South Dakota Electric

Your Touchstone Energy® Partner

Cooperative Connections

FEBRUARY 2014 VOL. 66 NO. 2

AGE-PROOFING YOUR HOME

Pg-8

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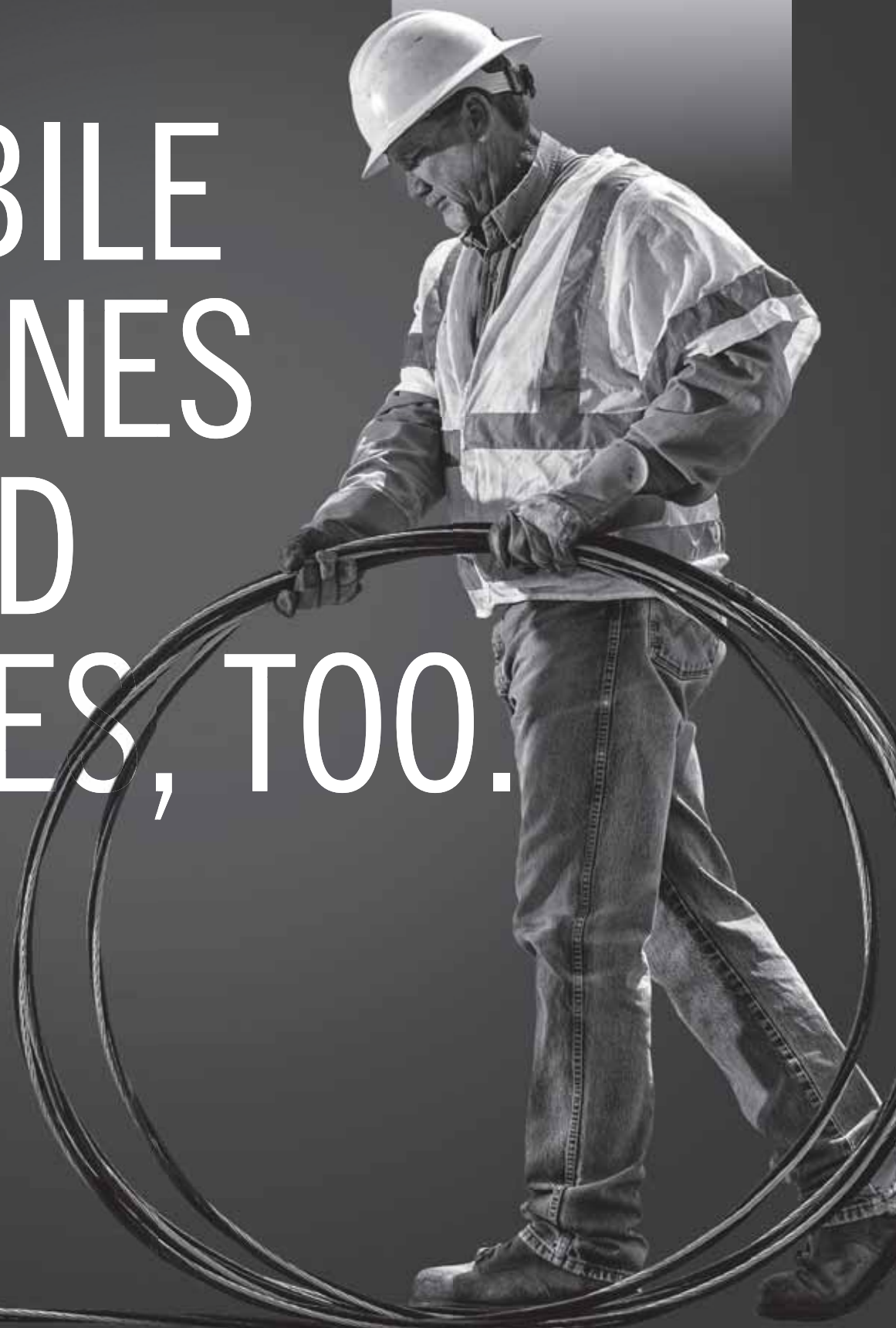

South Dakota Electric Cooperative Connections

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Editorial

Looking Out for Our Co-ops and their Members

Ed Anderson
General Manager, South Dakota Rural Electric Association

Flip on the evening news and you will be sure to see a story or two about our government in action (or not in action, as some stories like to point out.)

Keeping abreast of what our elected leaders are doing, and the decisions they are making, is important to all of us as citizens of a democracy. In the classroom, we learned how government was supposed to work, how the three branches of government held one another in check to ensure that well thought-out laws would be enacted. As we grew older, we may have become more jaded as we watched our government grind to a halt last fall. And now, our state leaders are in Pierre for the 89th Legislative Session. With the best of intentions, they will consider many bills – more than 500 are typically introduced each session, and this year will likely be no different (more than 120 bills were already drafted, awaiting lawmakers' arrival in Pierre for the start of session.)

As lawmakers wade through the merits of these bills, they weigh what impact such proposed laws will have on all of us. As part of their information gathering, lawmakers listen to lobbyists – including those working on your behalf through your local electric cooperative. They also listen to their constituents – you, the co-op member. In fact, your voice is one that carries much strength.

More than 300,000 South Dakotans receive power from their local electric cooperatives. These people expect that the co-op they own will do what they can to ensure that safe, reliable and affordable electric power is provided. One part of keeping electric power bills affordable is keeping a watchful eye on regulations and legislation at the state and federal level. That's where your co-op's statewide association, the South Dakota Rural Electric Association, and national arm, the National Rural Electric Cooperative Association, come in.

At times, this means that we actively promote legislation that benefits co-op members. At other times, it means that we work to reshape legislation that would be detrimental to our members.

Co-ops also work to ensure reliable power by keeping their members informed and engaged. Co-ops know that their members form the foundation of the co-op. They are the owners of the co-op. They elect their neighbors to make decisions for the co-op. And, they ask their members to contact their elected leaders on issues.

In February, electric co-ops will host their second Electric Co-op Day at the Capitol when they bring in electric co-op members and employees to watch our legislature in action and learn more about the process of government. We hope to see you there on Feb. 25.

Heating Safety

Heating equipment is a leading cause of home fire deaths. Almost half of home heating equipment fires are reported during the months of December, January and February. Some simple steps can prevent most heating-related fires from happening.

- Keep anything that can burn at least three feet away from heating equipment, such as the furnace, fireplace, wood stove or portable heater.
- Only use heating equipment that has the label of a recognized testing laboratory.
- Never use your oven for heating.
- Have a qualified professional install stationary space heating equipment, water heaters or central heating equipment according to the local codes and manufacturer's instructions.
- Maintain heating equipment and chimneys by having them cleaned and inspected annually by a qualified professional.
- Turn portable heaters off when leaving the room or going to bed.
- For fuel burning space heaters, always use the proper fuel as specified by the manufacturer.
- Make sure the fireplace has a sturdy screen to prevent sparks from flying into the room and burn only dry, seasoned wood. Allow ashes to cool before disposing in a metal container, which is kept a safe distance from the home.
- For wood burning stoves, install chimney connectors and chimneys following manufacturer's instructions or have a professional do the installation.
- Make sure all fuel-burning equipment is vented to the outside to avoid carbon monoxide poisoning.
- Install and maintain carbon monoxide (CO) alarms to avoid the risk of CO poisoning.
- If you smell gas in your gas heater, do not attempt to light the appliance. Turn off all the controls and open doors and windows. Call a gas service person.
- Test smoke alarms at least monthly.

Source: www.nfpa.org/education

Kids' Corner Safety Poster

"Don't give your keys to the baby"

Arvish Bhinder, 11 years old

Arvish is the daughter of Harpreet and Parminder Bhinder, Mission, S.D. They are members of Cherry-Todd Electric Cooperative, Mission, 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.

Bread and Breakfast

Lemon Coffee Cake

1/2 cup butter or margarine, softened
1 cup sour cream
1 cup sugar
2 eggs
1 tsp. vanilla
1/2 tsp. baking soda
2 cups flour
1-1/2 tsp. baking powder
1/2 tsp. salt, optional
1 can lemon pie filling

Topping:
1/2 cup flour
1/2 cup sugar
1/4 cup butter or margarine, cold
1 tsp. cinnamon
1/2 cup chopped nuts

Combine first 6 ingredients. Sift together flour, baking powder and salt. Stir into vanilla mixture. Spread half of dough into a greased and floured 9x13-inch pan. Spread lemon pie filling over dough. Top with remaining dough. Combine topping ingredients; mix with pastry blender until crumbly. Sprinkle over batter. Bake at 350°F. for 45 minutes or until topping is golden.

Mary Jessen, Holabird

Orange Biscuits

3/4 cup sugar
2 tsp. plus additional orange rind
1/4 cup melted butter or margarine
2 tubes of refrigerated biscuits
3/4 cup powdered sugar
2 T. orange juice

Mix sugar and 2 tsp. rind together. Roll biscuits in butter and in sugar mixture. Lay biscuits in a circle; tip over tip of the one before in a circle cake tin. Bake at 350°F. for 30 minutes. For frosting, combine powdered sugar, desired amount orange rind and orange juice. Drizzle over biscuits while biscuits are still warm.

Geraldine Dahlin, Beresford

Oatmeal Bread

1-1/2 cups water
1 cup milk
1/4 cup oil
1 cup quick cooking oats
2 tsp. salt
1/2 cup molasses
1-1/2 tsp. yeast
4-1/2 to 5-1/2 cups bread flour

Combine water, milk and oil in saucepan. Bring to a boil; remove from heat. Add oatmeal and stir until mixture is lukewarm; pour into bowl. Add salt, molasses and yeast; beat for 2 minutes. Add flour a little at a time. Remove from bowl. Knead for 8 to 10 minutes (it is very important to knead for 8 to 10 minutes). Let rise until size has doubled. Punch down and divide into loaves. Let rise again in pans. Bake at 375°F. for 35 to 40 minutes or until golden brown.

Betty Vliem, Lodgepole

Sweet Blueberry Drop Biscuits

Crisco® Original No-Stick Cooking Spray
2 cups White Lily® Enriched Bleached Self-Rising Flour
1/3 cup sugar
1/4 cup Crisco All-Vegetable Shortening, chilled
2/3 to 3/4 cups milk or buttermilk, plus additional as needed
1 cup fresh or frozen blueberries, if frozen, do not thaw

Heat oven to 500°F. Spray baking sheet with no-stick cooking spray. Combine flour and sugar into bowl. Cut in shortening with pastry blender or 2 knives until crumbs are the size of peas. Blend in just enough milk with a fork until dough leaves sides of bowl. If needed, add more milk to form soft dough. Gently stir in blueberries. Drop dough by rounded tablespoonfuls onto prepared baking sheet 1 to 2 inches apart. Bake 8 to 10 minutes or until golden brown. Cool 2 minutes. Split and serve warm with butter.

Note: Drop biscuits recipes are easy to modify with a couple of additions. Prefer savory instead? Prepare Bacon Cheddar Drop Biscuits by adding cheese and bacon to the biscuit dough. Other delicious combinations are cinnamon and sugar or blue cheese and garlic. Bake smaller versions of these biscuits to serve as appetizers at your next party or as part of an on-the-go breakfast for your family. Yield: 12 biscuits

Nutritional information per serving: Serving Size 1 biscuit of 12, Calories 140 (Calories from Fat 40), Total Fat 4.5g (Saturated Fat 1.5g, Trans Fat 0g), Cholesterol 0mg, Sodium 250mg, Total Carbohydrate 23g (Dietary Fiber 1g, Sugars 8g), Protein 3g

Pictured, Cooperative Connections

Quick Quiche

12 slices crisp bacon
1 cup shredded Swiss or American cheese
1/3 cup chopped onion
2 cups milk
4 eggs
1/4 tsp. salt
1/8 tsp. pepper
1/2 cup Bisquick

Put all ingredients in blender; blend on high 1 minute. Pour into a greased 9-inch pie pan. Bake at 350°F. for 50 to 55 minutes.

Peggy Fischbach, Warner

Breakfast Casserole

1 lb. frozen hash brown squares
1 roll sausage
1 pkg. bacon
Onion powder
12 oz. shredded Cheddar cheese
2 cups milk
10 eggs

Line a 9x13-inch pan with potatoes. Cook sausage and bacon; spread over top of potatoes. Sprinkle onion powder on top of meat. Mix milk and eggs together; pour over meat. Top with Cheddar cheese. Bake at 350°F. for 45 minutes to 1 hour or until eggs are set.

Lorelei Jakober, Leola

Please send your favorite seafood, appetizer and 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 2014. All entries must include your name, mailing address, telephone number and cooperative name.

Efficient Outdoor Lighting:

Light outdoor spaces to entertain and secure your home without wasting energy

Jim Dulley
www.dulley.com

Dear Jim: I need to add outdoor lighting for security at my home. I'd also like to use the lights for entertaining. How can I brighten outdoor spaces without driving up my electric bills? – Paul H.

Dear Paul: Outdoor lighting can be effective for security, but drives up utility bills if done improperly. Security lights are not always best for entertaining and vice versa.

Make your security and entertaining lighting plans independently, then check to see where they overlap. Security lighting is usually on all night; entertainment lighting is not. Choosing the proper security lighting has a greater impact on your utility bills.

Before you consider adding outdoor security lighting, make other low-cost security improvements to your home. Make sure window latches lock securely, install bump-resistant door deadbolts and consider an alarm system.

Once you feel the perimeter of your home is relatively secure, plan your lighting. Do an outdoor walk-around inspection of your house at night to see where additional lighting might help. Sometimes there is enough brightness from a neighbor's home to illuminate otherwise dark, suspect areas.

Prioritize lighting need areas. Installing just two 150-watt security lights and keeping them on all night can increase your electric bill by more than $100 per year.

Keep in mind, the wattage of a light bulb does not determine how much light it produces. Wattage refers to how much electricity a bulb uses. Instead, look for light output – measured in lumens – on bulb packaging.

Compact fluorescent lamps (CFLs) and light emitting diodes (LEDs) produce more lumens per watt of electricity compared to standard incandescent bulbs. For example, an L22 array LED fixture uses less than 25 watts to produce the same light output (about 1,800 lumens) as a 100-watt incandescent bulb.

When planning outdoor lighting, make an effort to minimize nighttime light pollution. Bright lights create a problem for wildlife and can be annoying to neighbors. If you install floodlighting, mount a directional light shield over it. I can barely see the stars on a clear night due to the excessive lighting in my subdivision.

It is a misconception that brighter lights provide more security. Lower lighting levels are more effective because it's difficult for the human eye to quickly adjust from a very bright area to darker area. If lighting is less bright, it's easier to see movement in darker areas where someone might be hiding.

Motion-sensor lights are some of the most efficient and effective for security. When the light comes on, a would-be thief assumes he has been seen. They also catch neighbors' attention. Select one with two-level lighting. You can switch it on for low-level background lighting; it only switches to full brightness when motion is detected.

Wherever there is access to the full sun, consider solar-powered motion-sensing floodlights. Spend extra for an ample battery pack (measured in watt-hours). These lights continue to operate even after a few consecutive cloudy days with little recharging sunlight.

If you plan to install low-cost standard 120-volt outdoor lighting fixtures, try using CFLs. These only use one-quarter as much electricity as standard incandescent bulbs and last at least 10 times longer. The overall savings will pay back their higher cost many times over. CFLs do not always work well in cold outdoor temperatures and take a little while to reach full brightness. Try one or two first and read the packaging to see if the bulb is intended for outdoor use.

Motion-sensor lights are some of the most efficient and effective for security.

LEDs, another super-efficient lighting option, are not affected by the cold. With a bright white light output, LEDs last up to 50,000 hours. Their light output is directional, so they are best for lighting specific targeted areas.

To light a larger area for an entire night, LPS (low-pressure sodium) fixtures are efficient. The fixtures are fairly expensive and they start up very slowly to reach full brightness. The light quality is monochromatic (yellowish) so they would only be applicable for security and not for entertainment lighting.

The following companies offer efficient outdoor lighting: Energy Focus, 888-704-2276, www.energyfocusinc.com; Hadco, 800-331-4185, www.hadcolighting.com; Idaho Wood, 800-635-1100, www.idahowood.com; Kim Lighting, 626-968-5666, www.kimlighting.com; and Wave Lighting, 877-870-9283, www.wavelightingusa.com.

Have a question for Jim? Send inquiries to: James Dulley, *Cooperative Connections*, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit www.dulley.com.

Basin Electric Signs Contract for Wind Generation

Basin Electric signed a power purchase agreement on Dec. 20 associated with the development of a new wind project to be developed in South Dakota.

The project is co-owned by Fagen Inc. of Granite Falls, Minn., and the principals of Dakota Plains Energy, Aberdeen, S.D., and is planned to be operational by the end of 2015.

"The Campbell County Wind Farm is proud to have been selected to provide 98 megawatts (MW) of clean, affordable energy to nearly 30,000 homes in the Upper Midwest," said Rob Johnson, president and principal of Dakota Plains Energy. "We are pleased for the opportunity to showcase South Dakota's superior wind energy assets along with providing the local economy with a positive impact for years to come."

This follows Basin Electric's November announcement to enter into two power purchase agreements for an additional 278-MW of wind power from projects in North Dakota to be operational by the end of 2015.

With the addition of these new projects, the renewable portion of Basin Electric's generating portfolio will be more than 1,100 MW. "We are pleased to grow our generating portfolio with another wind project," said Andrew M. Serri, Basin Electric CEO and general manager. "We are especially happy to work with a developer in our neighboring state, where we already have a generation presence. The cornerstone of a strong generation portfolio is diversity. This project will add to our robust mix of coal, gas, wind, waste heat, nuclear and oil."

About the Companies:

Basin Electric Power Cooperative *is a consumer-owned, regional cooperative headquartered in Bismarck, N.D. It generates and transmits electricity to 137 member rural electric systems in nine states: Colorado, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota and Wyoming. These member systems distribute electricity to about 2.8 million consumers.*

Dakota Plains Energy, Inc., *the only South Dakota-based utility-scale wind farm developer, is based in Aberdeen with a regional office in the Brainerd Lakes, Minn., area.*

Fagen Inc. *was established in 1988 in Granite Falls, Minn., and is a full-service international contractor performing engineering, procurement and construction and general contracting.*

Hanson Elected S.D. PUC Chair

South Dakota Public Utilities Commissioner Gary Hanson will preside as chairman of the PUC in 2014. Commissioner Chris Nelson will serve as vice chairman.

Both commissioners were elected to the posts at a Jan. 7 PUC meeting and will continue in the leadership roles they held in 2013. Kristie Fiegen is the third member of the commission.

This is Hanson's fifth time as chairman since first being elected to the commission in 2002. He is currently serving his second term as a statewide PUC commissioner.

For more on the South Dakota PUC, go to puc.sd.gov

Gary Hanson

Co-ops Launch Legislative App

South Dakota's electric cooperatives have launched an app for iPhones, iPads and other iOS devices which connect users with the state's elected officials. The app launched the first week of the 2014 South Dakota Legislative Session and is available for free download. Revisions to the application are being planned as is the launch of an app for Android devices.

"We believe this will be a useful tool for anyone seeking to connect with the state Legislature," said Ed Anderson, general manager of the South Dakota Rural Electric Association.

Wind Group Names New Leader

The South Dakota Wind Energy Association (SDWEA) has named Paul Bachman, PE, MBA, as the association's third executive director, effective Jan. 1.

"I am very excited by the opportunity to be a part of this excellent organization and look forward to the challenges facing us in wind development in South Dakota," said Bachman, who was the former department head and manager of the Sioux Falls Office of DGR Engineering,

Paul Bachman

Bachman currently serves on the S.D. Legislative Task Force on Wind Energy and the IEEE NESC (SC 4) Standards Committee. He is a registered professional engineer in eight states and is NCEES certified. He attended the South Dakota School of Mines & Technology, the University of South Dakota and received his Masters in Business Administration from the University of Minnesota-Duluth. Bachman has considerable experience in financial modeling of capital investments, development of marketing plans, conducting technical / financial feasibility studies for wind projects, and the development of interconnection and power purchase agreements.

Bachman and his family currently reside in Harrisburg, S.D.

The South Dakota Wind Energy Association is a voluntary trade association that supports the development of wind energy as a sustainable, economic and environmentally friendly resource for all of South Dakota.

A Home for All Ages

By
Brenda Kleinjan

While Peter Pan might have made for a great Disney character, when his name is applied to housing, it's not a good fit.

"We have too much Peter Pan Housing – housing for people who are never going to grow old," said Leacey Brown, gerontology field specialist for South Dakota State University Extension.

As the region's population ages, it's important to keep looking to the future, anticipating what individuals will need from their homes next year, in 10 years, 20 years and so on.

"Having a bedroom on the main floor can be a really big deal for a person as they get older and stairs become more difficult to climb," said Brown.

Having a bedroom on the main floor can be a really big deal for a person as they get older.

Brown said that overwhelmingly, people over age 50 in South Dakota report that staying in their home and community is very important to them.

"They want to stay there as they age," said Brown.

Doing so will take planning.

"They need to plan ahead while they are still young and working and can make the modifications that are necessary," said Brown.

Stairs can be one of the largest barriers to remaining in the home as a person ages. She listed three main things that are vital for homeowners wanting to stay in their homes long-term: a main floor laundry, a

bedroom on the main floor and an accessible bathroom.

"Those are probably the three main things people should be concerned about," said Brown.

Nearly 1 in 4 South Dakotans will be over age 65 by 2035, compared to 1 in 5 Americans nationwide.

Half of adults over age 65 own homes built prior to 1970. These homes often have smaller bathrooms and typically do not have grab bars in slippery areas.

"Grab bars are often viewed as a negative addition to the home, but if you want to remain in your home, put in grabs bars," Brown said. "Falls in the bathroom are one of the leading causes of nursing home placement."

But the list of things to look for to make sure that a house is a long-term fit as one ages doesn't end there. Every room in the home should be assessed.

"Thresholds between doors can become a tripping hazard as we get older if its not flush against the floor," said Brown.

The height of toilet seats – it should be 18 inches above the ground – is also important.

"You can almost take one room at a time and talk about how to make it safer," said Brown.

Lighting is also important.

"Lighting is a big deal. As a person gets older, their vision changes, so increasing the amount of light available makes it easier," said Brown.

While the modifications she noted become more important as people age, they can become crucial for younger homeowners as well.

"You can never predict what's going to happen, and accidents happen," said Brown.

"You have to ask yourself: Can I stay in my home if I have a disability?" said Brown.

Brown noted that Internet and technology are also tools that can help people stay in their homes longer, if they're willing to use it.

For More Information:

SDSU Extension's iGrow website has information available at http://igrow.org/healthy-families/aging/ or Brown can be reached at the Rapid City Regional Extension Center at 605-394-1722. Additional information is also available at http://dss.sd.gov/elderlyservices/services/

Tips for Home Modification

Before you make home modifications, evaluate your current and future needs by going through your home room by room and answering a series of questions to highlight where changes might be made.

Below are some areas to considered, as provided by the U.S. Department of Health and Human Services' Administration on Aging. Other resources are available through AARP and other groups. One website to check is http://homemods.org/resources/pages/safety.shtml

Once you have explored all the areas of your home that could benefit from remodeling, you might make a list of potential problems and possible solutions.

Appliances, Kitchen, Bathroom

- Are cabinet doorknobs easy to use?
- Are stove controls easy to use and clearly marked?
- Are faucets easy to use?
- Are there grab bars where needed?
- Are all appliances and utensils conveniently and safely located?
- Can the oven and refrigerator be opened easily?
- Can you sit down while working?
- Can you get into and out of the bathtub or shower easily?
- Is the kitchen counter height and depth comfortable for you?
- Is the water temperature regulated to prevent scalding or burning?
- Would you benefit from having convenience items, such as a handheld shower head, a garbage disposal or a trash compactor?

Doors, Windows

- Are your doors and windows easy to open and close?
- Are your door locks sturdy and easy to operate?
- Are your doors wide enough to accommodate a walker or wheelchair?
- Do your doors have peepholes or viewing panels? If so, are they set at the correct height for you to use?
- Is there a step up or down at the entrance to your home? If so, is the door threshold too high or low for you to get in or out easily?
- Is there enough space for you to move around while opening or closing your doors?

Electrical Outlets, Switches, Safety Devices

- Are light or power switches easy to turn on and off?
- Are electrical outlets easy to reach?
- Are the electrical outlets properly grounded to prevent shocks?
- Are your extension cords in good condition?
- Can you hear the doorbell in every part of the house?
- Do you have smoke detectors throughout your home?
- Do you have an alarm system?
- Is the telephone readily available for emergencies?
- Would you benefit from having an assistive device to make it easier to hear and talk on the telephone?

Floors

- Are all of the floors in your home on the same level?
- Are steps up and down marked in someway?
- Are all floor surfaces safe and covered with non-slip or non-skid materials?
- Do you have scatter rugs or doormats that could be hazardous?

Hallways, Steps, Stairways

- Are hallways and stairs in good condition?
- Do all of your hallways and stairs have smooth, safe surfaces?
- Do your stairs have steps that are big enough for your whole foot?
- Do you have handrails on both sides of the stairway?
- Are your stair rails wide enough for you to grasp them securely?
- Would you benefit from building a ramp to replace the stairs or steps inside or outside of your home?

Lighting, Ventilation

- Do you have night-lights where they are needed?
- Is the lighting in each room sufficient for the use of the room?
- Is the lighting bright enough to ensure safety?
- Is each room well ventilated with good air circulation?

Other areas to consider

Examine garages, driveways, closets, storage spaces and other areas for hazards and ease of access.

Harnessing Hot Water

Electric co-ops turn water heaters into batteries

By Cathy Cash and Megan McKoy-Noe

Hot water's great for early morning showers and washing dishes at night. It also transforms into a powerful energy storage device when connected to utility's demand response program. All it takes is a little cooperation.

Members at more than 250 co-ops in 33 states volunteer to help their utility store and save energy through electric resistance water heaters. At least half a million water heaters stand ready to answer the call, helping utilities lower system peaks, store wind and hydro energy during the night and enhance grid efficiency.

Co-ops in eastern South Dakota and western Minnesota have been leaders in this concept. In the early '80s, East River Electric Power Cooperative and its members incorporated Supervisory Control and Data Acquisition, or SCADA. In 1985, the load management system was launched.

Nearly 60,000 member consumers have volunteered to install load management devices on water heaters, irrigation pumps, air conditioners and customer-owned standby generators. Since 1985, more than $150 million has been saved in wholesale power costs.

Co-ops in western South Dakota have added similar programs in recent years.

When co-ops launched pioneering load management efforts in the late 1970s, electric resistance water heaters quickly became the "peak shift" device of choice. Water could be heated and stored during periods of low power consumption, such as late night and early morning hours. Thanks to big tanks (commonly 80 gallons or more), the units could be turned off for long stretches without a household being inconvenienced

Palmetto Electric Cooperative Senior Marketing Technician Travis Malphrus installs a load control switch on an electric water heater for its H2O Select program at a member's home. The co-op can turn off the appliance during times of peak electricity consumption to lower its power bill.
Source: Palmetto Electric Cooperative, Inc.

by running out of hot water.

Water heaters aren't the only resource co-ops tap when energy demand spikes. Demand response programs also use air conditioners, electric thermal storage heating cabinets and furnaces and other specialized equipment in the homes of volunteers.

In 2012, local electric co-ops cut 2,400 MW of load, the electric use equivalent of 1.2 million average-sized homes, saving members about $100 million in generation fuel costs and offsetting more than 2,000 tons of carbon dioxide emissions.

Water Fight

The success of volunteer demand response programs was threatened last year. The Natural Resources Defense Council recommended water heater limits to the International Code Council, a standards organization responsible for the International Energy Conservation Code. The code is revised every three years.

NRECA warned the proposal could harm utility demand response, load management and energy storage programs. Hundreds of co-op leaders echoed NRECA's stance, petitioning the U.S. Department of Energy and the council. In October, the council ruled against the change.

"Water heater programs have saved co-op members hundreds of millions of dollars and eliminated the need to build new electric generation," explains Keith Dennis, NRECA senior principal for end-use solutions and standards. "This victory represents an understanding of the building code community that water heaters can contribute significantly to the overall efficiency of the nation's power grid in addition to providing affordable hot water to consumers."

The proposal would have limited water heaters for new construction to a heat pump water heater, a solar water heating system, an instantaneous water heater or a storage gas water heater with a specific energy rating.

Heat-pump water heaters can't be cycled like electric resistance models and can't heat water as quickly. The price tag for these appliances is also higher than electric resistance water heaters, putting them out of reach for many co-op members.

You Can Help

Ready to work with your local electric cooperative to meet the region's rising energy needs without breaking the bank? Check with your local co-op to see if they offer a demand response program.

Source: NRECA Megan McKoy-Noe and Cathy Cash write on consumer and cooperative affairs for the National Rural Electric Cooperative Association. Rob Holt contributed to this article.

In 2012, local electric co-ops cut 2,400 MW of load, the electric use equivalent of 1.2 million average-sized homes, saving members about $100 million in generation fuel costs and offsetting more than 2,000 tons of carbon dioxide emissions.

A Look at Greenhouse Gas Regulations

By
Tim McCarthy

Greenhouse gas regulations are a topic of much concern to electric cooperatives in the region. More than half of the energy used to power co-op members' homes comes from coal-based energy, so proposed regulations in this area are ones watched closely.

Supreme Court ruled on definition of "pollutant" in 2007

As background, this series of regulations originated in 2007 when the U.S. Supreme Court ruled the definition of "pollutant" in the Clean Air Act (CAA) includes the emission of Greenhouse Gases (GHGs) and directed the Environmental Protection Agency (EPA) to make a determination as to whether new automobile emission endangered public health and welfare. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.

More rulings on emissions 2009-2011

In 2009, EPA finalized their endangerment findings and opened the door to using the CAA to regulate GHGs from motor vehicles. Then, in 2010, a ruling was issued that addressed GHG emissions from stationary sources under the CAA permitting programs. EPA was initially scheduled to phase in CAA permitting requirements throughout 2011.

Emissions permits required for certain facilities

Under the final ruling, thresholds for emissions have been set and the requirements have been "tailored" to limit which facilities would be required to obtain Prevention of Significant Deterioration (PSD) and Title V permits. Newly constructed electric generating facilities and those that have been modified in a fashion significantly increasing emissions of a pollutant other than

Basin Electric's Dry Fork Station plant in Wyoming is one of the last coal-based power plants in the nation to start up. Regulatory uncertainty has put several projects on hold nationwide.

GHGs would be required to obtain these permits. Furthermore, new facilities that emit more than a specified level of GHGs and modified facilities that increase the output of GHG emissions by a specified amount will be required to obtain the permits.

EPA still working to finalize standards

In 2011, a settlement agreement was reached between State and Environmental Petitioners and the EPA in regards to establishing a deadline for the passage of guidelines pertaining to the performance of electric utility steam generating units in regards to emissions. Due to a legal challenge, the proposed rule had been delayed. The U.S. Court of Appeals for the District of Columbia Circuit rejected the lawsuit in December 2012.

The EPA is working on finalizing the new source performance standards (NSPS) and issued a proposal to limit GHGs at existing plants in 2014. The EPA held public hearings in the fall of 2013 and on Jan. 8, 2014, published its proposed rule for new power plants in the *Federal Register*. The public now has 30 to 60 days to make comment on the rule.

Explaining
The Big 5
regulatory issues
Part Two of a Five-Part Series

NRECA looking out for cooperatives and members

The National Rural Electric Cooperative Association has weighed in on all aspects of this regulatory issue. On behalf of the cooperative systems, they have submitted comments and filed petitions on the initial endangerment findings, the tailoring rule, the motor vehicle rule and the settlement agreement. They have outlined the impacts the overall ruling would have on the economy as a whole, the power industry, electric cooperatives specifically and the members they serve. They also expressed concern at the limited duration applied to the development of a complex set of rules that have the potential to substantially impact the electric industry and cooperative members nationwide.

If anyone wants more information on these topics, you can visit http://www.nreca.coop/nreca-on-the-issues/environment/clean-air/.

Editor's Note: *This article is the second of a five-part series that will examine various federal regulatory proposals that affect you and your cooperative. This series focuses on regulatory policies – known as "The Big Five" – that will eventually have an impact on the price of electricity your co-op purchases from its power suppliers and delivers to you, our members.*

Electric Co-ops Renew Criticism of New Power Plant Rule

Jo Ann Emerson, CEO of the National Rural Electric Cooperative Association (NRECA), released the following statement upon a review of the Environmental Protection Agency's New Source Performance Standards (NSPS) for new power plants released Jan. 7 and published in the *Federal Register* on Jan. 8.

"The NSPS rule effectively eliminates new coal power plants as a future electric generation option, taking a reliable domestic fuel with a historically predictable cost off the table. The emissions standards require carbon capture and storage at new coal plants despite this technology not existing on a commercial scale at any power plant anywhere in the world."

"As not-for-profit, consumer-owned utilities, electric co-ops rely on a diverse fuel mix to provide affordable, reliable electricity to 42 million Americans. And we believe strongly in our responsibility both to our environment and to members, who often serve some of the most economically vulnerable populations in this country.


Jo Ann Emerson
NRECA CEO

"That's why NRECA continues to urge the Administration to reconsider this proposal and the potentially damaging effects it could have on our communities and economy," Emerson concluded.

Co-op members nationwide are encouraged to visit action.coop to send EPA a message.

The emissions standards require carbon capture and storage at new coal plants despite this technology not existing on a commercial scale at any power plant anywhere in the world.

Partnering in Health

Co-ops Invest in Local Health Care

Having access to local healthcare is important for individuals in communities large and small.

And, co-ops in South Dakota and western Minnesota are helping provide assistance in funding these vital projects.

Since inception, the REED Fund and its member cooperatives in eastern South Dakota and western Minnesota have invested or committed nearly $7 million in financing to 23 heath care related projects. In addition, more than $1 million has been invested in loans to assist fire departments, which also provide emergency services in rural areas. Electric cooperatives offer two types of financing for health care related projects: direct financing from their nonprofit fund, Rural Electric Economic Development, Inc. (REED Fund) and financing through applications to USDA Rural Development's Rural Economic Development Program for zero percent loans to qualifying projects.

The following is a short list of projects completed or approved in the last year:

Sundial Manor, *Bristol, S.D., Lake Region Electric Association, Webster,* received its third loan for ongoing improvements and upgrades to a skilled nursing and assisted living facility. The loan included funds for upgrading physical therapy, renovating resident rooms, remodeling offices and common areas and improving energy efficiency at the manor, all of which contribute to improved ac-

cess to services and ultimately quality of life of the residents.

Horizon Health, *DeSmet, Kingsbury Electric Cooperative, DeSmet.* Completed in the summer of 2013, the addition of a 9,200-square-foot facility enabled Horizon Health to expand its dental practice from two to eight dental operatory rooms, hire an additional dentist and support staff to reduce the patient waiting for routine services. It also helped grow, improve services and incorporate the medical facility into a new building to provide patients with access to coordinated care and vital support services.

Hand County Memorial Hospital, *Miller, Dakota Energy Cooperative, Huron*. This project includes a new hospital wing addition; renovation of the therapy, wellness and vision clinic; renovation of the clinic office building and upgrade of the assisted living facility. Health care services provided by Hand County Memorial include home health, wellness, community nursing, nutrition and ambulance. REED funds supplemented primary financing to complete the project.

Tyler Healthcare, *Lake Benton, Minn., Clinic, Lyon-Lincoln Electric Cooperative, Tyler, Minn.* Tyler Healthcare is dedicated to helping its neighboring rural communities in achieving economic improvements and stability. The Lake Benton clinic provides the only medical care for the Lake Benton area. Financing from Lyon Lincoln provided important physical improvements to the facility and enabled Tyler Healthcare to obtain Provider-Based Rural Health Clinic designation from the US Department of Health and Human Services for the Lake Benton Clinic, increase staff and hours of service, thereby expanding service to the area.

Rock County Opportunities, *Luverne, Minn., Sioux Valley Energy, Colman, S.D.* Financing will assist Rock County Opportunities to assist with construction of an addition to its existing facility will create space for more work opportunities for developmentally disabled persons. RCO currently has 56 clients receiving training services and employment, serving 25 local employers. Employees are given an opportunity for training and long-term employment and the outcomes are new opportunities for business growth and new jobs in the community both for people with disabilities and for people to work at RCO assisting its clients.

Madison Community Hospital, *Madison, Sioux Valley Energy, Colman, S.D.* MCH is constructing a new facility to replace its existing hospital originally constructed in 1958. The loan funds from Sioux Valley will be used to obtain equipment for the Radiology Department. Madison Community Hospital and its 145 employees are dedicated to providing cost-effective, quality inpatient and outpatient healthcare services. As a critical access hospital, it provides basic inpatient, outpatient, diagnostic and emergency services to Madison and surrounding rural communities in Lake, Kingsbury, Miner, Moody and McCook counties.

The REED Fund, established in 1996, is a nonprofit corporation governed by 21 electric cooperatives in South Dakota and Minnesota. The fund demonstrates cooperative principles of commitment to community and cooperation among cooperatives in a meaningful way that adds value to the local economy. REED provides gap financing to assist business, community projects, value added agriculture and multi-family rental housing. It counts numerous community banks, state, regional and local development corporations as its partners. For more information contact your local electric cooperative.

About REED Fund, Inc.

The REED Fund, Inc. was established in 1997 by electric cooperatives in South Dakota and Minnesota as a 501.c.3, non-profit corporation. Governed by 21 electric cooperative members of East River Electric Power Cooperative, the fund demonstrates cooperative principles of commitment to community and cooperation among cooperatives in a meaningful way that adds value to the local economy.

Mission:

To provide financing and help leverage investment to improve and make a difference in the region, by assisting development projects that

- promote growth, contribute to job, business and wealth creation
- improve the infrastructure and economic base in rural areas

Projects:

The REED Fund provides gap financing to both for-profit and non-profit entities. Projects include, but are not limited to:

- Small and medium sized business and cooperatives engaged in manufacturing, retail, service and tourism
- Community projects relating to water/wastewater, healthcare, education, telecommunications and public safety, recreation and arts, etc.
- Producer-owned businesses and cooperatives that add value to agriculture
- Multi-family rental housing with strong community support

Strategy:

Consideration is given to the level that the proposed project provides opportunities to rural residents and/or communities through

- Business development, expansion, retention and/or attraction
- Job creation/retention and/or wealth creation
- Capital investment and/or community improvement projects are considered high priority if they
- Add value to locally produced raw materials (agriculture)
- Improve the quality of life (facilities and/or services)
- Contribute to future economic growth in the area (business and housing)

Resources

- Total Lending Capital – $29 million
- Total Lending – 241 Loans – $54.5 million, plus $4.1 million in commitments
- Total Loans Outstanding – $18.1 million
- Total Project Investment – $466 million• Total Employment (created and retained) – 6,800 jobs
- Average loan size – $226,000 ($8,000 loan dollars per job assisted)

Regional Dateline

January 24-25
Mark Morris Dance Group
Sioux Falls, SD, 605-367-6000

January 25
Kool Kids' Klassic Fishing
Derby, Bruce, SD
605-627-5441, www.gfp.sd.gov

January 25
Bootlegger's Ball
Brookings, SD, 605-688-5423
southdakotaartmuseum.com

January 31-February 1
Living History Fair
Watertown, SD, 605-881-1758

January 31-February 2
Sinte Gleska University
Founders Day Pow-wow
Mission, SD, 605-856-8100

January 31-February 9
Black Hills Stock Show &
Rodeo Rapid City, SD
605-355-3861
www.blackhillsstockshow.com

February 1-2
Dakota Territory Gun
Collector's Association Show
Aberdeen, SD, 701-851-0129

February 11
Ag Fest, Pierre, SD
605-945-2548

February 11-15
Winter Farm Show
Watertown, SD, 605-886-5814

February 15
James Valley Model Railroad
Open House, Aberdeen, SD
605-226-2139

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Events of Special Note

February 7-9
Winterfest of Wheels Indoor
Car Show, Convention Center
Sioux Falls, SD, 605-231-3100
www.winterfestofwheels.com

March 8-9
Power 106 Big Boy Toy Show
Watertown, SD, 605-884-3548

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.

February 17
Farm & Home Show
Wessington Springs, SD
605-539-1929
www.wessingtonsprings.com

February 21
Kenny Rogers in Concert
Deadwood, SD, 605-559-1187
deadwoodmountaingrand.com

February 25-27
Ag Expo, Aberdeen, SD
605-725-5551
www.aberdeenagexpo.com

February 26
17th Annual Liberty Ball Game
7 p.m., Riggs High School Gym
Pierre, SD, 605-341-4311

February 27-March 2
Annual Sioux Falls
Sportsmen's Boat, Camping
and Vacation Show
Sioux Falls, SD, 763-755-8111
www.siouxfallsportshow.com

February 28-March 2
Home Builders Show
Watertown, SD, 605-878-3033

March 1
Book Blast at the Empire Mall
Sioux Falls, SD, 605-361-3301
www.simonkidgitsclub.com

March 7
Craig Morgan in Concert
Deadwood, SD, 605-559-1187
deadwoodmountaingrand.com

March 8-9
2014 Gun Show
American Legion Hall
Saturday 9 a.m. to 5 p.m.
Sunday 9 a.m. to 3 p.m. MST
Philip, SD, 605-859-2635
605-859-2280, 605-859-2892
or 605-859-2219

March 8-9
Spring Arts & Craft Show
Aberdeen, SD, 605-226-2162
www.lakewoodmall-sd.com

March 15
James Valley Model Railroad
Open House, Aberdeen, SD
605-226-2139

March 15
Satisfaction (Rolling Stones
Tribute) in Concert
Deadwood, SD, 605-559-1187
deadwoodmountaingrand.com

March 15-16
Advantage RVs Spring Camper
Show, Watertown, SD
605-753-5022

March 20
Tracy Lawrence in Concert
Deadwood, SD, 605-559-1187

March 22-23
Farm Toy & Collectables Show
Aberdeen, SD, 605-225-4841

March 22-23
Curt Carter Memorial Gun
Show, Watertown, SD
605-793-2347