advice in addition to research, drafting, and budget services to the Legislature.

legislator - a person elected by the citizens to make laws.

Legislature - the legislative body.

line-item veto - authority to veto part rather than all of an appropriations act.

Majority Leader - the head of the majority party in a legislative body.

Majority Party – a group of legislators of the same political party who have the greatest number of elected members and who control the leadership positions.

majority vote – a number or percentage of votes equaling more than half of the total number of members to pass legislation.

Minority Leader – the head of the minority party in a legislative body.

Minority Party - a group of legislators of the same political party who have the fewest number of elected members.



President - a title given to the presiding officer of the Senate held by virtue of the office of Lieutenant Governor.

President Pro Tempore – a Senator elected by the Senate, who is the constitutionally recognized officer of the Senate who presides over the chamber in the absence of the President.

prime sponsor – the legislator or legislator committee introducing a bill.

two-thirds majority - a super majority vote requiring two-thirds of the members to pass legislation.

Whip - a legislator elected by members of the political party to assist leadership.

without recommendation – the recommendation made by a committee when the committee cannot come to a consensus or has no feelings on the bil one way or another, so feels the entire house should determine whether it should pass.



October 20-January 6 Pheasant Hunting Season, Statewide, Pierre, SD, 605-223-7660

November 20-December 26 Christmas at the Capitol, Pierre, SD, 605-773-3178

November 30-December 23

Third Annual Christmas Shoppers Village, Shop indoors for a wide variety unique hand-crafted items from local artisans, including but not limited to: Lakota art, wood and leather items, foods, glass works, jewelry, rugs, purses, western décor, and photography, Shoppers Village is open during normal business hours. Tuesday-Saturday: 9 a.m. to 4p.m. Sunday: 1 to 4 p.m., Spearfish, SD, 605-642-9378

December 15-March 31 South Dakota snowmobile trails season, Lead, SD, 605-584-3896

December 22-23

1880 Train Holiday Express, Hill City, SD, 605-574-2222

January 3-5

Dakota Farm Show, Thursday and Friday 9 a.m. to 5 p.m., Saturday 9 a.m. to 5 p.m., Dakota Dome, Vermillion, SD

January 11-12

Annual Red Dirt Festival, Deadwood, SD, 605-559-0386

January 15

40th Annual Ranchers Workshop, 9 a.m. to 2:30 p.m. CT, Community Events Center, White River, SD, 605-259-3252 ext. 3

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January 17

Community Club Annual Banquet, Dinner catered by The Knotty Pine Supper Club, Entertainment by Comedian Scott Novotny, Elkton, SD Tickets 605-542-2681

January 18-19

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

January 18-20

Winterfest, Lead, SD, 605-584-1100

January 25-26

Snowmobile Rally, Deadwood, SD, 605-578-1876

January 25-26

Living History Fair, Lake Area Technical College, School children only on Friday, Open to public on Saturday, Watertown, SD, 605-881-1758

January 25-February 3

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

January 26-27

Dakota Territory Gun Show, National Field Archery Building, Yankton, SD, 605-665-4537

January 31

3 Cheers Celebration hosted by the Spearfish Foundation for Public Education, 5:30 p.m., \$5, W.S. Tretheway Pavilion, City Park, Spearfish, SD, www.spearfishschools.org

February 2

Lake Hendricks Fishing Derby, Hendricks, MN, 507-828-2113

February 2-3

Dakota Territory Gun Show, Dakota Event Center, Aberdeen, SD, 701-336-7533

February 8-10

Black Hills Sports Show & Outdoor Expo, Rapid City, SD, 605-939-1812

February 9-10

Dakota Territory Gun Show, Trophy Show – The Big One, Convention Center, Sioux Falls, SD, 605-630-2199

February 16-17

Dakota Territory Gun Show, Ramkota River Centre, Pierre, SD, 605-280-2438

February 21-23

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

February 22-23

State Wrestling Tournaments, Rushmore Plaza Civic Center, Rapid City, SD, 605-394-4111

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.