South Dakota Electric







South Dakota Electric Cooperative Cornections

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Editorial

Do You Know What Your Water Heater Is Doing While You Sleep?



Ed AndersonGeneral Manager, South Dakota
Rural Electric Association

Hot water looms large in the list of household chores. Showers, laundry, dishes – they all require hot water. If you think about it, we use a significant amount of energy to heat water. Now, utilities and manufacturers are teaming up to bring you new water heaters equipped with technology that can make the electric grid smarter and more efficient.

Electric co-ops are on the forefront of research testing new water heater technologies, including ways to improve the use of water heaters to integrate renewable energy onto the electric grid.

Water heaters are unique among electric home appliances. They are omni-present, use significant amounts of electricity and can store thermal energy for hours at a time.

For decades electric co-ops have partnered with their members on "demand response programs," which allow the co-op to turn home water heaters on and off in order to reduce how much power the co-op uses during peak periods, when power is more expensive. Members get a break on their bill in exchange for participation. New communications and automation technologies make this process more reliable, predictable and efficient.

More than 250 electric co-ops in 35 states use large capacity electric resistance water heaters that can reduce the co-op's power cost and store electricity produced by wind and hydropower. For example, when the wind blows at night – when most of us are sleeping and wholesale power is cheaper – the electricity produced can be used to heat water in our homes. The water will remain hot even if the water heater is turned off for a short period. In other words, collectively, water heaters can act like a battery, storing energy.

For all of these reasons, electric co-ops were dismayed in 2010 when the Department of Energy issued new efficiency standards for electric water heaters that would have made demand response programs using large capacity, electric resistance water heaters difficult.

For the last five years, electric co-ops have been working with efficiency advocates, manufacturers and others to ensure that we can take advantage of new technologies that benefit our members. In April, Congress passed legislation that allows co-ops to continue to run these demand response programs.

Electric co-ops across the country hailed this bipartisan legislation as a win for consumers. Collectively, the current water heater programs can reduce demand by an estimated 500 megawatts, saving consumers hundreds of millions of dollars and avoiding the need for new power plants.

Electric co-ops are now looking ahead and collaborating with partners to make sure the next generation of water heaters can provide more than just hot water.

Drowning: It Can Happen In An Instant



Most parents think water safety is first and foremost on their minds whenever they are enjoying summer activities with their kids. But when the unthinkable happens and a child drowns, parents and caregivers have been known to say, "I only looked away for a second."

The Younger the Child, the Greater the Risk

Not including boating incidents, about 10 people die from drowning every day in the United States, according to the Centers for Disease Control. While drowning is a risk for every age group, National Safety Council statistics point to drowning being the No. 1 cause of death for children ages 1 to 4. Deaths in this age group are mostly due to a child falling into a pool or being left alone in the bathtub.

Distractions Make for Tragedies

Parents are cautioned all the time about water safety, but drownings still occur. Always be aware and be in the present moment with your children. Following are a few water safety precautions:

- Never leave your child alone; if you have to leave, take your child with you.
- Enroll children 3 and older in swimming lessons, but remember that lessons don't make your child "drown-proof."
- Lifeguards aren't babysitters; always keep your eyes on your child.
 - Don't let children play around drains and suction fittings.
- Never consume alcohol when operating a boat and always make sure everyone is wearing approved life jackets.
- Don't underestimate the power of water; even rivers and lakes can have undertows.
 - Always have a first aid kit and emergency contacts handy.
 - Get training in CPR.
 - If a child is missing, check the water first.

The following rules apply to all swimmers:

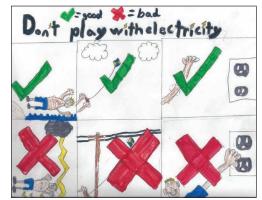
- Never swim alone.
- Don't dive into unknown bodies of water.
- Don't push or jump on others.
- Be prepared for an emergency.

Every pool, every lake and every warm summer day holds the possibility of new, fun summer experiences. All you need to add is your undivided attention.

Source: nsc.org



Kids' Corner Safety Poster "Don't play with electricity."



Hayden McNinch, Fourth-grader at Menno School District

Hayden is the daughter of Steve and Katie Huber, Olivet, S.D. They are members of Southeastern Electric Cooperative, Marion, 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.

Reader Recipes

Dairy Delights



Ice Cream in a Bag

1/2 cup rock salt (regular, rock 2 T. sugar 1 cup half and half or milk or kosher works) 1/2 tsp. vanilla

Put first three ingredients in a quart-size ziplock bag and seal. Put rock salt and ice in a gallon-size bag. Add the smaller bag to the larger bag and seal. Squeeze the bag for 10 to 15 minutes.

Mary Ellen Luikens, Tea

Wake-up Casserole

8 frozen hashbrown patties 7 eggs 4 cups shredded Cheddar 1 cup milk cheese 1/2 tsp. salt 2 cups cubed ham 1/2 tsp. dry mustard

Place hashbrown patties in a single layer in a greased 10x9-inch glass dish. Sprinkle with cheese and ham. In a bowl, beat eggs, milk, salt and mustard. Pour over ham and cheese. Cover and bake at 350°F. for 1 hour. Uncover and bake an additional 15 minutes until edges are golden brown and knife inserted in center comes out clean.

Mary Jessen, Holabird

Tutmai (Armenian) Yogurt Soup

1 egg, beaten 1 cup flat egg noodles 3 cups plain or Greek yogurt 4 T. butter 2 T. crushed dry mint 1 tsp. salt 2 cups water 1 small onion, diced

In a 2-quart saucepan, beat egg, yogurt and salt for 3 minutes. Add water. Cook on high, stirring constantly, until boiling. Add noodles. Lower heat and cook until noodles are tender. In fry pan, saute onions in butter until light brown. Add mint. Pour into soup. Cook for 5 minutes. When reheating soup, if too thick, add some boiling water.

Rose Tucker, Hot Springs

Rapid Ruby Rhubarb

1-1/4 cups flour, divided 2 eggs, beaten 1/3 cup powdered sugar 3/4 cup sugar

1/2 cup butter 2 cups finely chopped rhubarb

Mix together 1 cup flour, powdered sugar and butter. Press into 8x8-inch pan. Bake at 350°F. for 15 minutes. Combine eggs, sugar, remaining flour and rhubarb. Spread over hot crust. Bake 30 minutes or until set. Let cool 15 minutes before serving.

Jan Nelson, Belle Fourche

Powerhouse Green Smoothie

3/4 cup seedless green grapes 2/3 cup non-fat plain Greek yogurt 1/2 cup ripe banana slices 1-1/2 tsp. canola oil 1/4 cup chopped kale 1/2 cup ice cubes

In blender, combine all ingredients. Blend for about 30 seconds to 1 minute or until desired smoothness is achieved. Yield: 1 serving

Nutritional information per serving: 290 calories; 7 g total fat (0.5 g saturated fat); 0 mg cholesterol; 42 g carbohydrates; 3 g fiber; 31 g sugars; 17 g protein; 75 mg sodium; 502 mg potassium

Pictured, Cooperative Connections

Chocolate Chip Cheesecake Bars

1 (8 oz.) pkg. cream cheese, 1/2 cup coconut, if desired softened 1 (16.5 oz.) roll Pillsbury® 1/2 cup sugar refrigerated chocolate chip 1 egg cookies

In small bowl, beat cream cheese, sugar and egg until smooth. Stir in coconut. In ungreased, 8- or 9-inch square pan, break up half of cookie dough. With floured fingers, press dough evenly in bottom of pan to form crust. Spread cream cheese mixture over dough. Crumble and sprinkle remaining half of dough over cream cheese mixture. Bake at 350°F. for 35 to 40 minutes or until golden brown and firm to the touch. Cool 30 minutes. Refrigerate at least 2 hours or until chilled. Store in refrigerator.

Paula Vogel, Ethan

Crunchy Potato Balls

2 cups very stiff mashed 1 egg, beaten potatoes 1 tsp. mustard 2 cups finely chopped ham 1/4 tsp. pepper 1 cup shredded Cheddar or 2 to 4 T. flour

1-3/4 cups crushed corn flakes Swiss cheese

1/3 cup mayonnaise

Combine first 7 ingredients; mix well. Add enough flour to make mixture stiff. Chill. Shape into 1-inch balls. Roll in corn flakes. Place on greased baking sheet. Bake at 350°F. for 25 minutes...

Mary Truman, Kimball

At about 25 cents per 8-ounce serving, milk is a bargain, especially when you consider all the liquid assets inside — protein, calcium, potassium, vitamin D, vitamin B12 and more. Source: www.dairymakessense.com

Please send your favorite dessert, salad and garden produce recipes to your local electric cooperative (address found on page 3). Each recipe printed will be entered into a drawing for a prize 2015. All entries must include your name, mailing address, telepho<u>ne</u> number and cooperative

Stay Comfortable with Less AC



Jim Dulley www.dulley.com

Dear Jim: My family is trying to use less air-conditioning this summer to save electricity. Do you have any good tips for us so that we are not terribly uncomfortable in our home? – Ron H.

Dear Ron: There are quite a few free, low-cost improvements and simple lifestyle changes you can make to

reduce the amount of air-conditioning needed. However, it's important to keep in mind that initially your family will likely be a bit less com-fortable but should become accustomed to the changes quickly.

The simplest method to run the air-conditioner less is to set your thermostat a few degrees higher. The savings should be from 1 percent to 3 percent for each degree you raise it. This lessens the amount of outdoor heat that transfers into your home, which your air conditioner has to remove.

There is a limit to how high you can raise your thermostat without becoming too uncomfortable – and instigating a rebellion by your family. Other methods to minimize air-conditioning are to reduce the amount of heat that leaks into your home, reduce the amount of heat generated inside your house, control humidity levels, increase indoor air movement and use natural ventilation when possible.

Avoid sitting near a sun-exposed wall or window during sunny afternoons. Wall insulation is effective for blocking conductive heat gain, but not for radiant heat. When the outside wall gets hot in the sun, particularly a brick or masonry wall, the radiant heat comes right through the wall to your skin. It can make you feel a couple degrees warmer than the actual room air temperature. Window and door awnings can be helpful in blocking direct sunlight.

Most energy efficiency improvements, such as caulking, weather stripping and insulation, are made to reduce heat loss during winter. They also reduce heat gain during summer. Check the insulation in your attic to make sure there are no voids or thin areas where it may have loosened or blown around, and ensure all attic vents are not blocked by the insulation.

A great deal of heat is generated inside a home from cooking, bathing and running electric appliances, causing the air conditioner to work harder to remove the additional heat. When cooking or bathing, run the range hood or bath exhaust fan to remove the extra heat and moisture.

During the summer, use countertop-cooking appliances, such as a slow cooker, in the garage or outdoors to reduce indoor heat and humidity generation. Remember to unplug phone and computer chargers and other electrical items when they are not being used. Even though each device uses a small amount of electricity, they generate heat, which can add up quickly.

Wash dishes and clothes at night; avoid washing in the afternoons during peak heat. The heat given off from the hot water and electricity used by the motors will stress your air conditioner less at night. This also reduces the peak electricity demand for your utility provider.

Keeping air moving inside your home increases evaporative cooling from your skin to keep you comfortable at a higher indoor temperature. Running a ceiling paddle fan is very effective for this. Keep in mind the electric motor in the fan actually heats the room air, so turn it off when the room is unoccupied.

Set the ceiling fan on medium to high speed and the rotation switch so it blows the air downward. During winter, change the switch setting so the air blows upward and set it on slower speed.

There are quite a few free, low-cost improvements and simple lifestyle changes you can make to reduce the amount of air-conditioning needed.

On a breezy, not excessively hot day, try opening some windows. Widely open several windows on the downwind side of your home and slightly open windows on the windward side. Due to the pressure difference, this causes the air to blow in the partially opened windows much faster, creating a breeze in that room using no electricity.

Another option for staying cool is building a solar chimney, which uses the sun's heat to ventilate your house for free. This is a tall wooden chimney with two clear sides from the ceiling to above the roof. When the sun shines into the clear sides, it heats the air. Since hot air rises, it naturally exhausts air from your house. This works well when using natural ventilation on a still day. Block the ceiling opening with an insulated panel when air-conditioning or heating.

A whole-house ventilation fan, often located in a hall ceiling, can draw huge amounts of air through your house. For times when the air is not excessively humid, run the fan at night. This can cool down the entire house and delay the time in the morning when the air conditioner has to come back on.

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

Water Heater Law Signed by President

President Barack Obama recently signed an energy efficiency bill that will preserve production of large gridenabled water heaters that hundreds of electric cooperatives, including many cooperatives in South Dakota and western Minnesota, rely on for demand-response programs.

The law will allow the continued manufacturing of water heaters above 75 gallons for specific use in demand-response programs. The law supersedes a ban on the production of these water heaters set by the U.S. Department of Energy in 2010, which took effect April 16, 2015.

The signed legislation is welcome news to electric cooperatives nationwide.

"Co-ops have been in the business of saving members money for decades and this new standard keeps important programs going at more than 250 electric cooperatives. We sincerely thank the President for signing this legislation. It allows important demand response programs to continue saving consumers hundreds of millions of dollars," said **National Rural Electric Cooperative** Association (NRECA) CEO Jo Ann Emerson. "Demand response and energy efficiency programs — ones that reduce energy consumption, save money and help integrate renewable energy into the grid — should find easy agreement on Capitol Hill. This type of legislation makes a difference to the folks at the end of the power lines, the ones who pay the bills and most importantly, the ones who keep our economy going. Please help them save money and energy."

More than 250 co-ops in 35 states use large-capacity electric resistance water heaters to reduce demand during peak hours by an estimated 500 megawatts. Large, super-insulated water heaters can store low-cost, offpeak power as hot water, enabling coops to cut their fuel use and optimize operation of the electric grid.

Students Honored at Touchstone Energy® Scholar of the Year Banquet and Recognition

Touchstone Energy® Cooperatives in eastern South Dakota and western Minnesota honored some of the area's most impressive high school seniors Saturday, April 25, during the annual Touchstone Energy Scholar of the Year banquet and recognition on the campus of Lake Area Technical Institute.

The event honored the 36 high school students who were chosen each week throughout the school year as the Touchstone Energy Scholar of the Week. It's a program which recognizes students for academic achievement, co-curricular involvement and community service. The students are featured in weekly segments which air on KSFY Television and each student receives a \$100 scholarship for being chosen as the Scholar of the Week.

Hope Knedler, a senior at Vermillion High School who is from the Clay-Union Electric Cooperative service territory, was selected during the banquet as the Touchstone Energy Scholar of the Year. Knedler, who plans to attend the University of South Dakota in the fall, received a \$1,000 scholarship from Touchstone Energy Cooperatives. Colton Hageman, a senior at Lake Preston High School who lives in the Kingsbury Electric Cooperative service territory and

Chesney Arend, a senior at Bridgewater Emery High School and lives in the Central Electric Cooperative service territory, were both chosen to receive \$500 scholarships. Hageman plans to attend the University of Nebraska-Lincoln and Arend plans to attend the University of South Dakota. The names were drawn from among the banquet attendees.

Lake Area
Technical Institute's President
Michael Cartney
was the keynote
speaker for the
Scholar of the Year
banquet. KSFY
News anchor
Brian Allen served
as the master of
ceremonies.



Pictured are the 2015 Touchstone Energy® Scholars, Front row, from left: Calla Harper, Irene-Wakonda High School, Bon Homme Yankton Electric Association; Patrick Reiter, Florence High School, Codington-Clark Electric Cooperative; Rawson Yost, Clark High School, Codington-Clark Electric; Jessica Triebwasser, Colman-Egan High School, Sioux Valley Energy; Jordyne Schultz, Agar-Blunt-Onida High School, Oahe Electric Cooperative; Karee Wicks, Rutland High School, Sioux Valley Energy. Second row: Bailey Zerfoss, Wolsey-Wessington High School, Dakota Energy Cooperative; Sharon Folk, Milbank High School, Whetstone Valley Electric Cooperative; Hope Knedler, Vermillion High School, Clay-Union Electric Corporation; Lindsey Vogl, Webster Area High School, Lake Region Electric Association; Mikayla Prouty, Willow Lake High School, H-D Electric Cooperative; Chesney Arend, Bridgewater-Emery High School, Central Electric Cooperative. Back row: Jayden Mikkonen, Frederick Area High School, Northern Electric Cooperative; Jacob Milbrandt, Groton Area High School, Northern Electric; Colton Hageman, Lake Preston High School, Kingsbury Electric Cooperative: Joshua Thurow, Oldham-Ramona High School, Sioux Valley Energy; Nathan Herrold, Andes Central High School, Charles Mix Electric Cooperative; Devin Tolsma, Avon High School, Bon Homme Yankton Electric; Brandon VanOsdel, Gayville-Volin High School, Clay-Union Electric; Caleb Preszler, Menno High School, Southeastern Electric Cooperative; and Levi Olson, Waubay High School, Lake Region Electric.

To the Moon

Gee-Aye Dairy Puts Astronauts to Work

Astronauts Steve, Princess, Quincey and Vanna began doing the daily milking at the Gee-Aye Dairy west of Ethan, S.D., in June 2012. The four are not space cowboys but rather a team of robots that milk cows in Gary and Amy Blase's 160-head herd of Holsteins round the clock.

Adapting to the robots was a learning process for both the Blases and the cattle.

"Every cow reacts in her own way," said Gary. "It wasn't hard to get them to use the robots."

Each cow is equipped with a special collar and activity monitor that tells the robots when she was last milked and if it is time to milk again. (The cow can choose to be milked up to six times a day, depending on her lactation and milk production.)

A special pellet feed is in a trough at the milking station. As the cow feeds, an overhead 3-D camera records the cow's position in the milker. The robot's

arm slides into place and lasers locate each quarter of the cow's udder, attaching the milker. (The cow's first milking is mapped and stored in the computer, making subsequent milkings a bit quicker.)

One could argue the cows are part of the fitness craze and have their own version of a Fitbit. Just like the exercise monitor worn on millions of humans' wrists, the dairy cattle have activity monitors hanging from their numbered collars.

From those monitors, the Blases can track how many times a given cow went to milk, what the cow's temperature and weight were while being milked and how many minutes a day the cow spends in rumination. (Dairy cattle spend about 450 to 500 minutes a day chewing their cud. Departures from that range may indicate a variety of issues that may need to be addressed.) The data collected by the robots also includes the amount of time each of







the cow's quarters was milked, how much milk was produced and other pieces of data.

"We probably didn't realize how hard it was to put it all together," said Gary, explaining the data being recorded and displayed on the robot. "When you see this, that means what?" But, armed with the data collected, the Blases can make adjustments in their management of their herd.

As the Blases' explain "Quincey," the robot that serves as the primary training station for the cattle, one cow in particular seems to believe that the robot will forget her previous approaches to the milking station that morning. Cow No. 1881 has been known to attempt milking 50 times a day on her quest for the pellets that are only fed while a cow is being milked. She approaches the milking station and Quincey quickly analyzes her data and immediately swings the exit gate – and attached feeding

trough – out of 1881's reach. In a roughly 45 minute window, that cow has approached and been rejected by Quincey three times.

The robots also know which cattle are being treated – or doctored – for various ailments and diverts those cows' milk to a dump tank, which is used on farm and does not enter the farm's sellable milk supply. The robot then commences a complete wash down before the next healthy cow is milked.

Three times a day, the robots automatically shut down for a whole-system wash down.

While investigating the robots, the Blases, who married in 1972 and have been dairying ever since, visited 10 dairies in Wisconsin, Iowa and Minnesota. Ultimately, they decided to invest in the robots and retrofitted their existing operation.

"Dairying is always going to be labor-intensive and time-consuming," said Amy, noting that while the robots handle the collection of milk, they don't feed the cattle, scoop out the barn alleyways or change the animals' bedding."

The robots have given the Blases freedom from the clock and the parlor, though.

"It's opened an opportunity to follow our grand-kids a bit more," noted Amy.

MEET THE ROBOTS

Steve: Named in honor of an employee of the dairy who died of a heart attack on his way to work.

Princess: Named for the Gee-Aye Dairy's record-producing cow, who was declared a Gold Medal Dam in August 2000. Her daughter, Princette, is set to break her production record.

Quincey: Named for one of the family's top show cows, Quincey is the robot that all cows are trained on.

Vanna: Named for the head of one of the dairy's top show cow families.



Opposite page: Gary Blase analyzes screens of data collected about his herd through the Gee-Aye Dairy's Lely Astronaut robotic milking machines. Among the data Gary is monitoring closely is the output of one cow — Princette — who is about to break her mother's milk production record. One of the robots is named for the mother — Princess — who produce 328,000 pounds of milk (roughly 6.5 semi tankers full) in her lifetime. Above: The data is used to adjust feed rations and other factors in the herd's health. Right: Gary shows the milk collection area of astronaut Quincy. The monitor on the door shows real-time data collected by the robot and also allows the Blases to make adjustments. Top: Amy demonstrates how the touch-screen is used to guide the milker's lasers in place for a cow's initial milking. The process is then automatic, unless a problem occurs.



Capitol Hill Becomes Co-op Territory

Co-op Nation established a

beachhead on Capitol Hill, as nearly 2,000 electric cooperative leaders met in Washington to press lawmakers on key co-op is-

By Steven Johnson, Staff Writer Electric Co-op Today sues as part of the NRECA Legislative Conference.
With a focus on a snarl of environmental rules,

NRECA CEO Jo Ann Emerson told participants they are in an ideal position to explain the impact of regulatory overreach to members of the Senate and House.

"You're a leader in your community because you care enough to help bridge the humongous gap between your town and Washington," Emerson said May 4 at the Hyatt Regency Washington on Capitol Hill. "There is no other way to do it than to pack up a suitcase full of common sense and deliver it yourself."

The May 3-5 conference armed co-op CEOs, directors and staffers with insights for their visits with legislators and their staffs.

Among the takeaways: a briefing that outlined the real-world consequences of Environmental

Protection Agency proposals.

Lisa Johnson, CEO of Tampa, Fla.-based Seminole Electric Cooperative, said EPA's Clean Power Plan could force the closure of the G&T's workhorse coal plant and hurt the rural Florida economy.

Russ Biggica, director of government and regulatory affairs for the Pennsylvania Rural Electric Association, said the water proposal would needlessly extend the reach of the Clean Water Act and its permitting process to routine ditches.

Those perspectives are important, said Kirk Johnson, NRECA senior vice president for government relations, because the 114th Congress appears ready to act on environmental issues.

"Co-ops believe that a common-sense approach based on experience is the best way to further our national goals," he said.









Above: Andrew Christianson, left, deputy chief of staff for Rep. Kristi Noem, met with the South Dakota electric cooperative leaders during the Legislative Conference. The meeting was held while the U.S. House of Representatives was on recess. Top photo: H-D Electric Cooperative Manager Matt Hotzler greets Sen. Mike Rounds while FEM Electric's Scott Moore, Rushmore Electric's Vic Simmons and West River Electric's Dick Johnson look on. Above, middle: Sen. John Thune, right, takes a guick photo with South Dakota's Action Committee for Rural Electrification representative Dan Coomes, an engineer at East River Electric Power Cooperative. Opposite page, left: More than 50 South Dakota electric cooperative employees, directors and their guests attended the 2015 NRECA Legislative Conference. Opposite page, above: SDREA General Mangager Ed Anderson, far left, along with managers of several electric cooperatives met with newly appointed Rural Utilities Administrator Brandon McBride, right.

Legislative Conference Topics

Protect the Ratepayer (Electric Co-op Member)

Electric co-ops exist to provide their members with safe, affordable, reliable electricity. The Clean Power Plan (CPP) threatens that affordability and reliability.

In the House, the Ratepayer Protection Act would protect ratepayers until litigation surrounding the CPP is concluded — providing a "legislative stay" of the rules.

Electric cooperatives urged their Members of Congress to co-sponsor H.R. 2042, the Ratepayer Protection Act introduced by Energy and Power Subcommittee Chair Ed Whitfield, R-Ky.

Waters of the United States (WOTUS)

The proposed WOTUS rule will dramatically expand the regulatory reach of the EPA and U.S. Army Corps of Engineers, resulting in even more red tape for co-ops working to build and maintain transmission and distribution lines.

Legislation to block this regulatory over reach and send EPA back to the drawing board, is expected soon in both the House and Senate.

Electric cooperatives urged their Member of Congress to co-sponsor and support legislation to stop the regulatory burden imposed by the WOTUS rule.

Preserve Non-Hazardous Designation of Coal Ash

Electric co-ops support EPA's designation of coal ash as non-hazardous.

House Energy and Environment Subcommittee Chairman John Shimkus, R-III., introduced a bill that will make the non-hazardous designation permanent to provide long-term certainty.

In recent years, about 40 percent of coal ash has been recycled into beneficial products like concrete; designating coal ash as non-hazardous ensures that beneficial recycling will continue.

Electric cooperatives urged their delegations to co-sponsor and support the Improving Coal Combustion Residuals Regulation Act of 2015.

STB Reform

In March, U.S. Sen. John Thune, R-S.D., and U.S. Sen. Bill Nelson, D-Fla., introduced S. 808, the Surface Transportation Board (STB) Reauthorization Act of 2015.

Thune and Nelson's bill would allow board members to work together in a more streamlined approach. Their bill would expand the STB board membership from three to five members and allow for board members to discuss pending matters without issuing a public meeting notice, but with later public disclosure. The bill would also allow the board to initiate some investigations, not just respond to complaints, and would require the STB to establish a database of complaints and prepare quarterly reports on them.

Thune and Nelson's bill would also change the case review process by requiring the board to establish timelines for stand-alone rate cases and a report on rate case methodology. The bill would codify an arbitration process for certain rate disputes and carrier complaints.

Thank Our RUS and Water Heater Champions

The **Rural Utilities Service** is a critical source of capital for electric cooperatives. This year more than 225 members of Congress signed our letter to the Appropriators urging \$5 billion in loan level for the Electric Loan Program or sent their own.

South Dakota electric cooperatives thanked Rep. Kristi Noem, Sen. Mike Rounds and Sen. John Thune who all signed this letter and supported this vital program.

Electric cooperatives also thanked those members of Congress who helped get legislation passed to preserve access to large water heaters used in demand response programs.

S. 535, the Energy Efficiency Improvement Act of 2015, passed the Senate by unanimous consent in March and was considered by the House on April 21.

South Dakota's electric cooperatives thanked our Senators for supporting this bill to preserve access to this demand response tool.

Helping Community Gardens Grow

MISTRESS MARY MIGHT HAVE BEEN CONTRARY IN getting her garden to grow, but community gardens are bringing young and old together to develop local foods and provide training to upcoming gardeners.

"Community gardens keep popping up all over the state. I maintain a list, but I'm sure it's just a small portion of what's out there," said Chris Zdorovtsov, South Dakota State University Extension community development field specialist with the SDSU Consumer Sciences Department.

"I have about 70 on my list, but I think that's only a portion – probably only half to a third of what's out there," said Zdorovtsov.

"Community gardens are creating a place for people to grow food for themselves when they may not otherwise have the land to do so or if they don't have the equipment to till up a space," she said, noting that the garden spaces can be an ideal setting for older South Dakotans to continue gardening.

SDSU Extension has four key programs designed to foster community and youth-oriented gardening.

First is the Community and Family Extension Leaders Children's Gardening \$150 Mini Grants. Available each spring, the grants help educational garden projects fund seeds, plants, small garden equipment or other programming materials. The grant is offered to any school-age group, K-12, with preference given to after-school and out-of-school time programs. Participants must partner with SDSU Extension through a Master Gardener, a county 4-H youth program advisor, FNP/EFNEP assistant or other connection.

Next up is the **SDSU Extension Seed Bank** which offers educational gardens across the state of South Dakota 20 vegetable seed packets. The





donated seeds are intended for newly starting and established educational gardens for youth or adults.

The **South Dakota School Garden Grant** provided by SDSU Extension is available to help newly starting school gardens launch programs focused on growing and consuming fruits and vegetables. This program provides K-12 schools with funding and development support to help them launch successful garden projects. Award winners will receive project development coaching from SDSU Extension staff, 20 seed packets and \$1,000 for purchasing construction supplies, tools/equipment, plants and programming materials.

Kids Gardening Grants and Fundraising is a comprehensive list of national grants and deadlines related to youth and community gardening.

Zdorovtsov noted that communities of all sizes are taking advantage of the various programs. "Some of the smallest towns are providing some of these sites."

Interest in community gardening goes back generations.

"The whole era of the World War II-era Victory Garden brought gardening back as an important means for food production," said Zdorovtsov.

While many people had backyard gardens, gardens were also tilled up in some public places to "plant, plant, plant."

While the Victory Gardens may be first to come to mind, Zdorovtsov noted that in the early 1890s, vacant lots in Detroit, Mich., were used for the unemployed to grow food to feed their families and create income.

"School gardens extended from then until the 1920s and there was a movement during World War I for a war garden campaign," she said.

The Depression also brought relief and sustenance gardening for food and income, followed by the more well-known Victory Gardens.

"Then it drifted away, but then in the 1970s, community gardens started to happen again with interest in starting urban gardens," she said. In 1978, the Community Garden Association was formed.

"I've seen interest every year; it's been consistent since I started in this position in 2008. There are one to three new ones each year in Sioux Falls, S.D., and Rapid City, S.D., but also in smaller communities like Wakonda, S.D., and Arlington, S.D.," Zdorovtsov said. "In general there are probably more than there were 15 years; probably the newer trend is incorporating them into schools and curriculum."

The South Dakota Discovery Center in Pierre has gardens that have benefited from the grants, including the center's model square-foot gardens.

"The purpose of the gardens is to demonstrate that a lot of produce can be grown in a small space, for little expense and provide family's access to fresh vegetables," said Kristie Maher, SDDC executive director. "Each spring students help plant gardens. Often they make seed starter mats, paper towels upon which they glue the proper number of seeds properly spaced out. Two of the gardens feature hoop greenhouse roofs to help the seeds get started. During the growing season, SDDC guests are welcome to help weed, water and harvest and to use their senses to explore the various plants.

"Gardening goes hand-in-hand with the South Dakota Harvest of the Month (www.sdharvestofthemonth.org) program that shares tasting opportunities and health benefits in order to encourage kids and families to eat more fresh fruits and vegetables," said Maher.

Interested in starting a community garden? SDSU Extension provides coaching to teams interested in starting successful community gardens. The teams can assist local planners with guidance on garden models, site selection, overcoming challenges, budgeting, applications and guidelines. A development workbook: *Diggin' the Dirt, Community*, is also available. Communities are also welcome to request online webinars on community garden topics. More info at: http://igrow.org/community-development/local-foods/community-gardens

CFEL Children's Garden Grants

Ten youth and school gardens received funding this spring to launch or enhance garden programs across the South Dakota. SDSU Extension and the Community and Family Extension Leaders (CFEL) provided funding for the \$150 mini-grants.

The gardens can use the funds to purchase seeds, plants or small garden equipment or utilize the award to purchase programming materials. Garden programs must have an SDSU Extension partner, such as a Master Gardner, a county 4-H youth program advisor, or FNP/EFNEP assistant. They must provide programming to a school-age group, K-12, incorporate handson learning experiences for a six- to 12-week period and incorporate plant science and nutrition education topics.

2015 Awardees:

- Bad Nation Rustlers 4-H, Ft. Thompson
- Bon Homme 4-H Jr. Garden Club, Tyndall
- Centerville FFA, Centerville
- EmBe, Sioux Falls
- Kennebec Women's Club-Community

Garden. Kennebec

- Lutheran Social Services of S.D. New Beginnings Center, Aberdeen
 - North Rapid Community Schools, Rapid City
 - Oahe YMCA, Pierre
- St. Elizabeth Seton Elementary School, Rapid City
 - Youth and Family Services, Inc., Rapid City

2014 Awardees:

- 4-H Youth Community Garden, Meade County 4-H, Sturgis
- Andes Central Afterschool Program and Charles Mix Co. 4-H, Lake Andes
 - Christian Center Daycare, Sioux Falls
- Harding County School District and Harding County 4-H, Buffalo
 - Lemmon Jr. Master Gardeners, Lemmon
- Lutheran Social Services of S.D. New Beginnings Center, Aberdeen
- M&M Day Care and Jungle After School Program, Huron
 - North Rapid Community Schools, Rapid City
 - Rosebud Juvenile Detention Center, White

River

- South Dakota Discovery Center, Pierre
- Wall Afterschool Program-WASP, Wall
- Wounded Knee School District, Manderson

Promoting Employee Wellness

o-op Employees are Lacing up Their Walking shoes – and the ocassional pair of ice skates – and donning their activity monitors as they step forward to wellness.

June 2015 is National Employee Wellness/Employee Wellbeing Month, a month set aside to promote improved wellness among America's workers.

According to a 2008 report by a division of the U.S. Center for Disease Control, health care costs are a significant and growing element of overall employment costs for businesses offering benefits and companies of all sizes are affected by absenteeism and lost productivity from employee illness, injury, obesity or chronic conditions. One study reports that obesity alone has been estimated to cost employers almost \$2,500 per employee per year, including direct medical expenditures and absenteeism.

"Steps to Wellness: A Guide to Implementing the 2008 Physical Activity Guidelines for Americans in the Workplace," a report by the CDC's National Center for Chronic Disease Prevention and Health Promotion's Division of Nutrition, Physical Activity and Obesity, said that regular physical activity reduces the risk of premature death as well as coronary heart disease, diabetes, arthritis, osteoporosis and certain types of cancerous diseases that affect nearly half of all American adults.

The Physical Activity Guidelines recommend at least 2-1/2 hours per week of moderate intensity aerobic physical activity or 1-1/4 hours per week of vigorous intensity aerobic physical activity, in bouts of at least 10 minutes at a time or an equivalent combination of both. They also recommend moderate or high intensity muscle strengthening activities that involve all major muscle groups at least two days per week.

And, since Americans – including electric cooperative employees – spend much of their week at work, implementing employee wellness committees and business-wide wellness programs may make a difference.

With offices in Wall and Rapid City in western South Dakota, West River Electric Association has had an active Employee Wellness Committee in place since 2009.

The committee is tasked with developing innovative ways to get employees and their families



By Brenda

Kleinjan

moving in physical activities.

"We try to put together a couple big wellness activities each year as a family activity," said Jenny Patterson, the cooperative's manager of office services who works with the committee.

The cooperative has started a Fitbit program using the popular activity monitor. In 2014, participating employees signed a contract and received their monitor. If they don't meet the minimum number of steps in a month, then

the employee has to pay for a portion of the monitor's costs.

But, for employees meeting step goals, rewards are offered.

"If they reach goal of 300,000 steps a month, then they get a \$25 contribution into their HSA (health savings account) for each month they meet that," said Patterson. "We also do a

quarterly – if they meet 900,000 steps in a quarter, they get a \$25 gift card. If they meet the steps goal in the full year, then an additional \$200 goes into the HSA."

Health screenings and health surveys are other wellness activities offered by the cooperative and some of these benefits are also extended to their spouses.

Other benefits include reimbursement for fitness center fees and professional weight loss program fees, interest-free loans for fitness equipment and the coop maintains fitness rooms/areas at the Wall and Rapid City offices.

Large group activities for employees and their families are also offered.

"The last three or four years we've been ice skating – WREA rents it for two hours as a family-oriented activity centered around wellness," said Patterson. "We're also looking at bowling and biking on the Mickelson trail."

Each quarter the committee throws out a challenge to the Fitbit participants that coincides with regional activities like the Crazy Horse Volksmarch held each June.

"Our week for the 100,000 step challenge is during the Volksmarch and Deadwood Mickelson Trail Marathon, both set for the first weekend in June.

Patterson said the co-op's Wellness Committee meets four times a year meet

HEALTHY TIPS FOR A

HEALTHY WORKPLACE

• Support and promote physical activity breaks dur-

ing the workday, such as stretching or walking.

Display key messages to encourage physical

Participate in online challenges hosted on the

activity on signs or display boards.

• Provide articles in employee newsletters

promoting physical activity and current

Provide healthy choices in vending machines.

Provide lunch and learns: Offer healthful food

• Make all areas of the workplace tobacco-free

alternatives at meetings, company functions and

HealthySD.gov website.

opportunities to participate.

health education events.

(indoor & outdoor)

and gets input from employees for ways of improving the program.

"The first Wednesday of every month is Wellness Wednesday and the committee provides fruits and veggies for the employees," Patterson said.

Across the state at South-eastern Electric Cooperative in Marion, S.D., incentive programs are also

offered to promote employee wellness.

Like WREA, Southeastern Electric offers health screenings and surveys and incentives for completing various preventive activities such as tobacco cessation and weight loss.

According to the CDC report, the return-on-investment for wellness programs has increased over the years. A 2008 study of 192 companies of varying sizes using the same workplace wellness program, which includes physical activity promotion, found program costs of around \$300 per employee per year. After a year, seven of 10 targeted risk factors had improved, resulting in medical savings of 59 percent and productivity gains of 41 percent.

The report went on to cite a 2010 study that showed that for every dollar spent on wellness programs, medical



Family-oriented activities such as mountain walks in the Black Hills (above) and ice skating are part of West River Electric Association's employee wellness programs.

costs fell by approximately \$3.27 and costs associated with absenteeism fell by approximately \$2.73.

May 31

Buffalo Ridge Chorale Spring Concert with guest musicians "Friends of Jazz" Christ Lutheran Church Hendricks, MN, 605-479-3438

June 1

Shrine Circus, Watertown, SD 605-225-4841

June 3-4

Shrine Circus, Pierre, SD 605-225-4841

June 5

Shrine Circus, Mobridge, SD 605-225-4841

June 5-7

Fort Sisseton Historical Festival Fort Sisseton State Park Lake City, SD, 605-448-5474

June 5-7

Black Hills Quilt Show & Sale Rapid City, SD, bhquilters.org

June 5-7

Wheel Jam, Huron, SD 605-353-7340

June 6

Car and Motorcycle Show and Swap Meet Sisseton, SD, 605-698-3401

June 6

Gold Rush Gravel Grinder Spearfish, SD, 605-641-4963

June 6-7

Spring Volksmarch at Crazy Horse Memorial Crazy Horse, SD, 605-673-4681 www.crazyhorsememorial.org



Events of Special Note

June 5-6

Dairy Fest, Brookings, SD 605-692-7539

June 13

Outdoor Purple Martin Festival 9 a.m. to 3 p.m. Columbia, SD, 605-396-2381 Pre-registration at www.purplemartindakotas.org

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.

June 6-7

Siouxland Renaissance Festival Sioux Falls, SD, 866-489-9241

June 6-7

SDQG Quilt Show Aberdeen, SD, 605-228-3545

June 6-August 9

The 47th Annual Red Cloud Indian Art Show Heritage Center at Red Cloud Indian School Pine Ridge, SD, 605-867-8257

June 7

Miss Prairie Village & Prairie Princess Pageant Madison, SD, 605-256-3644

June 7

Mickelson Trail Marathon Deadwood, SD, 605-584-3896

June 7-13

RASDAK – Ride Across South Dakota Bike Tour Spearfish, SD, rasdak.com

June 12

Northern Bull Riding Tour Madison, SD, 605-256-3844

June 12-14

Hills and Valley Riding Club Annual Trail Ride Sica Hollow State Park Sisseton, SD, 605-742-3077

June 13

Art & Wine Festival Rapid City, SD, 605-716-7979

June 19-20

Wild Bill Days, Main Street Deadwood, SD, 605-578-1876

June 19-20

Prairie Hills Art Show Wessington Springs, SD 605-539-1963

June 19-21

Crazy Horse Stampede Rodeo and Gift from Mother Earth Crazy Horse, SD 605-673-4681

June 20-21

Kite and Bike Festival Brookings, SD, 605-688-5423

June 20-21

Arts in the Park Aberdeen, SD, 605-226-1557 AberdeenAreaArtsCouncil.com

June 21

Prairie Village Variety Show Madison, SD, 605-256-3644

June 26-28

Motongator Joe's Country Music Festival, Madison, SD 605-256-3644

June 27

Uptown Summer Festival Watertown, SD, 605-886-3040

July 3-5

Sisseton Wahpeton Oyate 147th Annual Wacipi Ceremonial Grounds Agency Village, SD 605-698-8217