Northern Electric Offices Will Be Closed Christmas Day and New Year’s Day

Northern Electric Cooperative’s November board meeting was held December 1 at the headquarters in Bath with all directors present. As the first order of business, the Board approved the October 22, 2015, minutes and October expenditures. The Board then reviewed and accepted monthly reports by management including details on financial, operations, member services, safety, and communications. Directors viewed the East River Electric Power Cooperative video report. East River Director Victor Gross reported on actions taken by the East River Board at the October 29 meeting. South Dakota Rural Electric Association Director Mike McHugh reported on the SDREA Board Meeting which he attended on November 12-13, 2015, in Pierre. Directors Glen Larson, Mike McHugh and Manager Char Hager reported on the Basin Electric Annual Meeting which they attended on November 3-5, 2015, in Bismarck, ND. Directors Donna Sharp and Francis Esser reported on the East River Member Director/Employees Orientation which they attended on November 23, 2015, in Madison.

MANAGER’S REPORT
General Manager Char Hager’s report to the board included the following items:
• Update and discussion on new and progressing development projects and activities taking place in the community and our service area.
• Brief update on Rural Electric Economic Development (REED) revolving loan fund activities.
• Legal and Legislative report included Manager Hager informing the board of the Dakota Energy Annual Legislative Luncheon on December 22, 2015, at the Crossroads Hotel and Convention Center in Huron.
• Discussion on final plans for the Mid-West Electric Consumers Association Annual Meeting, December 7-10, 2015 in Denver, CO.
• Calendar review of upcoming meetings and events.

BOARD REPORT
The board considered and/or acted upon the following:
1. Approved the date and time of the next regular board meeting for 9:30 A.M. on Tuesday, December 22, 2015.
2. Approved payment of legal fees for Harvey Oliver in the amount of $2,342.60.
3. Approved Work Order Inventories #15-10 for $135,477.15 and #15-10MC for $122,708.06 to be submitted to the Rural Utilities Service (RUS) for reimbursement from loan funds for electric plant construction already completed.
4. Authorized limited board attendance to the 2016 SDREA Annual Meeting and Legislative Dinner January 14-15 in Pierre and appointed Director Donna Sharp delegate, Manager Char Hager alternate.
5. Authorized acceptance and execution of arrangement letter offered by Eide Bailly LLP to perform the audits for 2015.
6. Authorized limited board attendance to the 2016 East River Energize Forum, February 3-4, in Sioux Falls.
7. Approved Resolution for Frederick Substation Transfer to East River Electric Cooperative.
9. Approved a donation of $1,000.00 for the State Fair Foundation.
10. Held Executive Session.

Questions or more details on any of these matters?
Please ask your cooperative manager, staff or director.


<table>
<thead>
<tr>
<th>kWh Sales</th>
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<th>kWh Sales</th>
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<tr>
<td>23,529,079</td>
<td>1,404,255</td>
<td>under budget</td>
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<tr>
<td>Electric Revenues</td>
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<td>$2,164,123</td>
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<tr>
<td>Total Cost of Service</td>
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<td>$2,127,327</td>
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<td>Operating Margins</td>
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<td>Year to Date Margins</td>
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<td>$688,852</td>
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<td>1,833 kWh</td>
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<tr>
<td>October ‘14</td>
<td></td>
<td>1,858 kWh</td>
<td>$178.88</td>
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Editor’s Column

Electricity: It’s Not Something To Take ‘Lightly’

You flip on the switch and it’s there.
You turn off the switch and it’s not.
Electricity was ‘on-demand’ before ‘on-demand’ was the cool kid on the block. But ensuring that electricity is available at the flick of the finger isn’t as easy as it may seem.

Let’s start locally, at Northern Electric Cooperative our crews work throughout the year to upgrade our infrastructure and catch a problem before it causes a power outage. Just this summer our crews buried nearly 30 miles of line to make the electric grid more resilient. An outside contractor also conducted the annual testing of 3,000 poles this year to make sure they are sturdy and can remain in service.

East River Electric Power Cooperative in Madison, South Dakota, delivers the power you use to Northern Electric from power plants owned by Basin Electric Power Cooperative in North Dakota. I recently had the chance to tour the facilities in Madison and got an inside look at what it takes to deliver energy. The coordinated efforts of the employees and the millions of dollars worth of poles, wire, and supplies that are stocked at the facility are simply amazing. East River keeps enough stock on hand to not only complete planned upgrades, but to also respond quickly if there is a storm or outage. Their entire facility is dedicated to keeping the lights on for members.

And, as we pause for reflection during this holiday season, I believe it is truly miraculous that we can flip on a switch and have electricity to power our everyday needs and wants. Believe it or not, some parts of the world still do not have this luxury. The international arm of the National Rural Electric Cooperative Association (NRECA) works all year long to bring electricity to corners of the earth that have yet to be touched by power. With outposts in places like Bangladesh, Bolivia, the Dominican Republic, Uganda, and South Sudan NRECA International continues its mission to electrify rural areas across the globe.

So, when you flip on the switch on Christmas morning, or turn out the lights on your New Year’s Eve celebration, please take a moment to think about all the men, women, and millions of dollars that it takes to ensure that electricity remains affordable and ‘on-demand.’ It truly is one of the greatest blessings we have as Americans and rural South Dakotans, and it’s something that we should never take lightly.

Ben Dunsmoor
Communications Director
Speaking Out

The start of the new year brings many state legislatures back to their respective capitol cities to tend to the business of the people.


While lawmakers are in the capitol, there are several ways to reach them:

South Dakota:
Write to local legislators in care of the Legislative Research Council, Capitol Building, 3rd Floor – 500 East Capitol Ave., Pierre, SD 57501-5070
South Dakota Senators can be reached at 605-773-3821 while Representatives can be reached at 605-773-3251. During session, faxes can be sent to legislators at 605-773-6806.
To e-mail legislators, go to: http://legis.sd.gov/Contact/LegislatorEmail.aspx and select the legislator’s name from the drop-down box.

Minnesota:
To reach Minnesota Senators, write to: Honorable (Full Name), Minnesota State Senate, 75 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, MN 55155-1606
To reach Minnesota Representatives, write to: Honorable (Full Name), Minnesota House of Representatives, (Room #) State Office Building, 100 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, MN 55155-1298
Email is most effective if it is not a blanket mailing to all members. When sending an email, remember to include your name, postal address and phone number.
For more information on contacting Minnesota legislators, go to http://www.leg.state.mn.us/leg/faq/faqtoc?id=47

Nebraska:
Find contact information for Nebraska Senators at http://nebraskalegislature.gov/senators/senator_list.php

Safety Tips

Electric Blanket Safety Tips Can Save Your Life

During the cold of winter, an electric blanket may provide extra warmth in your home. Please consider several important safety tips to assure your electric blanket does not start a fire.
• Make certain your blanket is approved by a nationally recognized testing agency.
• When not in use, turn your blanket off. Most models have no internal temperature control that turns the heat off when the blanket temperature gets too hot.
• Place your blanket on top of you, not below you. Sitting or lying on an electric blanket may damage the internal coils of the blanket, exposing the heating element to a combustible material (the blanket).
• Never place items such as books, pillows or stuffed animals on top of the blanket. These items can trap the heat, leading to elevated temperatures and serve as a source of ignition.

• Keep the blanket flat, not crumpled or in a ball. If left on, a crumpled blanket allows for excessive heat buildup within the blanket. Always turn the blanket off when leaving the room.
• Do not wash an electric blanket. The twisting, tugging and turning action of the washing machine will most certainly damage the internal coils.
• Unplug your blanket if you see or smell smoke coming from it. Discoloration of the blanket may indicate the heating elements are burning internally.
If you have any doubt about the safety of your blanket, discontinue using it. Electric blankets are usually a safe way to add a little warmth and are widely used throughout the country. However, this is only true if blankets are well maintained and properly used.

Source: seattle.gov

Kids’ Corner Safety Poster

“Play safe around cords.”

Allison Bruns,
10 years old
She is the daughter of Matt and Kim Bruns, Madison, 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.
## Super Soups

### Creamy Lasagna Soup

- **Ingredients:**
  1. (23 oz.) can low-sodium, low fat tomato soup
  2. 3 cups hot water (equivalent of using 1 empty soup can)
  3. 3 cups low fat milk (equivalent of using 1 empty soup can)
  4. 3 T. Tone’s Italian seasoning
  5. 1 lb. ground beef, cooked and drained
  3 cups hot water (equivalent of using 1 empty soup can)
  8 oz. low fat cream cheese
  1 cup shredded mozzarella cheese

- **Instructions:** Combine first 5 ingredients until near boiling on medium high heat. Cook lasagna noodles in boiling water until soft; drain. Add to soup mixture. When heated through, add cream cheese, stirring thoroughly. Serve with mozzarella cheese sprinkled on top. Makes 12 servings.

*Julie Thonvold, Erwin*

### Chunky Chicken, Vegetable and Rosemary Stew

- **Ingredients:**
  1. 2 T. canola oil, divided
  2. 2 dried bay leaves
  3. 12 ounces boneless chicken breasts, cut into 1-inch pieces
  4. 1 medium onion, cut in 8 wedges
  5. 3 medium carrots, quartered lengthwise and cut into thirds
  6. 1 medium celery stalk, cut into 1-inch pieces
  7. 2 cups water
  8. 2 T. canola oil, divided
  9. 2 T. dried rosemary
  10. 1 T. crushed red pepper flakes
  11. 1/4 tsp. salt
  12. 1/4 tsp. black pepper

- **Instructions:** In Dutch oven, heat 1 T. canola oil over medium-high heat. Add chicken and cook about 3 minutes per side or until it begins to brown (center will still be slightly pink). Remove from oven and set aside. Add remaining canola oil, onion, carrot and celery. Sauté, stirring frequently, for 5 minutes or until vegetables just begin to lightly brown on edges. Add water, bay leaves and pepper flakes. Bring to boil over high heat. Reduce heat to medium low and simmer covered for 20 minutes or until vegetables are tender. Stir in chicken, beans, tomatoes, Italian parsley, rosemary and salt. Cover and cook 5 minutes or until tomatoes are tender and chicken is cooked. Serve immediately or let stew stand 30 minutes to develop flavors and texture. Yields 6 1-cup servings.

*Please send your favorite bread/breakfast and seafood 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 2016. All entries must include your name, mailing address, telephone number and cooperative name.*
Northern Electric Cooperative takes holiday lighting seriously.

For more years than many employees can remember, it’s been a tradition to decorate the vast lawn in front of the main headquarters in Bath with lights and figurines. The Redfield office also gets in on the fun with its own display.

At the Bath headquarters this year more than 30 strings of LED lights are used to celebrate Christmas and ring in the New Year. This includes the large star that is placed above the display every year. The star and the hundreds of LED lights set up in the front lawn serve as a festive welcome to drivers who are entering Aberdeen on U.S. Highway 12.

The creativity of Northern Electric Cooperative crews are also on display in Redfield this year. Old wire spools are being used in that display to create a snowman and Christmas bulbs. With all the construction on the Northern Electric system there is often a surplus of these spools. The new Redfield display is a way for the office to show off its holiday electric cooperative pride and recycle unused materials at the same time.

LED lighting is a key component in both displays, making the season merry and bright without breaking the bank. According to energy.gov a string of 50 LED lights costs a mere 13 cents to operate during the holiday season. Old ceramic incandescent light bulbs cost about $13 to operate per string during 40 days of illumination.

So, as you are out and about in the next few weeks please drive by both offices and take a look at these creative, sustainable, festive, and joyful displays. Merry Christmas and Happy New Year from Northern Electric Cooperative!
(Above): Nearly 30 strings of LED lights are used to decorate the front lawn of the Northern Electric office in Bath. (Left): A toy soldier figurine is just one piece of the Northern Electric holiday light display. (Below): Repurposed wire spools are used to create a festive display at the Northern Electric office in Redfield.

Recipes are needed for the 32nd volume of East River Electric’s Country Cookin’ cookbook!

Please help us create another great cookbook by submitting your favorite hearty recipes as well as recipes for the “Light Side” section of the cookbook. Submission deadline is Monday, February 1, 2016.

Submit via email to kkaup@eastriver.coop, fax to: 605-256-8057, or contact your local cooperative for more information.
Positive. Influential. Life-changing.

All three words hold a host of meaning for students who have participated in the annual Rural Electric Youth Tour.

Since 1963, more than 1,200 South Dakota teens have made the trek to Washington, D.C., to learn about cooperatives, the nation’s political process and about their peers from across the country.

“The trip that we took was extremely positive. It was a great influence for leadership,” said Shanna (Hilderman) Stueve of Wheaton, Minn., who, as a teenager in 1996 represented West Central Electric Cooperative in Murdo, S.D., on the trip.

“Basically the experience allowed me to see things that I wouldn’t have necessarily been able to participate in. It showed me different leadership styles, not to mention all of the historical and incredibly interesting monuments that we are able to participate in,” Stueve said.

“I was incredibly interested in politics. However, I did not end up following that career path,” said Stueve who, along with her husband, has an insurance and seed business in western Minnesota where they are members of Traverse Electric Cooperative.
“As a junior in high school, having the opportunity meet the politicians that represented me was very important to me. I feel like this is a trip of a lifetime!” she said. “Not only did I have the chance to see the different aspects of government, but I also had the opportunity to see the different socioeconomic backgrounds based on region from across the country. I feel like it’s a valuable exposure to culture.”

**Rooted in politics**

Youth Tour was born from a speech at the 1957 NRECA annual meeting by then-Sen. Lyndon B. Johnson. He was a longtime advocate of electric co-ops, having lobbied for the creation of Pedernales Electric Cooperative in 1937 as a young politician in Texas. “If one thing comes out of this meeting, it will be sending youngsters to the national capital where they can actually see what the flag stands for and represents,” the future president said.

With that encouragement, Texas electric co-ops began sending summer interns to work in the senator’s Washington, D.C., office. In 1958, an electric co-op in Iowa sponsored the first group of 34 young people on a weeklong study tour of the nation’s capital. Later that same year, another busload came to Washington from Illinois. The idea grew, and other states sent busloads of students throughout the summer. By 1959, the Youth Tour had grown to 130 participants.

South Dakota sent its first delegation of 31 students representing 18 cooperatives in 1963. The following year, NRECA began to coordinate joint activities among the state delegations and suggested that co-op representatives from each state arrange to be in Washington, D.C., during Youth Tour week. The first year of the coordinated tour included about 400 teens from 12 states.

As word spread, the program grew – and grew and grew. Youth Day, generally on the Monday of Youth Tour, is when all the state contingents converge to learn about grassroots politics and hear from inspirational speakers. The students share their state pins, often vying to get the most pins or those that are rare, like those from Hawaii’s small group.

In 2015, South Dakota electric cooperatives sent 44 teens on the trip. It tied with the state’s 1965 delegation as the largest to represent the state. More than 1,700 students participated in the 2015 Youth Tour and the 2016 tour, scheduled for June 10-16, promises to be even bigger.

**Inspiring our youth**

For the past decade, students have heard the inspiring story of Paralympian Mike Schlappi, a star athlete who was paralyzed as a teen. State coordinators lobby for Schlappi to return year after year because, they say, the students never fail to take his story to heart.

Schlappi was their age when his whole life changed from an accidental gunshot. Today he makes the annual Youth Tour presentation a priority because he loves the kids. “They’re so young and trying to figure out their lives. They’ve heard enough speakers and read enough books, sometimes they’ll roll their eyes,” Schlappi said. “But they’re away from parents and excited about their future and maybe got their eyes on the cute kid across the room. They’re willing to make positive changes. Back home, they get labels, and they have to live up to that. [At Youth Tour], they can make new impressions on new friends.”
Students Should Apply Now For $1,000 & $500 Scholarships

Many high school seniors aren’t just checking off the items on their Christmas lists this time of year they are also narrowing down their college choices.

The price of higher education is always a factor in deciding which school students will attend next fall. Northern Electric Cooperative and North Dakota-based power supplier Basin Electric Power Cooperative are once again offering two scholarships this year to help with the cost of college.

“Education and commitment to community are two of the principles cooperatives operate under,” Northern Electric General Manager Char Hager said. “These scholarships epitomize those principles.”

University of South Dakota freshman Madiyn Waage was the 2015 recipient of the $500 scholarship awarded by Northern Electric Cooperative. The money is being applied to tuition at USD for the Aberdeen Central graduate.

“It was really helpful,” Waage said. “It’s helping me pay for my classes this year so it’s definitely been rewarding.”

Lucas Sternhagen was awarded the $1,000 scholarship from Basin Electric in 2015. He is also a freshman at the University of South Dakota. Sternhagen graduated from Groton High School last spring.

To be eligible for the scholarships parents of the students must be current consumers of Northern Electric Cooperative. The scholarship application process includes a short essay and documentation of academic and extracurricular activities.

Applications and instructions on how to apply have been sent to all of the school districts in the Northern Electric service territory. Information can also be found at www.northernelectric.coop.

“Just be yourself and don’t be scared of failing,” Waage said. “Just take the time to apply because it could be worth it.”

For Waage that advice is paying off.

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Heating Help Is Available

The Low-Income Energy Assistance Program (LIEAP) helps eligible South Dakotans pay for home heating costs. Energy assistance may not pay for all your home heating costs but it will help ease the strain of the heating season. Energy assistance is available from October 1 - May 15.

Eligibility for the program is based on:
- Number of people in household
- Gross income of everyone in household
- Type of heating for the home
- Geographic area you live in

Applications can be obtained by calling 1-800-233-8503, online at http://dss.sd.gov/economicassistance/energyassistance/lowincome.aspx, at the local Department of Social Services office or from the Northern Electric office in Bath, SD.
Scholarship eligibility

Applicants must be U.S. citizens and natural or adopted children of Northern Electric consumers/members. Dependents of Northern Electric employees are not eligible. Any applicant must be a student who is enrolled, or planning to enroll in, a full-time graduate or undergraduate course of study at an accredited, two-year or four-year college university or vocational/technical school.

How the selection process works

The scholarship awards are based on academic excellence and financial need. All applications are critically evaluated using a combination of several criteria including: SAT/ACT scores, grade-point average, work experience, participation in school and community activities, a statement by the student explaining his/her educational and career goals, financial need, and a written recommendation by a third party.

Applications will be considered by an independent judge for Northern Electric and then submitted to Basin Electric for scholarship distribution.

How to apply

Applications are available from local high school guidance counselors, on the Northern Electric Cooperative website, or directly from Northern Electric offices. Applicants must complete the scholarship application and provide all the required information.

Completed applications MUST BE RETURNED BY FEBRUARY 15, 2016 to:

Northern Electric Cooperative,
PO Box 457
Bath, SD 57427

For more information, contact Kay Albrecht at: 605-225-0310 or 1-800-529-0310.

Groft Selected As Scholar of the Week

Northwestern Area High School Senior Isaac Groft likes to get involved in almost everything at his school. Groft’s ambition to take on new challenges is the reason the four-sport athlete from Ashton was named the KSFY Touchstone Energy Scholar of the Week on December 7.

Groft was nominated for the honor by Northwestern counselor Kari Brenner for maintaining a 3.65-grade point average and participating in multiple sports and extra-curricular activities.

“I think we have good teachers here who push their students,” Groft said about his school.

Groft is the first student in the Northern Electric Cooperative territory to receive the recognition this year. The Northwestern senior is also one of only 34 students who will be selected as the KSFY Touchstone Energy Scholar of the Week during the 2015-2016 school year. Each recipient receives $100 from their local electric cooperative. The award also means the student is eligible for two $500 scholarships and one $1,000 scholarship which are given away at the Scholar of the Week banquet at the end of the school year.

“It’s a really great honor,” Groft said. “It’s great that people are recognizing academic excellence here and I hope it motivates others to do well.”

A story featuring Groft and his achievements aired on KSFY on December 7. KSFY Television is a partner in the Touchstone Energy Scholar of the Week program and highlights the recipients every week.
Teens’ Big Ideas Take Shape

Young Entrepreneurs Plan for Success

TEENS ARMED WITH BUSINESS PLANS AND DREAMS descended on Aberdeen in early December to showcase their concepts and compete in the ninth annual BIG Idea Final Competition.

The Bent Perspective plan for an Origami intensive store brought top honors to Pierre student Haley Ketteler.

Ketteler outlined how her company would provide customers with an all paper experience, allowing clients to design paper arrangements for special events, take classes to learn Origami, purchase paper creations, kits and supplies and order custom creations. As part of the experience, she had to identify marketing opportunities, define her competition and outline management and operations for the business.

Eight high school finalists were selected from the 263 applications submitted from 37 different schools. First round judges included 114 volunteers from the region along with 132 college entrepreneurship and business students. Marketing designs were also submitted by 110 teams which included a logo and ad for their idea. Ellen Schlechter of Faulkton High School was recognized for her Calving Book App which was the The Marketing Design competition winner.

The eight finalists included Ketteler, second-place finishers George Bernard and Mark Wesolick of St. Thomas More High School in Rapid City, S.D., third-place finisher MaKayla Price of Wess-
The competition encourages students to consider new ideas and opportunities for creating a business in their own region. “We’re trying to get them to start thinking about starting a business, not necessarily starting the business, but what it would take to start and run a business,” said event organizer Kelly Weaver, regional director with the South Dakota Small Business Development Center in Aberdeen, S.D. Participants were able to take part in panel discussions with the business owners, Weaver said. The competition is coordinated by the Small Business Development Center and funded by Sanford Health, East River Electric Power Cooperative, REED Fund, Dacotah Bank, Student Loan Finance Corporation, Aberdeen Development Corporation, Northwestern Energy, McQuillen Creative Group, The Tom and Danielle Aman Foundation, and Midcontinent Communications. Scholarships are provided by Northern State University and Presentation College. The competition is a result of the input and collaboration of these organizations along with: Aberdeen Area Chamber of Commerce, Aberdeen Downtown Association, Aberdeen Catholic School System – Roncalli High School, Aberdeen School District – Central High School and Dacotah Bank.

In addition to the schools listed above, students from the following high schools also participated: Aberdeen Central High School, Bridgewater-Emery High School, Bowdle High School, Canistota High School, Canton High School, Durpre High School, Edmund Central High School, Ethan High School, Eureka High School, Faith High School, Groton High School, Hitchcock Tulare High School, Hoven High School, Ipswich High School, Iroquois High School, Lead-Deadwood High School, Leola High School, Milbank High School, Mitchell High School, Montrose High School, Northwestern, Sioux Valley High School, Sioux Falls Christian, Swift Home School, Vermillion High School, Wagner High School, Warner High School, Watertown High School, Wilmot High School, and Yankton High School. A total of 414 students participated in a submission.

For her winning plan, Ketteler won $1,000, while Bernard and Wesolick’s Caveman Custom Iron plan earned $500 for second place and Price’s plan for KP Photography received $250 for third place. Scholarships to both Northern State University and Presentation College were also awarded. Schlechter received $500 for her marketing design plan.

Go to BIGIdeaSD.com for more information about the competition.

BIG Idea Finalists were, front row, from left: Cierra Veldhuizen, Maria Wilson, Haley Ketteler, Jenny Rooks, Brianna McGinnis and Sophie Wittenberg. Standing from left were: Olivia Facenda, George Bernard, Tony Baumann, Mark Wesolick, Eli Gerry, Tyndall Petterson, Dalton Larson, MaKayla Price, and Jared Miller. Photo by Dawn Sahli Photography
Double Threat

The Right Strip Can Protect Devices, Cut Energy Bills

There is little, if anything, you can buy today that does not have some electronic component. Even clothing as wearable electronics are starting to take hold. Not to mention a device (http://www.makeymakey.com) that allows you to make a keyboard from bananas. So, it’s time to take a look at making sure your electronics last as long as possible. I’m not talking about replacement plans or extended warranties. Today we’re talking about protecting your products from electrical surges.

The first order of business is to define a surge. Here’s one from Computer Hope (http://www.computerhope.com/jargon/s/surge.htm) on the ‘Net. “Alternatively known as a line surge, a surge is an unexpected increase in voltage in an electrical current that causes damage to electrical equipment. For example, the standard United States voltage is 120V. If an electrical current above this rating was to come through a power outlet for more than three nanoseconds, this would be considered a surge, anything less is considered a spike. A surge is usually created by lightning and can damage unprotected computers and sometimes even protected computers.”

Many people think a blink from their electric cooperative or utility provider’s system is a surge, but these are generally caused by something like a tree contacting a line. In such cases, the system’s protective devices work, causing an interruption to protect the wires and other components. These are not surges, but more like turning a light on and off.

True surges will enter a home through any number of avenues. The most obvious is through the power lines. Less obvious is through the telephone lines, cable/satellite connections, water lines and any other metallic system that connects to your home. So, to protect against surges, you need to take a three-pronged approach.

Perhaps the most important thing to do is to be sure all the grounds in your home are good and that they are bonded together. Over the years, grounds can deteriorate, new services can be added with inadequate grounding and so forth. A faulty ground will allow surges into the home rather than bleeding them off into the earth. Get a qualified electrician to test and correct your grounding system.

Next, protect your electrical service entrance with a surge device. The easiest to install are those mounted behind the meter. They can also be mounted at the main electric panel. When a surge travels down the electric lines, these devices will act to “clamp” the surge and reduce its power. These are sacrificial devices that allow themselves to be destroyed rather than allowing the surge to pass through. Noble devices indeed!

The third prong is to protect expensive devices at their point of use. Computers and entertainment equipment are prime examples. Remember that surges can enter the home via avenues other than the power lines. Computers and entertainment equipment are frequently connected to cable and phone lines. Those devices need to have protection at the point of use that covers all possible avenues. These are generally in the form of a power strip or wall device most of us are familiar with. Use a quality product from a manufacturer such as Monster, Belkin, Tripp Lite, or APC, to name a few. Look for one with a joule rating of at least 1,000, a connected equipment warranty and compatibility with digital signals from cable and satellite. While you are at it, look for a “smart” strip that turns off all but one connected device when not in use.

Save money on your electric bill while protecting your equipment. It’s a definite win-win.

Tom Tate writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation’s 900-plus consumer-owned, not-for-profit electric cooperatives.
ADVANCED POWER STRIPS
Which one is right for me?

I want to stop WASTING ENERGY in my…

ENTERTAINMENT CENTER
I always turn off my electronics when done

Why don’t I turn them off?  NO  YES

Do I want manual or automated power control?

DO I WANT MANUAL OR AUTOMATED POWER CONTROL?

Automatic  Sleep  Shut down

I fall asleep  I forget  I’ll do it myself

HOME OFFICE
Is the computer a laptop or tablet?

Do I put it to sleep, or shut down?

YES  NO

Does it stay docked or is it frequently moved?

Automatic  Sleep  Shut down

Always docked  Moved often

I fall asleep  I forget  I’ll do it myself

COST
Power strip automatically pre-set schedule.

FEATURES
Power strip looks for signs of activity in the room, and detected.

POSSIBLE DRAWBACKS
You have to set up the timer and stick to your schedule for maximum energy savings.

WHAT TO LOOK FOR
Digital or dial timer.

Power strip can be turned switch.

When a primary device (such as a computer or TV)

When all of the controlled power strip automatically outlets where the

When all of the controlled outlets power to those outlets completely, eliminating all

One outlet is labeled as the "master.

National Renewable Energy Laboratory
15013 Denver West Parkway, Golden, CO 80401
303-275-3000 • www.nrel.gov
Operated by the Alliance for Sustainable Energy, LLC

NREL is a national laboratory of the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy
Printed with a renewable-source ink on paper containing at least 50% wastepaper, including 10% post consumer waste
NREL/PO-5500-60461 • October 2013

COOPERATIVE CONNECTIONS • January 2016
Regional Dateline

November 20-January 10
Winter Wonderland, Falls Park
Sioux Falls, SD, 605-275-6060

November 24-December 26
Christmas at the Capitol
8 a.m. to 10 p.m., Pierre, SD
605-773-3178

December 5-26
Deck Your Halls Holiday Art Show and Sale, 10 a.m. to 5 p.m., Spearfish, SD
605-642-7973

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

December 17-19
Strawbale Winery Twilight Flights 2015, 5 to 10 p.m., Renner, SD
605-543-5071

December 20
Christmas Caroling at The Abbey, 2 to 4 p.m., Marvin, SD
605-398-9200

January 10, 17, 24, 31
Foreign Film Festival
Spearfish, SD, 605-642-7973

January 12
37th Annual Ranchers Workshop, Antelope Multi-purpose Building
9 a.m. to 3:15 p.m. CST
Mission, SD, 605-259-3252 ext. 3

January 16
Bark Beetle Blues Crawl
Custer, SD, 605-440-1405

January 21-24
Snowmobile Rally
Deadwood, SD, 605-578-1876

January 22-23
ISOC SnoCross Shootout, 12:45 to 8:30 p.m., Deadwood, SD
605-578-1876

January 29-30
Mardi Gras Weekend
Deadwood, SD, 605-578-1876

January 29-30
35th Annual Farm, Home and Sport Show, Armory Webster, SD, 605-345-4468
www.webstersd.com

January 29-February 7
Black Hills Stock Show & Rodeo, Rapid City, SD
605-355-3861

February 5-6
Living History Fair
Watertown, SD, 605-886-7335

February 9-13
Winter Farm Show, 9 a.m. to 4 p.m., Watertown, SD
605-886-5814

February 12
Strawbale Winery Valentine Twilight Flights 2016
6 to 10 p.m., Renner, SD
605-543-5071

February 24-28
SD State Dart Tournament
Rushmore Plaza Civic Center
Rapid City, SD, 605-394-4115

March 5
Trade Show, 9 a.m. to 3 p.m., Custer, SD
605-673-2244

March 12-13
2016 Gun Show
American Legion Hall
Saturday 9 a.m. to 5 p.m.
Sunday 9 a.m. to 3 p.m. MST
Philip, SD, 605-859-2635
605-859-2280, 605-859-2892 or 605-859-2219

Events of Special Note

January 5-7
Dakota Farm Show, Dakota Dome, Vermillion, SD
507-437-7969

February 5-7
Winterfest of Wheels Indoor Car Show, Convention Center Sioux Falls, SD, 605-231-3100
www.winterfestofwheels.com

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.