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Produced by the following electric cooperatives in South Dakota and western Minnesota:

Black Hills Electric, Custer, S.D. Bon Homme Yankton Electric, Tabor, S.D. Butte Electric, Newell, S.D. Cam Wal Electric, Selby, S.D. Central Electric, Mitchell, S.D. Charles Mix Electric, Lake Andes, S.D. Cherry-Todd Electric, Mission, S.D. Clay-Union Electric, Vermillion, S.D. Codington-Clark Electric, Watertown, S.D. Dakota Energy, Huron, S.D. Douglas Electric, Armour, S.D. East River Electric, Madison, S.D. FEM Electric, Ipswich, S.D. Grand Electric, Bison, S.D. H-D Electric, Clear Lake, S.D. Kingsbury Electric, De Smet, S.D. Lacreek Electric, Martin, S.D. Lake Region Electric, Webster, S.D. Lyon-Lincoln Electric, Tyler, Minn. Moreau-Grand Electric, Timber Lake, S.D. Northern Electric, Bath, S.D. Oahe Electric, Blunt, S.D. Renville-Sibley Co-op Power, Danube, Minn. Rosebud Electric, Gregory, S.D.

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> Brenda Kleinjan, Editor Dawn Trapp, Communications Specialist Design assistance by TDG Communications, Deadwood

May is National **Electrical Safety Month**



Ed Anderson General Manager, South Dakota **Rural Electric Association**

May is National Electrical Safety Month, electric cooperatives in South Dakota and western Minnesota are joining with the Electrical Safety Foundation International (ESFI) to raise awareness about potential home electrical hazards and the importance of electrical safety. This year's campaign features the launch of Electrical Safety Illustrated magazine, which discusses timely electrical safety issues and equips consumers with the knowledge to protect their homes, families, and communities from electrical hazards.

The National Fire Protection Association (NFPA) estimates 47,700 home structure fires reported to

U.S. fire departments each year involve some type of electrical failure or malfunction as a factor contributing to ignition. These fires result in 418 civilian deaths, 1,570 civilian injuries, and \$1.4 billion in direct property damage. Awareness and education are critical to reduce the incidence of electrical fires, and ESFI sponsors National Electrical Safety Month each May to educate the public in order to reduce the number of electrically related fires, fatalities, injuries and property loss

Many electrocutions and home fires can be prevented by understanding basic electrical safety principles and by taking simple precautions.

Many electrocutions and home fires can be prevented by understanding basic electrical safety principles and by taking simple precautions.

This year's campaign features a collection of easily sharable safety resources that provide a fundamental understanding of electrical safety that will encourage National Electrical Code® (NEC) process and address the importance of timely adoption, an illustrated guide that break downs the importance of arc fault circuit interrupters (AFCIs) and ground fault circuit interrupters (GFCIs) while highlighting their differences, a graphic that explains tamper resistant receptacle (TRR) technology, a National Electrical Safety Month quiz, tips for avoiding counterfeit electrical products, and important information on home surge protection.

ESFI encourages the sharing of its campaign resources, and developed The National Electrical Safety Month 2014 Electrical Safety Advocate Guide to provide the resources necessary to raise awareness of electrically safe practices. Whether you want to educate a loved one or raise awareness in your community, school, or workplace, this guide provides step-by-step instructions on how to be an Electrical Safety Advocate and help champion ESFI's cause of minimizing electrically-related deaths and injuries.

Electrical safety awareness and education among consumers, families, employees and communities will prevent electrical fires, injuries, and fatalities. For ESFI's complete collection of National Electrical Safety Month resources, and for more information on spring safety, visit www.esfi.org. See more at: http://www.esfi.org/index.cfm/cd/FAP/cdid/13338/

pid/10272#sthash.6EZzDy7w.dpuf



Motorcycle Safety Tips

Among all motor vehicles, motorcycles are the most vulnerable on the road. Because motorcycles do not have seat belts, you can be thrown off your seat in a crash, which can result in serious injury or even death. Imagine your chance for survival if a truck strikes you, or if you strike it. Hitting a truck is like hitting a steel wall. However, your chance for survival will be increased if you wear a helmet and follow the safety tips below when riding your motorcycle.

Watch the no-zones

Never hang out in a truck's blind spot or "No-Zone." Trucks have large No-Zones on both sides, the front and behind the truck. Truck drivers cannot see you when you ride in these blind spots. The front blind spot is particularly dangerous if you need to stop quickly. Because of their lightweight and braking system, motorcycles can stop much faster than trucks. A truck may not be able to stop as quickly as you do, so you need to take special precautions to avoid crashes before they happen.

Always wear a helmet

Make sure to always wear a helmet. Beware of helmets that do not meet U.S. Department of Transportation (DOT) standards. Check for the DOT label inside your helmet. Helmets are the most important piece of equipment you can wear when riding your motorcycle. A helmet could be your only source of protection in a serious crash.



Drive to survive

Motorcycles are the smallest vehicles on the road. Unfortunately they provide virtually no protection in a crash. Other drivers may not see you on your motorcycle, so you must be aware of everything on the

road. Be extra cautious, paying attention to the signals and brake lights of other vehicles, especially trucks. Ride with caution and drive defensively. Never ride in between lanes in traffic or share a lane with another vehicle. Don't instigate aggressive driving with other motorists; you will only increase your chance of a crash.

Check yourself and your bike

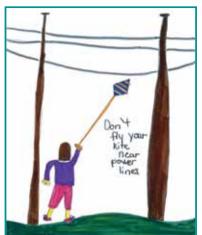
Conduct a safety inspection of your motorcycle before each ride and wear protective clothing including gloves, boots and a jacket. Proper maintenance and protective clothing will help reduce your chance of a crash or the severity of injury if you are involved in a crash, especially with a large truck or bus.

Watch Your Speed

Of all vehicles, motorcycles accelerate the fastest, while trucks and buses are the slowest. Please watch your speed around trucks, especially in bad weather or at night. Colliding with the back of a truck will end your riding days.

Source: sharetheroadsafely.org

Kids' Corner Safety Poster



"Don't fly your kite near power lines."

Ciana Schwader, 10 years old

Ciana is the daughter of Joe and Tara Schwader, Howard, S.D. They are members of Central Electric Cooperative, Mitchell, 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.



America needs an ALL-OF-THE-ABOVE STRATEGY

Reader **Recipes**

Comforting Casseroles

Chicken Cordon Bleu Casserole

1 lb. pasta, any fun-shaped pasta 1 cup cooked and cubed chicken 1 cup cooked and cubed ham 1-1/2 cups milk 8 oz. cream cheese

2 T. minced onion 2 cups shredded Swiss cheese Salt, pepper and cayenne pepper to taste 1 cup panko crumbs 1/2 cup butter, melted

Cook pasta; drain. Add chicken and ham; stir to combine. Combine milk, cream cheese and onion; heat until smooth. Stir in pasta mixture. Add cheese and seasonings. Put in a baking dish. Top with crumbs and butter. Bake at 350F°F. for 35 minutes.

Mary Truman, Kimball

Better Bean Casserole

| 3 T. butter | 1 (15 oz.) jar alfredo sauce |
|----------------------------|-------------------------------|
| 6 oz. mushrooms, sliced | 4 oz. cream cheese, softened |
| (2 1/2 cups) | 1 T. flour |
| 1 tsp. chopped fresh thyme | 1-1/2 cups crushed sour cream |
| 1/2 tsp. garlic powder | & onion potato chips, divided |
| 1/4 tsp. pepper | 2 cans green beans, drained |

Melt butter in skillet over medium heat. Add mushrooms, thyme, garlic powder and pepper; cook, stirring, until lightly browned - about 3 minutes. Reduce heat to low. Stir in alfredo sauce, cream cheese and flour; cook, stirring occasionally, until cream cheese is melted and sauce is heated through - about 3 to 4 minutes. Stir in 1/2 cup crushed potato chips and green beans. Transfer to ungreased 2-1/4 quart baking dish; cover. Bake at 350°F. until hot and bubbly - about 45 minutes. Sprinkle with remaining chips. Bake an additional 5 minutes until chips are lightly browned.

Janie Wittmeier, Bruce

Stuffing Casserole

1 lb. ground beef 1/4 cup chopped onion 1 (10.5 oz.) can cream of chicken soup

1 (16 oz.) can cream-style corn 8 slices Velveeta cheese 1 (6 oz.) pkg. stove-top stuffing mix

Brown ground beef and onion; drain. Add soup and corn. Place in a 9x13 pan. Top with stuffing mix prepared as directed on package. Bake at 350°F. for 1 hour.'

Donna Beck, Worthing

German Potato Salad Casserole

1 lb. ground beef (90% lean) or ground turkey 1 cup chopped onion 2 cloves garlic, minced 1 tsp. dried thyme leaves, crumbled 1 (14.5 oz.) can diced tomatoes, well drained 1-1/2 cups shredded Swiss cheese, divided

Cook ground beef, onion, garlic and thyme in a large nonstick skillet over medium heat 8 to 10 minutes or until beef is no longer pink; drain. (Beef should be left in large crumbles.) Season with salt, if desired, and pepper. Stir in potato salad and tomatoes. Cook over medium heat until liquid is reduced and thickened, about 7 minutes, stirring occasionally. Stir in 1 cup cheese and spoon mixture into an ungreased 2-quart baking dish. Sprinkle remaining cheese on top. Bake at 350°F., uncovered, for 15 minutes or until bubbly. Remove from oven and let stand 5 minutes before serving. Makes 4 servings.

Nutritional information per serving (using 90% lean ground beef): 476 calories; 36 g protein; 33 g carbohydrate; 22 g fat; 682 mg sodium; 110 mg cholesterol; 2 g dietary fiber; 3 mg iron; >1 mg thiamin; 933 IU Vitamin A; 15 mg Vitamin C

Pictured, Cooperative Connections

Hot Rice Dish

- 2-1/2 cups minute rice 2 cups cubed chicken or ham 1/2 cup chopped celery 1/4 cup chopped onion 1 (10 oz.) pkg. chopped broccoli (frozen)
- 1 (10.5 oz.) can cream of chicken soup 1/2 cup milk 1 can chopped, drained water chestnuts 1 jar cheese whiz

Combine all ingredients. Bake at 350°F. for 1 hour in a covered baking dish or cake pan.

Denene Miles, Doland

Bacon Cheeseburger Casserole

1 lb. ground beef 1 onion, chopped 1/3 cup ketchup 2 T. yellow mustard

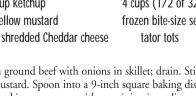
1 cup shredded Cheddar cheese

8 slices bacon, cooked, crumbled 4 cups (1/2 of 32 oz. pkg.) frozen bite-size seasoned

Brown ground beef with onions in skillet; drain. Stir in ketchup and mustard. Spoon into a 9-inch square baking dish sprayed with cooking spray; top with remaining ingredients. Bake at 400°F. for 30 to 35 minutes or until casserole is heated through and tator tots are golden brown.

Jillian Nedved, Harrisburg

Please send your favorite ethnic, dessert and salad 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.





Geothermal Heat Pumps Provide Heating and Cooling Advantages



Energy Cents Ideas

Jim Dulley www.dulley.com

Dear Jim: I have an old inefficient propane furnace and central air conditioner. I was thinking of replacing them with a geothermal heat pump. Does this sound like a good idea and what types are best? – Steve H.

Dear Steve: With all the problems last winter with pro-

pane shortages and the price uncertainty of natural gas, many people are considering geothermal heat pumps. In fact, I just installed a variable-speed WaterFurnace 7-Series geothermal heat pump in my own home.

In addition to extremely efficient and comfortable heating, a geothermal heat pump also is the most efficient central air-conditioning system available. During summer, when in the cooling mode, it provides free water heating for additional savings.

Even though the overall geothermal heat pump installed cost is higher than other heat pump systems because of the ground loop, it will pay back its higher cost in savings. Also, if one is installed by 2016, there is a 30 percent federal tax credit on the total cost.

The difference between a standard and a geothermal heat pump is the geothermal unit uses liquid-filled (water/antifreeze mix) piping in the ground instead of the outdoor condenser unit. Since the ground stays at a fairly constant temperature, it is extremely efficient year-round. Most people install deep vertical loops, but I have a large backyard, so I installed a five-foot-deep horizontal loop.

The big advantage during winter is the heating output of a geothermal system does not drop as it gets colder outdoors. This is when your house also needs the most heat. For this reason, the expensive backup electric resistance heating very seldom comes on with a geothermal heat pump.

I chose this WaterFurnace model because, with its variablespeed compressor, it has the highest heating and cooling efficiencies. The heating COP (coefficient of performance) is 5.3. Using the free heat from underground, it produces more than \$5 worth of heat for each \$1 on my utility bill. When cooling during the summer, the EER (energy efficiency ratio) is as high as 41. This is more than twice as efficient as the best new standard heat pumps and central air conditioners. Instead of the heat from the house being exhausted outdoors and wasted, it goes into the water heater for free heat.

For extra savings, I also installed an optional hot water assist unit. During winter, excess heat being produced by the geothermal heat pump goes into the standard electric water heater. This heats the water using just one-fifth as much electricity as the water heater elements.

The variable-speed compressor in my 7-Series model is connected to its matching thermostat to fine tune its heating and cooling output to the instantaneous needs of my house. This provides excellent comfort and maintains even room temperatures and lower noise levels.

By constantly varying the output, it runs in more efficient, slower, quieter and longer cycles. This is coupled with a variablespeed blower which matches the air flow from the registers to the compressor output. This is why the comfort is so good.

In addition to extremely efficient and comfortable heating, a geothermal heat pump also is the most efficient central air-conditioning system available.

Another significant advantage of the variable-speed compressor is humidity control during summer. Set the desired humidity on the thermostat. When it is humid, but not very hot outdoors, the blower slows down and the compressor runs fast to provide more dehumidification with less cooling. This type of compressor also provides a 120 percent instant supercool mode.

The next step down in comfort and efficiency is a model with a two-stage compressor. Most of the time, it runs at the lower-output speed. When it cannot heat or cool your house to the thermostat setting, it automatically switches to the higher speed for more output. Its EER is as high as 30.

The simplest design is a single-stage compressor which either is on or off. This still provides much better comfort and savings over a standard heat pump.

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



Ag Contest Winners Named

Milbank, S.D., High

School's Kiera Leddy earned a \$1,100 scholarship by having the top speech in the 53rd annual state finals of the South Dakota Resource Conservation Speech Contest held April 5 in Pierre, S.D.

Leddy was among 10 South Dakota teens representing district and area conservation districts in the contest.

Scholarships totaling \$2,300 for the winners are provided by Touchstone Energy[®] cooperative of South Dakota.

Second place, with a \$750 scholarship, went to Joanna Geffre of Aberdeen while the third-place prize of a \$450 scholarship was awarded to Tiffany Schell of New Underwood High School.

The contest is co-sponsored by the South Dakota Department of Agriculture, the U.S. Fish and Wildlife Service and the South Dakota Association of Conservation Districts.

Scholarships Awarded to Future Linemen

The South Dakota Rural Electric Line Superintendents Association presented \$4,000 in scholarship awards to six students enrolled in the Mitchell Technical Institute Power Line Construction and Maintenance program recently.

Receiving \$1,000 awards were R.J. Shape, Spencer, and Rick Schiley, Webster. Receiving \$500 awards were Jacob Bialas, Parkston; Alex Duprel, Sturgis; Lucas Nehlich, Roscoe; and Jacob Stromseth, Watertown.

The committee also selected the recipient for the Mark and Kathy Hofer Power Line scholarship. The Hofers provide one scholarship each year to a qualified student in the program. This year's recipient was R.J. Shape. Hofer is a director for Central Electric Cooperative in Mitchell and represents the co-op on the South Dakota Rural Electrc Association and represents the state on the National Rural Electric Cooperative Associa-



SDRE line superintendents and scholarship recipients pose for a photo. Back row, from left: Mike Kelly, Northern Electric; Mark DeFea, Whetstone Valley Electric; Jacob Bialas, Parkston; Jacob Stromseth, Watertown; Rick Schiley, Webster; Alex Duprel, Sturgis; Lynn Kruse, Dakota Energy; Rob Vetch, FEM Electric; R.J. Shape, Spencer; and Lucas Nehlich, Roscoe. Front row: Bill Brisk, Black Hills Electric; Randy Borer, Cherry-Todd Electric; and Dave Zaug, Codington-Clark Electric.

tion board of directors.

A special memorial scholarship was awarded this year by committee member Lynn Kruse, operations manager at Dakota Energy Cooperative. The Larry Brink Memorial Scholarship of \$1,000 was awarded to Lucas Nehlich. Brink was a career power lineman and former operations manager at Dakota Energy. Brink retired in 2002 and passed away in 2013. His wife, Mary, and children Jane, Kaye, Amy, Dan, and families, along with Dakota Energy, provided the funds for the scholarship.

The SDRE Line Superintendents have awarded more than \$70,000 since the program's inception in 1997.

Governor Signs HB 1194

Utility groups from across the state witnessed Gov. Dennis Daugaard, center, sign a bill into law that provides provisions for utilities to cross railroads. Watching the signing are, from left, Greg Dean, director of industry relations for the South Dakota Telecommunications Association (SDTA); Darla Rogers, lead lobbyist for the South Dakota Rural Electric Association and SDTA; Margo Northrup, lobbyist for South Dakota Association of Rural Water Systems (SDARWS); Dist. 23 Sen. Corey Brown, R-Gettysburg; Dist. 23 Rep. Charlie Hoffman, R-Eureka; Dist. 21 Rep. Lee Qualm, R-Platte; and SDARWS Executive Director Dennis Davis.



Regulation and Stewardship:

Co-ops Strive for Balance

ELECTRIC COOPERATIVES HAVE BEEN GOOD ENVIRONmental stewards since their beginnings – living up to the co-op principle of Commitment to Community. After all, the first electric co-ops were primarily in rural areas, serving members who largely made their living off the land.

By Reed Karaim

Those members knew the value of clean air, soil and water and today's electric co-ops continue to honor that heritage. In just the last decade, power supply cooperatives have invested more than \$3.4 billion to reduce emissions and boost efficiency. They are planning billions of dollars more in further upgrades. Cooperatives have always balanced investments in efficiency and the environment with the need to control costs for members. The U.S. Environmental Protection Agency (EPA) is considering a series of new environmental standards for coal power plants that potentially could have a devastating impact on the ability of electric cooperatives to provide their members with affordable and reliable electricity.

The federal agency is tightening a number of regulations that limit power plant emissions.

While complying with all these standards could cost power generation cooperatives millions of dollars, "the most pressing issue and the one that could



have the biggest impact on us is the proposed rule that will come out this June on carbon dioxide emissions for existing power plants," says Kirk Johnson, senior vice president of government relations for the National Rural Electric Cooperative Association in Arlington, Va.

Cooperatives are more dependent on coal-fired generation than the rest of the industry. The reason lies in the tumultuous decade of the 1970s.

Electric Co-ops and Coal

Oil embargoes, gas lines, soaring prices and shortfalls. For much of the 1970s, the nation was caught up in a complicated energy crisis that involved disruptions in Middle Eastern oil supplies and a conviction the world was running out of oil and natural gas.

In 1977, President Jimmy Carter called on the United States to "shift to plentiful coal" to meet its growing energy needs. A year later, Congress went further, passing the Powerplant and Industrial Fuel Use Act to block the use of natural gas or oil to generate electricity.

Electric cooperatives stepped up to meet the challenge, adding 15,600 MW of coal-based capacity during the natural gas ban. "That's when we built 70 percent of our coal generation, during the period leading up to and during the Fuel Use Act," says John Novak, NRECA executive director of environmental issues. "We built these units when there was a need to build them and when the policy of the federal government was that coal was a domestic fuel source we should be using."

The Fuel Use Act was repealed in 1987, but co-op efforts to help the nation meet its energy needs during a time of crisis have had long-term consequences. About 70 percent of the power generated by co-ops comes from coal plants, compared to about 37 percent for the industry overall, according to Novak.

He notes these coal-fired units still have many years of effective life and that generation and transmission cooperatives have already invested significantly to meet EPA regulations. Coupled with the other rules now being considered by the EPA, the rule on carbon dioxide emissions could be the "straw that breaks the camel's back," Novak says, making the continued operation of some plants financially unfeasible. If complying with the standard proves too costly, it may make more economic sense to shutter some units rather than spend millions to comply.

Cooperatives believe environmental regulation needs to be balanced with a realistic assessment of costs and benefits. The situation is particularly critical with regard to carbon dioxide emissions. "We're asking the EPA to recognize the unique circumstances of not-for-profit electric cooperatives and to work with us to come up with a fair solution that allows us to continue to provide affordable and reliable power to our members," says Novak.

Coal-based plants like this have helped the nation meet its energy needs, especially during times of crisis. Today, about 70 percent of the power generated by co-ops nationwide comes from this fuel. Photo by Steve Crane/Basin Electric

Pursuing a Responsible Energy Future

The EPA moved to regulate carbon dioxide after the Supreme Court ruled in 2007 that the agency had authority under the Clean Air Act to regulate greenhouse gas emissions. But many analysts believe the Act was never intended to regulate carbon dioxide. It was enacted to address problems with smog and acid rain for which proven solutions existed. No commercially viable technology yet exists for removing carbon dioxide emissions from power plants.

Still, some environmental groups have been pressing the EPA for regulations that would mandate a 25 percent reduction in carbon emissions, which would require either closing plants or severely curtailing their operations. NRECA believes this approach exceeds the intent of the Clean Air Act.

"Some groups are pushing the EPA to go beyond the blackand-white letter of the law and require emission reductions that can't be achieved with today's technology," says Johnson. "We don't think that's allowed by the law, and it will cause costs to skyrocket."

The EPA's effort to expand regulatory control of power plant emissions and other operations comes at a time when Congress has been unable to agree on legislation to address the same issues. Capitol Hill observers note the EPA took a more active role on greenhouse gases after Congress failed to pass a "cap and trade" program that would have curtailed the emissions.

More recent bills have been introduced to limit EPA's authority to regulate carbon dioxide and other greenhouse gas emissions, but "any legislation whatsoever, whether it's to strengthen or weaken the requirements, or do something in between, faces a very strong uphill fight because Congress is so divided," says Johnson.

Electric cooperatives, however, continue to lobby for reasonable solutions to EPA concerns. For example, John Cassady, senior principal for legislative advocacy at NRECA, notes coops have been working with a broad-based coalition to find an effective legislative approach to coal ash disposal. The legislation has received bipartisan support in the House, but faces a difficult road in the Senate. "Were continuing to work with our membership to try and spread the message among policymakers," Cassady says.

Congress may be paralyzed, but electric cooperatives aren't. Co-ops representatives, along with NRECA staff, have met with EPA officials to make their case. Co-ops also continue to work on upgrades and new technologies to make their plants even cleaner while still providing the service the public expects.

"Our folks are engaged in all kinds of activities to improve the efficiency and environmental performance of our power plants across the board," says Johnson. "They're very serious about finding solutions that are affordable for members."

Reed Karaim writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

Power in Numbers

Basin Electric, North Dakota Rally Energy States to Influence Carbon Rule

HEN CLOUDS OF ADVERSITY OVERSHADOWED THE well-being of those at the end of the line, allies unite to weather the storm.

The Environmental Protection agency (EPA) is developing regulations for existing power plants that are creating turbulence for rural electric utilities and those they serve.

By Dain Sullivan *Basin Today*

"We want to get the energy states together to begin a dialogue and talk about what would be a feasible rule." In an effort to establish a voice that will influence impending carbon regulations, highlighted in Section 111(d) of the Clean Air Act, North Dakota and Basin Electric Power Cooperative, Bismarck, N.D., are taking a lead role in bringing energy states together before EPA's proposed rule comes out in June 2014.

Section 111(d) addresses greenhouse gas standards for existing fossil fuel-based power plants and petroleum refineries.

Following this year's proposed rule, a final rule is scheduled to be published in June 2015, with states required to provide a plan to meet EPA's expectations by June 2016.

EPA has left little time for North Dakota and other states to develop a State Implementation Plan (SIP) in the wake of a proposed rule. The EPA has already proposed a rule to regulate greenhouse gases for new power plants, represented in Section 111(b).

Building a Coalition

To influence EPA's decision regarding carbon regulations for existing power pollutants, North Dakota and Basin Electric are pursuing an energystates coalition.

"We're trying to form a consensus around alternative options to EPA's proposed rule," said Mike Eggl, Basin Electric senior vice president of Communications and Administration. "At the state level we are working to set the stage, through the governor's office, for this energy-states concept that could have an alternative to what might come out of the rule or might also be used to influence the rule."

The cooperative has provided regular updates to North Dakota Gov. Jack Dalrymple and his staff on the EPA regulation issue. The state, including the North Dakota Department of Health, has been supportive of science-based, achievable regulations.

Dale Niezwaag, Basin Electric senior legislative representative, has worked with Eggl to coordinate Basin Electric's communications with North Dakota and other states.

"The governor has been very supportive in our work toward establishing an energy-states coalition" Niezwaag said. "Along with the state's support, the attorneys general have also been very active in pushing back on regulations where they feel EPA is going too far on infringing state rights or not approving state programs."

The idea of an energy-states coalition is a fairly new one. It was the success of similar coalitions in eastern states and California that increased the concept's potential.

"We want to get the energy states together to begin a dialogue and talk about what would be a feasible rule," Niezwaag said. "We'd also like to see if there's industry consensus for what should be done, and convey that to EPA."

State primacy. It's an area where tension exists between EPA and the states. Basin Electric stands by the idea of a states-first approach to carbon regulation and is working with the Republican Attorneys General Association and surrounding state attorneys general toward a flexible approach to the carbon rule.

"If this flexible option of proposals doesn't work, that sets the stage for us to challenge the rule legally," Eggl said.

Prior to EPA's proposed ruling, an energy-producing states summit is scheduled for April 16-17 at Bismarck, N.D., State College's National Energy Center of Excellence. At least 12 states are expected to attend the event, during which further discussion on impending regulations will be shared.

Talking with Other Energy Groups

In the meantime, Basin Electric is also working closely with associations like Lignite Energy Council and American Coalition for Clean Coal Electricity to underline common ground on the topic of state flexibility. The cooperative has established similar interest in the idea with regional generation and transmission cooperatives and investor-owned utilities (IOU).

"We think there's a lot of common ground between cooperatives and IOUs on this issue," Niezwaag said. "We're not going to agree on every point, but the idea is that there's a lot of commonality."

Representatives at Basin Electric have also teamed up with members and statewide associations to draft a white paper outlining main talking points for the proposed carbon rule.

"The kernel of everything we do in this situation is motivated by a consensus within the membership that this is an important issue. It's worth billions of dollars to the co-op future, and we work on it jointly with the statewide associations," Eggl said.

Working with EPA

Following President Barack Obama's call for stricter limits on carbon emissions, Basin Electric aims for more dialogue with EPA. In recent months, the EPA has held listening sessions regarding the 111(d) issue as a main avenue of communication.

"EPA has been open to receiving comments so far, "Niezwaag said.

One of the major questions being directed toward EPA is whether utilities like Basin Electric will get any form of recognition in regards to existing power plants. Basin Electric Senior Legislative Representative Steve Tomac is hopeful for that outcome, considering the majority of the cooperative's generation fleet is coal-based.

"Are we going to get some kind of credit for the work we've already done?" Tomac asks. "We're certainly hopeful EPA will recognize that we're going to have some stranded costs. If the states are given flexibility, we're confident we can probably meet some reasonable controls."

"EPA does respond, but it takes a lot of pressure, and that pressure either has to come from Congress, from the states or from the public," Niezwaag said. "Our best effort is to get the states."



Basin Electric Interim CEO and General Manager Paul Sukut, right, listens to Environmental Protection Agency (EPA) Administrator Gina McCarthy speak

EPA Administrator Visits Basin Electric Facilities

U.S. Sen. Heidi Heitkamp, D-N.D., invited Environmental Protection Agency (EPA) Administrator Gina McCarthy to Dakota Gasification Company's Great Plains Synfuels Plant near Beulah, N.D., on Feb. 28 to hold a listening session on proposed greenhouse gas regulations. Heitkamp and McCarthy led a roundtable discussion including U.S. Sen. John Hoeven, R-N.D., U.S. Rep. Kevin Cramer, R-N.D., and more than 15 local utility, union and government representatives.

McCarthy said the EPA has been holding these listening sessions so the agency can come up with rules for regulating greenhouse gases on existing plants, including carbon dioxide. "I know there are significant concerns about the proposed rules we're moving forward on to reduce carbon pollution," she said. "That's why we're here, to tell states not to worry. Tell us the information, but in the end you are going to have to be at the table participating in the implementation of this final rule. And it had best be implementable."

Much of the discussion from utility leaders, such as Basin Electric Interim CEO and General Manager Paul Sukut, centered around needing regulatory certainty, and needing regulations to be achievable while utilities work to keep the lights on affordably. Sukut told McCarthy about the 2011 study done at Antelope Valley Station to determine whether carbon capture would be doable on an existing coal-based power plant. Basin Electric was set to receive a \$100 million grant from the U.S. Department of Energy to complete the project. However, a front-end engineering and design study found the project would cost more than \$500 million and would capture very little carbon dioxide. "We just couldn't get it to go. The parasitic load and the technology at all," Sukut said. "We just didn't feel like we could spend taxpayer money, go into something like that, and we weren't sure it was going to work at all."

Heitkamp reiterated what industry leaders were saying.

"I think sometimes the folks in this room think EPA is in the 'Hell no to coal' environment, and that this is all designed to terminate the long-term use of coal," Heitkamp said. "If we in fact discontinue the use of coal in our generation of electricity, and in our energy base, that will be a decision that generations in the future will look back on and consider very, very foolish."

McCarthy said the goal of the EPA is not to shut out coal, and that President Barack Obama has been clear he wants an "all of the above" strategy for fueling electricity generation. "Find ways to reduce carbon in a way that doesn't threaten energy reliability, that doesn't have a significant impact on price, that allows every fuel to continue to be burned and utilized. Those are my parameters," she said. "EPA has been asked by the president to move forward on greenhouse gas rules. But the president was very clear. No. 1, we have an all-of-the-above strategy. Coal is part of the energy mix today and it will be for decades in the future."

McCarthy toured the model room at the Great Plains Synfuels Plant as part of the visit. Watch videos from the visit on YouTube at http://bit.ly/ McCarthyVisit.

~ By Tracie Bettenhausen Basin Today

Keeping Cool: Proposed Intake Rules Costly

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HE LAST OF THE BIG **5** REGULATORY ISSUES WE'LL examine is the Cooling Water 316(b) Regulations proposed by the Environmental Protection Agency.

Intent of Rule: Reduce Damage to Aquatic Life

This rule was proposed under a section 316(b) of the Clean Water Act in April of 2011. The intent of the rule is to reduce damage to aquatic life through impingement or entrainment. Impingement is when aquatic creatures are trapped against the inlet screens of cooling water intake locations. Entrainment is when these creatures are actually drawn into the cooling water system.

Rule Requires Permits and Imposes Limits

The rule required that National Pollutant Discharge Elimination System (NPDES) permits be obtained for facilities with cooling water intake structures. The permitting process ensures the location, design, construction and capacity of the structures reflect the best technology available (BTA) to minimize harmful impacts on the environment. In part, it also applies limits on the number of fish that can be harmed at any site that takes in at least 2 million gallons of water per day with the possibility of more stringent standards being applied at any facility that takes in at least 125 million gallons per day. The new rules will have no effect on health or water quality.

EPA Regulations Challenged by Electric and Environmental Stakeholders

The origins of this rule are from Environmental Protection Agency (EPA) action in February 2004. The EPA took final action on regulations governing cooling water intake structures at certain power producing facilities. These regulations were challenged by both the electric industry and environmental stakeholders. The U.S. Court of Appeals for the Second Circuit ultimately agreed with many points raised by the environmental groups. Their decision was to remand this rule back to EPA. EPA, in turn, suspended the rule as the court's decision impacted its content greatly.

Supreme Court Allows Utilities to Apply Costbenefit Analysis

Subsequently, the Supreme Court agreed to review part of the rule pertaining to the EPAs ability to consider costs and benefits when choosing intake system technology to protect aquatic life. Finally, in April of 2009 the Supreme Court reversed the Second Circuit Courts ruling and decided it is permissible for utility companies and regulators to apply cost-benefit analysis when deciding what technology is necessary to protect aquatic life from large industrial cooling water intake structures. This action would allow utilities some measure of control over costs associated with compliance with the final

Water from the Missouri River supplies several power plants in North Dakota.

By Tim McCarthy



rule. However, this merely helps limit what will still result in very significant compliance costs.

By EPA's own analysis, annualized costs to comply with the impingement requirements in the proposed rule would exceed the environmental benefits by 20-to-1 (\$384 million to \$18 million). An EPRI review of peer reviewed literature found no evidence that regulating CWIS will improve fish populations.

NRECA Pleased with Proposed Site-specific Ruling

While no final ruling has been issued, the National Rural Electric Cooperative Association (NRECA)



Part Five of a Five-Part Series

is pleased the proposed rule allows for site-specific analysis and for the consideration of costs when making decisions on which technologies must be installed. The proposed rule also does not require existing generation facilities with once-through cooling designs to retrofit their systems when it does not make economic sense, and when less expensive alternatives may exists. The NRECA emphasized that any new water discharge controls or clean water requirements should strive to meet established environmental goals to enhance water quality through scientifically sound, cost-effective methods, while allowing as much flexibility as possible to utilities in their efforts to meet these goals.

Realistic Balance Between Environmental Impacts and Energy Costs Must Be Found

There is no current effective date established for the enforcement of the regulations outlined within this rule. It appears an impingement standard may go into effect between 2013 and 2020. EPA missed the Jan.14, 2014, deadline which had already been extended from June 2013 to allow the Agency to initiate a formal consultation with the Fish and Wildlife Service (FWS) and National Marine Fisheries Service under the Endangered Species Act.

Entrainment deadlines are expected to be set by individual states. This is a tough debate with extremist on both sides of the issue, one side saying the harm of any aquatic life is unacceptable, and the other saying we simply must produce regardless. In the end, it is a great example of what I have continually said about any energy policy. We must find a realistic balance between the environmental impacts and the costs to sustain our current way of life. If we can't find that balance, something will have to change significantly if it comes down to one side "winning" and one side "losing."

Editor's Note: This month addresses the final part of a five-part series that examined various federal regulatory proposals that affect you and your cooperative. This series focused 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.

Water Rule Raises Concerns

A water rule proposed by the Environmental Protection Agency would grind the U.S. economy to a halt by expanding federal authority over everything from ditches to seasonal streams, House GOP lawmakers told the agency.

"Every hollow and valley in my region has some sort of a stream running through it, sometimes dry or intermittent, and those will be under your jurisdiction," said Rep. Hal Rogers, R-Ky.a and chairman of the House Appropriations Committee. "You're grinding to a halt the economic engine of this country."

Rogers' comments were directed at EPA Administrator Gina McCarthy, the sole witness before the Subcommittee on Interior, Environment, and Related Agencies on March 27.

The agency and the U.S. Army Corps of Engineers released the "Waters of the U.S." proposed rule March 25 to clarify what bodies of water are subject to the Clean Water Act requirements.

Publication in the Federal Register, expected within a couple of weeks, will initiate 90 days for public comment.

Reaction from Capitol Hill was swift.

"You just fired the first shot over the bow in the West, because this is war," Rep. Mike Simpson, R-Idaho, told McCarthy at the hearing. "Water is obviously vitally important in Idaho. Just because the EPA or the Army Corps doesn't regulate it under the current rule doesn't mean that it isn't regulated. The states regulate it."

Rogers called the proposal "the biggest land grab in the history of any federal agency in the history of mankind, really."

Subcommittee Chairman Ken Calvert, R-Calif., echoed those conclusions: "Now every small business and farmer could be subject to EPA fines if they disturb a puddle on their land."

McCarthy responded that the agency was trying to follow a key Supreme Court decision and provide "certainty" to landowners about their clean water obligations. "The cost of uncertainty at this point is much larger than the cost of rule," McCarthy said. "We do not believe we are expanding the reach of the Clean Water Act beyond its historical waters."

Rogers remained unconvinced and contended that the courts will find that EPA "completely overreached beyond your legal authority given by the Congress." Rogers said he was also concerned that this proposal and EPA's pending greenhouse gas standards will extinguish the coal industry.

"Don't look for any friendship out of this seat," Rogers told McCarthy. "The nation needs this inexpensive electricity that comes from burning coal. Nothing else can produce the power that is already in place by burning coal. So whether you like it or not, and I know you don't, you are going to have to use coal to keep your lights on."

NRECA is also anxious about the repercussions of the water proposal and is engaged in a broad industry effort to reduce its impact on thousands of tributaries, ditches flood plains, wetlands and seasonal streams.

"We are reaching out to Congress and the states; we are working with a broad coalition of stakeholders to blunt the impact of this proposal and find a workable solution to maintain clean water for co-op communities without the unnecessary costs this proposal could impose," said Dorothy Kellogg, NRECA environmental principal for waste and water.

By Cathy Cash, ECT Staff Writer

National Electrical Safety Month:

Does Your Home Pass Muster?

MAY IS NATIONAL ELECTRICAL SAFETY MONTH, and electric cooperatives across the United States are joining with the Electrical Safety Foundation International to raise awareness about potential home electrical hazards and the importance of electrical safety. This year's campaign, "Back to the Basics," challenges consumers to make home electrical safety assessments a priority.

According to the Consumer Electronics Association, the average home today has a minimum of three televisions, two DVD players, at least one digital camera, one desktop computer and two cell phones.

Modern homes run on electricity, but if you don't properly maintain your electrical products they can create hazards. The good news is that eliminating electrical hazards from your home doesn't have to be difficult or expensive.

Each year, home electrical problems alone account for an estimated 53,600 fires. These fires cause more than 500 deaths, 1,400 injuries and \$1.4 billion in property damage.

Older Homes Pose an Even Greater Threat

Many of these fires occur in aging homes. Today, our dependence on electricity is increasing, and we are expecting more out of our home's electrical system. According to the U.S. Census Bureau, half of the homes in use in the United States were built before 1973. These homes were built before many of the electronics and appliances we use today were even invented. Unfortunately, our increased demands for energy can overburden an older home's electrical system causing fires or electrocutions.

Put Into Perspective

One-half of the homes in the United States were built prior to the advent of drip coffee makers and garage door openers.

• One-third of these homes were built before hairdryers or electric can openers were invented.

• This does not even take into account the recent explosion in the use of computers, cell phones and other personal electronic devices.

Electrocutions Can Be Prevented

Fire is not the only danger. Each year, hundreds of people in the U.S. are electrocuted in their own homes.

Many electrocutions and home electrical fires can be prevented by using more up-to-date technology and by recognizing warning signs your home may be showing.



GFCI Quick Tips

- GFCIs should be used in any area where water may come in contact with electrical products.
- Put a ground fault circuit interrupter (GFCI) between your electric power source and your electric product.
- Test your GFCIs monthly, and after every major electrical storm.
- If GFCIs are not present in your home, consult a licensed electrician about adding this important protection; purchase plug-in units; or use a portable GFCI to provide individual receptacle or load protection.

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Home Safety Checklist

Protect your family from fire and other electrical hazards by using this short checklist. These simple steps will help you to identify and to correct electrical dangers commonly found in homes.

1. Check the wattage of all bulbs in your lights.

• Are the bulbs the appropriate wattage for the size of the fixtures? A bulb with excessive wattage may overheat and cause a fire.

2. Check all lamp cords and extension cords.

• Are cords placed out of the walking areas and free of furniture resting on them? Tripping hazards may result.

• Also, stepping on cords or placing furniture on them can cause damage and create a fire hazard.

• Are cords in good condition, and not damaged or cracked? Shock or fire hazards can result from damaged cords. Do not attempt to repair cords yourself. Take any item with a damaged power cord to an authorized repair center, or safely dispose of the item and purchase a new one.

 Are cords unwrapped? Tightly wrapped cords can lead to overheating.

• Are all extension cords being used only on a temporary basis? Extension cords are not as safe as permanent house wiring. Have receptacles installed where they are needed.

3. Check all wall outlets and switches.

• Are all outlets and switches working properly? Faulty outlets or switches may indicate an unsafe wiring condition.

 Are all outlets and switches cool to the touch? Unusually warm outlets or switches may indicate an unsafe wiring condition.

• Do you hear crackling, sizzling, or buzzing from your outlets? Call a licensed electrician to identify the cause.

• Are all outlet and switch cover plates in good condition? Replace any missing, cracked or broken cover plates.

Kitchen

1. Check all counter top appliances

 Are all appliance cords placed away from hot surfaces? Pay particular attention to cords around toasters, ovens and ranges. Cords can be damaged by excess heat.

• Are all appliances located away from the

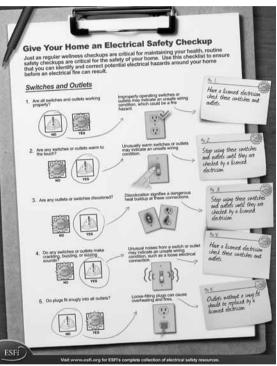
sink? Electrical appliances can cause a shock if they come in contact with water. Plug kitchen appliances into GFCI-protected outlets.

• Do appliance cords dangle from counter or table tops? These cords can catch on people passing by.

2. Check all large appliances

 Have you ever received even a slight shock (other than one from static electricity) from any of these appliances? Do not touch the appliance until it has been checked by an electrician.

Is the top and area above the cooking



range free of combustibles (for example, potholders, plastic utensils)?

• Using range for storage of non-cooking equipment may result in fires or burns.

 Is there excessive vibration or movement when the washer or dryer is operating? Movement during operation can put undue stress on electrical connections.

Bedroom

1. Check for tamper-resistant outlets

2. Check portable heaters

 Is it placed away from things that can catch fire such as drapes and newspapers? Relocate heaters away from passageways and keep all flammable materials such as curtains, rugs, furniture or newspaper at least three feet away.

 Is the equipment stable and placed where it will not be tipped over? Fire hazard can result if a heater is tipped over. Animals and even blowing drapes can be factors.

3. Check for the presence and proper placement of smoke alarms and test each one. Smoke alarms should be located on every level of the home, inside each bedroom and outside each sleeping area.

Bathroom – Electricity and Water Don't Mix

1. Check for Ground Fault Circuit Interrupters (GFCIs)

• Are the bathroom outlets protected by GFCIs? GFCIs should be installed in kitchens, bathrooms, and other areas where the risk of electric shock is high.

• If you have any GFCIs, do you test them regularly? GFCIs must be operating properly to protect against electrocution.

2. Check small electrical products such as hair dryers and curling irons

• Are they plugged in when not in use? Plugged-in electrical appliances (even when switched off) may result in an electrocution hazard if they fall into water.

 Are they in good condition? Pay particular attention to erratic operation and damaged wiring or other parts.

Basement/Garage

1. Check your breaker box

• Is your fuse box or circuit breaker

box appropriately labeled? Labeling

helps to easily identify which circuits are used for each room in your home.

• Does everyone of appropriate age know where the fuse box or circuit breaker box is located and how to turn off and restore power to the home?

• Are you regularly resetting tripped circuit breakers? Circuit breakers that trip constantly may be a sign that circuits are overloaded or that other electrical hazards exist. Consult a qualified, licensed electrician.

• Is your home protected by arc fault circuit interrupters (AFCIs)? AFCIs are safety devices that replace standard circuit breakers in the electrical service panel and that greatly reduce the risk of home electrical fires. Consult a licensed electrician if you are interested in adding AFCIprotection to your home.

Source: www.esfi.org



Regional Dateline

April 19, 26-27 and May 3-4

Pari-Mutuel Horse Racing Fort Pierre, SD, 605-223-2178

April 23

Red Green "How To Do Everything" Tour Mitchell, SD, 605-995-8430 www.cornpalace.org

April 24

Chicago in Concert Deadwood, SD, 605-559-1187 deadwoodmountaingrand.com

April 24-25

All Dakota High School Fine Arts Exhibition, Works Groton, SD, 605-626-7117

April 24-27

El Riad Shrine Circus Sioux Falls, SD, 605-336-1117

April 25

Country Gold Tour in Concert Deadwood, SD, 605-559-1187

April 25-26

Black Hills Fiber Arts Fair Rapid City, SD, 605-791-0711 www.blackhillsfiberartsfair.org

April 26

RiverRat Marathon and Bike Ride, Yankton, SD www.riverratmarathon.com

April 28-30

Shrine Circus Corn Palace, Mitchell SD 605-995-8430

April 30-May 4 Black Hills Film Festival Hill City, SD, 605-574-9454



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.

May 2-3

Platte Chamber Fishing Tournament, Platte, SD 888-297-8175

May 2-4

Naja Shrine Circus Civic Center, Rapid City, SD 605-343-4076

May 2-4

South Dakota Birding Festival Pickstown, SD, 605-487-7603

May 10

Avera Race Against Breast Cancer, Sioux Falls, SD 605-322-8900 www.averaracesiouxfalls.org

May 10-11

Aberdeen ABATE/FM Crusaders Bike Show & Dance Aberdeen, SD, 605-228-6283

May 10-11, 17-18, 25-26 Pari-Mutuel Horse Racing Aberdeen, SD, 605-715-9580 May 11 Historic Prairie Village Opening Day Madison, SD, 605-256-3644

May 12

Rodney Mack Philadelphia Big Brass in Concert Mitchell, SD, 605-996-5081

May 17

Super Diamond (Neal Diamond Tribute) in Concert Deadwood, SD, 605-559-1187

May 17

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

May 17-18 South Dakota State Poker Championship Deadwood, SD, 605-578-3670

May 23-25 and Aug. 14-16 Legendary Hart Ranch Rodeo Rapid City, SD, 605-399-2582

Events of Special Note

May 16-18

Statewide Open House and Free Fishing Weekend Pierre, SD, 605-773-3391

May 24-25

South Dakota Kayak Challenge Yankton, SD, 605-864-9011 www.sdkayakchallenge.org

May 24-25 SDRA Foothills Rodeo Wessington Springs, SD 605-770-4370

May 29-June 1

Argus Leader RibFest Sioux Falls, SD, 605-367-7288 www.sfarena.com/ribfest

May 30

Engelbert Humperdinck in Concert, Deadwood, SD 605-559-1187 deadwoodmountaingrand.com

June 6-8

Wheel Jam, SD State Fairgrounds, Huron, SD 605-353-7340 www.wheeljam.com

June 26-28

National Red Power Round Up, SD State Fairgrounds Huron, SD, 605-353-7340 redpowerroundup2014.com