

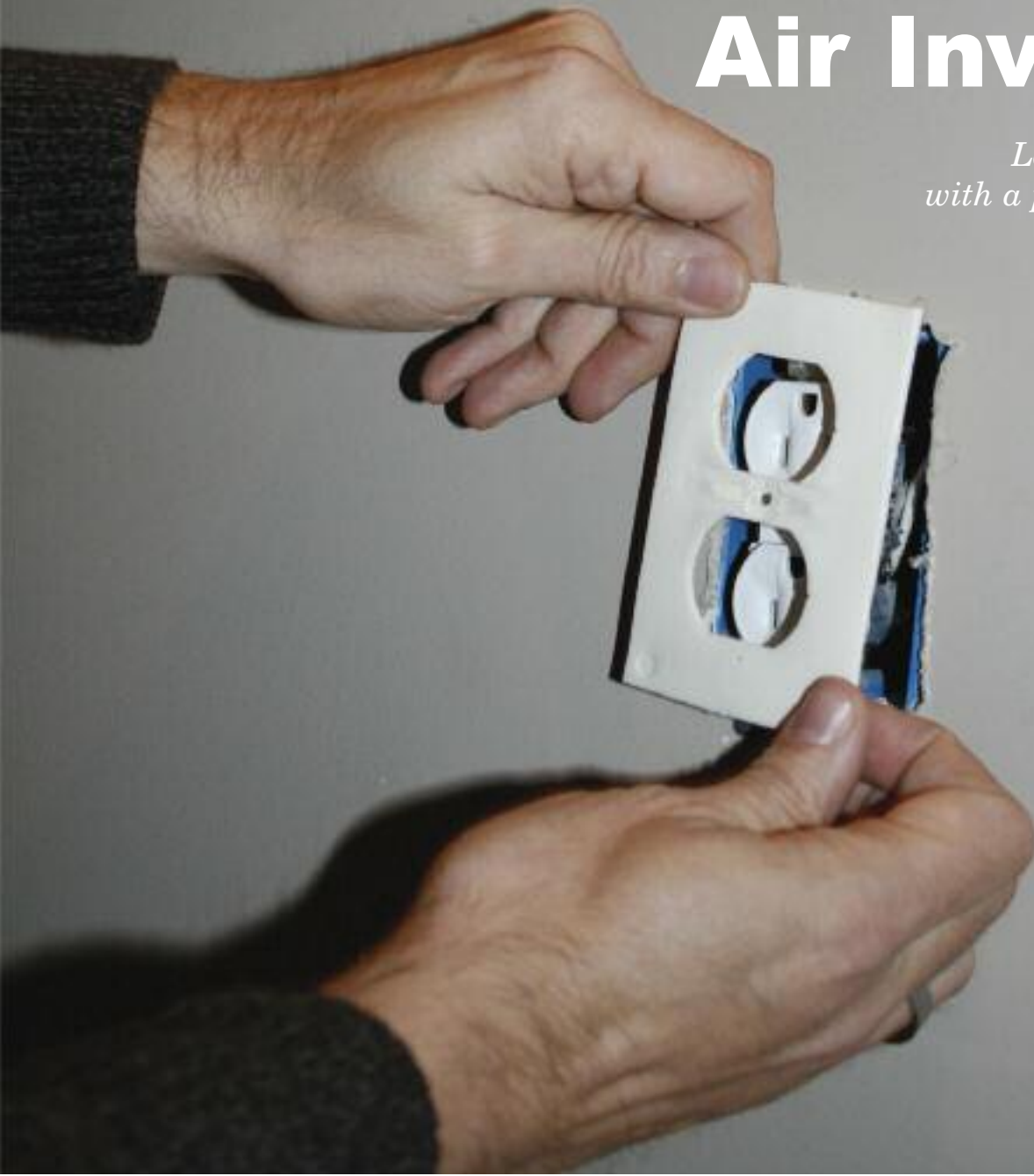
RURAL ELECTRIC

NEBRASKAN

February 2012

Avoiding Air Invaders

*Lower your energy bill
with a properly sealed home*



Butler Public Power District

Heat Your Home The Right Way Avoid These Common Mistakes

Keeping your home comfortable in the winter time can be costly process if you make these common mistakes.

1. Mistake - Maintaining a constant temperature

A common misconception is that it takes more energy for the furnace to reach a comfortable temperature than to maintain that temperature. But by leaving the house at a comfortable 68 degrees, even when you are sleeping or away at work, you are missing out on major savings. By installing a programmable thermostat and knocking the temperature down by 10 degrees for eight hours per day, you can cut your heating bills by 5-10 percent. Sure, the furnace will cycle on for a longer period to return to the more comfortable temperature, but it will be far outweighed by hours of savings when it didn't have to work as hard.

2. Mistake - Cranking up the temperature to warm up the house

Just because you've lowered the temperature when you left the house, doesn't mean you need to blast the heat to warm it back up. If you return to a cold home, adjusting the thermostat to a higher setting will not warm up the house any quicker. Most furnaces pump out the heat at the same rate no matter the temperature. They just cycle on for a longer period to reach the higher temperature.

3. Mistake - Closing off vents in unused rooms

You might think that you are wasting energy heating rooms that your aren't using, but by closing off vents in unused rooms you are actually changing the air pressure of your whole system causing your furnace to run inefficiently. Experts recommend never shutting off more than 10 percent of vents. Sealing your ducts is a more efficient way to save energy.

4. Mistake - Using the fireplace

Sorry, but an open fireplace flue will likely suck more cold air into the house than the heat the fire can radiate into the living space.

5. Mistake - Using electric room heaters

A single energy-efficient space heater in a small, well-insulated room can save energy if the central heater is switched off but generally, using multiple space heaters to warm your home can lead to higher energy bills. Electric heaters can also be a fire hazard, so make sure the unit is placed in a safe location.

NEW OFFICE HOURS

Effective March 1st

7:30 a.m. - 4:00 p.m.



THIS ISSUE

Heat Your Home The Right Way Avoid These
Common Mistakes

From the Desk of the General Manager —
Transmission & Distribution Lines

Paying Attention to Your Heat Pump Can Avoid
Big Bills

Going from Room to Room...
Heating, Cooling & Water Heating



From the desk of...

the General Manager

Transmission & Distribution Lines



Butler Public Power District is committed to providing safe, reliable electricity to our customers. Keeping electricity flowing to you and to other customers sometimes requires us to build new power lines or upgrade existing lines. That means working with landowners and local, state and federal entities to meet the area's needs. Electric power lines have been part of the landscape for nearly 75 years, delivering the power we need to use our favorite electronics and appliances and operate our homes and farms. There are high-voltage transmission lines, such as those Nebraska Public Power builds, and sub-transmission and distribution lines from Butler PPD to your home, farm or business.

At its January Board Meeting the Board of Directors approved a Capital Additions Budget of just over \$2million so we can continue to replace lines built in the 1930s and 1940s and build new lines which will provide additional back-up so that alternate paths are available during emergency outage periods.

Q. What are transmission and distribution power lines? A. Transmission lines deliver large or bulk amounts of electricity from power plants to substations, or from large substations to smaller substations. Think of transmission lines as the interstate freeways of the electrical system. Distribution lines deliver smaller amounts of electricity directly to homes, farms and industries. Think of them as the smaller state or county highways of the electrical system. NPPD is the transmission company and Butler is a distribution company.

Q. What are volts? A. The force or electrical pressure of an electrical current is measured in volts. The voltage at which a transmission line operates is expressed in kilovolts (kV). One kV equals 1,000 volts. Any line that operates at over 100 kV is considered a high-voltage transmission line. Lines the district operates are either considered sub-transmission lines (69kV or 34.5kV) or distribution lines (below 25kV).

Q. How are transmission/distribution lines planned? A. A new transmission line may be needed to improve or preserve reliability for many reasons, such as people in an area using more electricity than they had used previously or more irrigation or industry coming into an area. In addition, lines may be built when a source of backup power is needed, such as to add an alternate source of power to an existing facility or provide a link between utilities so backup power is available during emergencies. Think of it as serving the same purpose as a road construction detour. When one path is unavailable, it is vital to have an alternate path.

Q. Who decides a new line is needed? A. We engage planning engineers to review and recommend scheduled work plans to assure we are operating our power lines as efficient as possible. Ultimately, however, the Butler PPD Board makes the final decision.

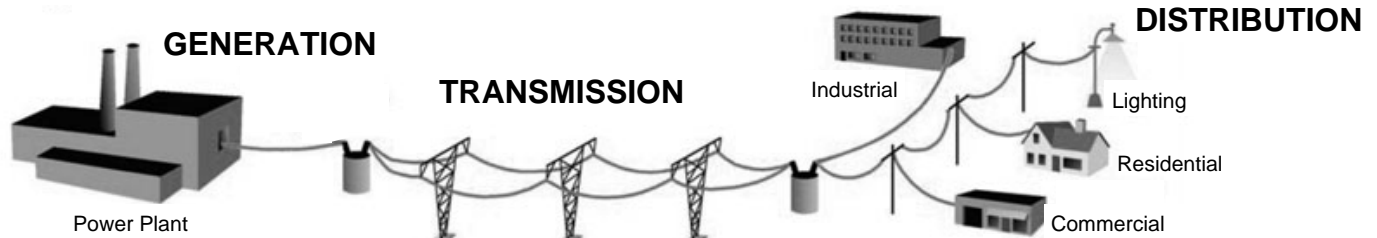
Q. Why not bury more lines underground? A. At first glance, it might seem that burying transmission lines is a good solution, but it actually has significant drawbacks for both utilities and landowners. Burying long-distance transmission lines underground is generally not practical because:

1. They cost several times more than overhead lines due to the differences in equipment, materials and construction costs.
2. Repairs are much more difficult and expensive. Outages can last days rather than hours.
3. The construction process is much more disruptive for landowners.

Even though special circumstances (such as areas near airports or dense urban areas) may require underground lines for short distances, transmission lines will continue to be built above ground until a more reliable and economical method of underground construction and maintenance is developed.

Q. Why do you have to remove trees? A. For safety and reliability, a clear area around power lines, called the clear zone, must remain clear. Transmission line wires are not insulated and produce heat as the electric current moves through the line. Trees that come in contact with the power line can start on fire and/or cause a short circuit and outages. Additionally, line contact with trees or other objects that touch the ground can be dangerous for people nearby.

Q. Do you have to remove even small trees? A. Yes. Crews will remove any trees or vegetation that would hinder the construction, operation or maintenance of the line. For safety, reliability and cost savings, we remove tall-growing trees and saplings before they become a problem. Whenever possible, we leave shrubs and other low-growing vegetation in the edges of the right of way; however, an open area is needed on both sides of the transmission line's center for accessibility.



Paying Attention to Your Heat Pump Can Avoid Big Bills



Air heat pumps are extremely efficient heating systems, when it's the part of the system supplying the heat for your home. If the outside unit fails though, you could be faced with big utility bills.

A heat pump is the only heating system that is really two separate heat systems in one. The primary system is the heat pump, which is very similar to your refrigerator. Just as your refrigerator absorbs heat from inside of the refrigerator and moves it to the coil (the one that used to be on the back), a heat pump absorbs heat outside and moves it inside. But the colder the temperature gets outside, the amount of heat is available to transfer, which causes the auxiliary heating system to stage on to assist the heat pump. This auxiliary system is the electric coils that the same as an electric furnace.

If something on a gas or electric furnace fails, you know right away something is wrong because it begins to get cold in your home. You know you need a repairman.

But if the outdoor portion of your heat pump quits working, the electric coils take up the slack and you may not even know there is a problem until you get your next electric bill, that is. All of a sudden your usage has sky-rocketed and you don't know why until somebody suggests you check if that unit outside is running at the same time the system inside is.

To make sure this doesn't happen to you, occasionally verify that the outdoor unit is running when the system inside is. If not, you may have a unit that has failed and you may need to call a repairman. Before doing that though, double check the thermostat to make sure no one has inadvertently put the system into emergency heat mode. This setting shuts the heat pump off and lets the electric coils supply all of the heat.

Some thermostats even have warning lights or indicators that the auxiliary heat (the electric coils) are running. This may not indicate that you have a problem though because it could just be cold out and the heat pump needs the auxiliary electric coils to help keep your house warm but if you notice that the warning light is consistently on it would be prudent to investigate further.

Paying attention to your heat pump, knowing how it sounds and looks when it is operating correctly can help you quickly identify when it malfunctions. Doing so can help you avoid that sudden big electric bill.

ENERGYWISESM
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**It PAYS to install
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based on the type of new qualifying
heat pump system you install.
-OR-
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Interest Loan**
for your new qualifying heat pump.



Contact us for more information.

BUTLER
PUBLIC POWER DISTRICT

In partnership with our supplier, Nebraska
Public Power District, we deliver energy to you.

Going from room to room...Each month a room of the house will be featured informing you of numerous efficiency tips .



In the last of our monthly installments covering how to make you home more energy efficient we will discuss the two systems that are most likely your largest energy users. Small changes with these systems can have a large impact on your utility bills!

Heat & Cool Efficiently

As much as half of the energy used in your home goes to heating and cooling. So making smart decisions about your home's heating, ventilating, and air conditioning (HVAC) system can have a big effect on your utility bills — and your comfort. Take these steps to increase the efficiency of your heating and cooling system.

Change your air filter regularly

Check your filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months. A dirty filter will slow down air flow and make the system work harder to keep you warm or cool — wasting energy. A clean filter will also prevent dust and dirt from building up in the system — leading to expensive maintenance and/or early system failure.

Tune up your HVAC equipment yearly

Just as a tune-up for your car can improve your gas mileage, a yearly tune-up of your heating and cooling system can improve efficiency and comfort. If you have this work done be sure to contact us to see if you qualify for an EnergyWise incentive to help offset a portion of the cost.

Seal your heating and cooling ducts

Ducts that move air to-and-from a forced air furnace, central air conditioner, or heat pump are often big energy wasters. Sealing and insulating ducts can improve the efficiency of your heating and cooling system by as much as 20 percent — and sometimes much more. Focus first on sealing ducts that run through the attic, crawlspace, unheated basement, or garage. Use duct sealant (mastic) or metal-backed (foil) tape to seal the seams and connections of ducts.

Consider installing ENERGY STAR qualified heating and cooling equipment

If your HVAC equipment is more than 10 years old or not keeping your house comfortable, have it evaluated by a professional HVAC contractor. If it is not performing efficiently or needs upgrading, consider replacing it with a unit that has earned the ENERGY STAR. Depending on where you live, replacing your old heating and cooling equipment with ENERGY STAR qualified equipment can cut your annual energy bill. But before you invest in a new HVAC system, make sure that you have addressed the big air leaks in your house and the duct system. Sometimes, these are the real sources of problems rather than your HVAC equipment.

Also, be sure to ask about Proper Installation of your new equipment. Replacing your old heating and cooling equipment with new, energy-efficient models is a great start. But to make sure that you get the best performance, the new equipment must be properly installed. In fact, improper installation can reduce system efficiency by up to 30 percent — costing you more on your utility bills and possibly shortening the equipment's life.

Water Heating

Most people are surprised to learn that the second largest energy consumer in the home is water heating. Water heating typically uses 15% of the average home's total energy use. Use the following ideas to reduce the amount you spend on heating water.

- Reduce the water temperature to the lowest possible setting that still provides sufficient hot water for your needs.
- Use a hot water wash on only those clothing items that require hot water, and always use a cold water rinse. Rinsing with warm water is wasteful and rarely if ever better than rinsing with cold water.
- If the tank is warm to the touch, adding an insulation blanket will reduce the heat loss and energy costs.
- Insulate the cold water line entering your unit & hot water line leaving your unit. A recommended distance is 10 feet.
- Change personal energy habits. By taking shorter shower or shallower baths, hot water needs are reduced.

Butler Public Power District

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Published monthly by the Nebraska Rural Electric Association, 1244 K Street, Box 82048, Lincoln, Nebraska 68501, (402) 475-4988.

Advertising in the Rural Electric Nebraskan does not imply endorsement for products by the Nebraska Rural Electric Association. Correspondence should be sent to Wayne Price, Editor, Rural Electric Nebraskan, Box 82048, Lincoln, NE 68501.

The Rural Electric Nebraskan is printed by Jacob North Companies, Box 82046, Lincoln, NE 68501. Form 3579 should be sent to the Rural Electric Nebraskan, Box 82048, Lincoln, NE 68501.

Periodicals postage paid at Lincoln, Neb. POSTMASTER: send address changes to the Rural Electric Nebraskan, 1244 K Street, Box 82048, Lincoln, NE 68501.

Publication numbers are USPS 071-630 and ISSN 0193-4937.

Rates: \$10 for one year; \$15 for two years; \$20 for three years, plus local and state tax.

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On the cover

If there's a gap in insulation, heat gets through. Use foam gasket covers to seal around outlets and light switches on exterior walls of your home. See the related story on Page 6. Photograph by Matt Price.



by Wayne Price

Re-designed NREA website offers new features

The Nebraska Rural Electric Association has launched a re-designed website in an effort to boost the communications with its membership and the public. The site can be visited at www.nrea.org.

NREA staff has spent time over the past few months working with our website designer, Pickering Creative, to implement a new website that is more user-friendly and more technologically advanced.

The new website is the result of a NREA strategic planning session held last year.

The NREA logo and mission statement are now front and center on the homepage. Our goal is to increase awareness for the NREA with the public across Nebraska.

The NREA Legislative blog, written by Government Relations Director Kristen Gottschalk, will be available on the website. The blog will keep readers updated on activities happening during the legislative session.

An interactive NREA calendar is another new feature. The calendar will be “clickable” so users can obtain additional information regarding events with just one click. Users will also be able to easily print the calendar which was not the case with our previous website.

The website will include links to the NREA social media Facebook site and also includes a social sharing widget that allows visitors to bookmark, email or share content on the NREA website on one of their own social media pages such as Twitter, Facebook or LinkedIn, as well as email a link to the page to specified recipients.

Employment Opportunities is a new area that has been added for job postings from NREA members. This section will be updated regularly with job postings from around the state.

A newsfeed appears on the right-hand side of the homepage updating visitors of current issues involving the NREA. This new feature will allow us to provide fresh information on a regular basis, which was lacking on the previous website.

The website will continue to be a source for readers to find archived issues of the *Rural Electric Nebraskan* magazine. One change that visitors will notice is an upgraded electronic version of the current magazine issue. We now have a “flip-book” version which is available in color and includes all the advertisements from that month.

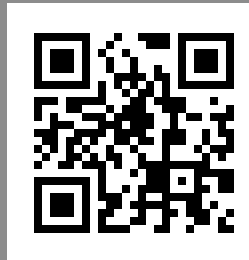
The online pages include links to URLs that are part of articles or ads. This will make it easier to find additional information about stories and advertised products. A new member-login feature will allow NREA members to have their own login and password. The new login feature will also enable members to see additional levels of the website that non-members will not have access to.

We will be able to increase the level of communication with our members through this section of the website.

Visitors with a smartphone or tablet, such as the iPad or Kindle Fire, will discover a mobile-ready version of the NREA website. This version will have all the features of the online version with a few differences. The mobile version will have fewer graphics and can adjust to smaller screen sizes.

The NREA staff is proud of the new website and would like to thank Pickering Creative for their technical and creative expertise over the course of this project.

I encourage you to visit our website and have a good look around. If you have comments or suggestions, head to the Contact Us section and let us know.



Scan & View
with smartphone

Check out
the NREA website
NOW!

2012 Nebraska State Senators

The second session of the 102nd Nebraska Legislature convened on Wednesday, Jan. 4th. It's a 60-day session.

If you want to reach your state senator during the 2012 session, please address correspondence to:

Senator (Name)
District # State Capitol
PO Box 94604
Lincoln, NE 68509-4604

Find your senator's name, hometown, legislative district and Capitol telephone number in this list:

Lavon Heidemann, Elk Creek, District 1, 471-2733
R. Paul Lambert, Plattsmouth, District 2, 471-2613
Scott Price, Bellevue, District 3, 471-2627
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Heath Mello, Omaha, District 5, 471-2710
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Chris Langemeier, Schuyler, District 23, 471-2719
Greg Adams, York, District 24, 471-2756
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Amanda McGill, Lincoln, District 26, 471-2610
Colby Coash, Lincoln, District 27, 471-2632
Bill Avery, Lincoln, District 28, 471-2633
Tony Fulton, Lincoln, District 29, 471-2734
Norm Wallman, Cortland, District 30, 471-2620



The Nebraska Unicameral meets inside the George W. Norris Memorial Chamber. The Nebraska Legislature became a one-house body in 1937.

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Russ Karpisek, Wilber, District 32, 471-2711
Vacant, Hastings, District 33, 471-2712
Annette Dubas, Fullerton, District 34, 471-2630
Mike Gloor, Grand Island, District 35, 471-2617
John Wightman, Lexington, District 36, 471-2642
Galen Hadley, Kearney, District 37, 471-2726
Tom Carlson, Holdrege, District 38, 471-2732
Beau McCoy, Omaha, District 39, 471-2885
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Kate Sullivan, Cedar Rapids, District 41, 471-2631
Thomas Hansen, North Platte, District 42, 471-2729
Deb Fischer, Valentine, District 43, 471-2628
Mark Christensen, Imperial, District 44, 471-2805
Abbie Cornett, Bellevue, District 45, 471-2615
Danielle Nantkes, Lincoln, District 46, 471-2720
Ken Schilz, Ogallala, District 47, 471-2616
John Harms, Scottsbluff, District 48, 471-2802
LeRoy Loudon, Ellsworth, District 49, 471-2725

Avoiding Air Invasions

Properly sealed, insulated homes lead to comfort, lower energy bills

by Magen Howard

We all know the symptoms of a house that's leaking air. Drafty halls in the winter lead to rooms that suffocate in summer. Then there's the most uncomfortable pain of all high electric bills.

Talk to an energy efficiency expert from your local electric utility, and one of the first things he or she will do is ask about insulation in your house. What type do you have? Is it in the attic, walls, and floors? How about the basement or crawl space?

Chances are leaky homes aren't properly insulated. But it takes more than a roll of the familiar pink fiberglass to stop air invasions.

Sealing the Envelope = Zipping Your Coat

"The biggest culprit to high energy bills remains an uninsulated, unsealed building envelope,"



Black marks on your insulation means you've got air infiltration, and your insulation is doing little more than catching dust. Create an air barrier for more comfort and lower energy bills. Photograph provided by Blue Grass Energy

remarks Bob Dickey, manager of marketing & economic development for Eastern Illini Electric Cooperative, based in Paxton, Ill. “You can lower home energy bills — you just have to identify and stop air infiltration.”

A “thermal building envelope” separates you from outside elements. It’s like wearing a coat when it’s cold: If you zip up your coat, it’s nice and warm, but if it hangs open, you’re left freezing. By properly sealing the building envelope and creating air barriers, and then installing insulation, you keep hot air out in summer and cold air out in winter.

Sealing your home’s thermal envelope involves applying caulk and foam to cracks and gaps and correctly installing insulation. If the insulation isn’t put in well, it’s not doing its job. Typically, incorrectly placed insulation leaves gaps between walls and doors or windows, or where the ceiling meets the walls.

If there’s a gap in insulation, heat gets through, warns Peter Criscione, a manager with E Source, which works with the Cooperative Research Network, a division of the National Rural Electric Cooperative Association that monitors, evaluates, and applies technologies to help electric cooperatives control costs, increase productivity, and enhance service to their members.

“It comes down to finding quality installers,” Criscione stresses.

It’s All About Air Infiltration

Understanding air infiltration is only half the battle. You have to find and stop the invaders.

“The first step involves putting a ‘lid’ on a house because heated air rises and will work its way out of the living space,” Dickey relates.

If your local public power district or electric cooperative offers home energy audits, take advantage of them. Your utility’s energy advisor will determine if your home needs a blower-door test, one of the best ways of finding out how much air goes in and out of your residence every hour. If a thermal imaging

Choosing the Right Insulation for Your Home

Your home, depending on its age, generally has one of three types of insulation: material fibers such as fiberglass or rock wool, cellulose, or foam. Each has a different R-value — the rating system for insulation’s effectiveness. The higher the R-value, the better the insulation will prevent heat transfer between indoors and out. Foam has the highest R-value and creates an air barrier, but it’s also the most expensive. Cellulose is behind foam in R-value, followed by fiberglass and rock wool. But if you create an air barrier with fiberglass or cellulose, that increases the R-value.

However, how much insulation and what kind you choose largely depends on where you live and whether you have a newly built home or an existing home you’re looking to retrofit. The right insulation also depends on your payback period.

Here’s a general primer on insulation:

Batts or rolls: These are the fiberglass or rock wool types. They are generally made to fit between wall studs.

Loose fill: Fiberglass, rock wool, or cellulose can be blown in, which makes it ideal for attics and other cavities, like walls. Fiberglass and rock wool require an air barrier before insulation installation, which means the cavity needs to be filled with caulk and foam. Cellulose does a better job of blocking air flow by itself.

Rigid foam board: This works for placement against exterior walls and shared walls with attics and must be sealed into place with caulk or foam. It’s typically more expensive, but good for colder climates.

Foam in place: This foam insulation is sprayed in and is ideal for cracks and gaps, such as spaces around windows and doors. Use low-expansion foam in these narrow spaces.

See the insulation Zip code calculator on EnergySavers.gov to find out how much insulation is right for your area.

Source: *EnergySavers.gov*

camera is available, the auditor can pinpoint exactly where your home loses air. Typical culprits include the roof, around doors and windows, recessed can lights, attic hatches and pull-down stairs, and unfinished basements or crawl spaces.

Don’t overlook the obvious — check where ceilings and floors meet the walls, too. Do you routinely have to clean a cobwebby corner? That’s a good indication of air infiltration because insects like fresh air.

“What you don’t see could be costing you a lot,” Dickey warns.

Caulk, weather stripping, and expanding spray foam should take care of those problem areas listed above. You can also make a box of rigid foam board for the attic pull-down stairs.

Choosing Insulation

But insulation won’t do any good if you don’t have proper air barriers — if your house jacket isn’t zipped. While loose-fill fiberglass or fiberglass batts keep heat from moving in or out of your house, they do little to stop air flow. In fact, if every single joint and crack is not sealed with caulk or expanding foam, your fiberglass batt insulation does little more than catch dust.

“If you look at your insulation around the edges and it’s black, you’ve got air infiltration — that’s dust being blown through the fiberglass and getting trapped,” Dickey reveals.

Cellulose, made from recycled

Please turn to page 8

Avoiding Air Invasions From page 7

newspapers and blown in, provides good attic insulation because it does more to stop air flow. Foam insulation, while the most expensive, also boasts the highest R-value — the effectiveness rating given to insulation — and completely blocks air.

Your local energy professional can help determine the best type of insulation for your house and also help you work out a payback period on your investment. You can also check EnergySavers.gov for more information about insulation, and use their ZIP code calculator to find out how much insulation you need for your location.

The bottom line: “If air is getting through, your energy bills will go up and you won’t be comfortable,” Dickey concludes.

Sources: *Eastern Illini Electric Cooperative, E Source*

Magen Howard writes on con-



Sealing the cracks around recessed can lights with caulk can greatly reduce air flow. Photograph provided by Blue Grass Energy

sumer and cooperative affairs for the National Rural Electric Cooperative Association, the service organization for the

nation’s 900-plus consumer-owned, not-for-profit public power districts and electric cooperatives.

Protect your family from CO poisoning this winter

According to Underwriters Laboratory (UL), more than 500 people die each year from carbon monoxide (CO) poisoning in the United States. During the winter months, incidents of carbon monoxide poisoning increase due to the use of heating equipment.

With that in mind, prevent CO poisoning this winter by installing and maintaining a carbon monoxide detector:

- Have a qualified technician inspect fuel-burning appliances at least once a year. Older or damaged appliances emit carbon monoxide due to wear and tear.
- Notice signs that signal a CO problem: streaks of carbon or soot around the service door of your fuel-burning appliance; the absence

of a draft in your chimney; excessive rusting on flue pipes; moisture collecting on the windows and walls of furnace rooms; fallen soot from the fireplace; small amounts of water leaking from the base of the chimney, vent, or flue pipe; damaged or discolored bricks at the top of your chimney; rust on the portion of the vent pipe visible from outside your home.

- Signs of CO poisoning include headaches, dizziness, fatigue, confusion and breathing difficulties. If someone has these symptoms inside the house but not outside, it may be a result of CO.
- Install a CO detector outside bedrooms as most poisonings occur while sleeping.
- Follow the manufacturer’s directions for installing the detector.

- If your unit is hard-wired into your home’s electrical system, you should test it monthly. If it runs off of a battery, test the detector weekly and replace the battery once a year.

- Never use charcoal grills inside homes, tents, or campers. Don’t leave vehicles running in an enclosed garage, even to “warm up.”

If your CO alarm sounds, immediately open doors and windows for ventilation. If anyone is experiencing symptoms of CO poisoning, evacuate the house and call 911. If the alarm sounds, but no one is experiencing symptoms, continue to ventilate the house, turn off fuel-burning appliances, and call a qualified technician to inspect your home.

Source: Underwriters Laboratory

CWD found in Buffalo, Custer, Holt counties

Chronic wasting disease (CWD) in deer has appeared for the first time in Buffalo, Custer and Holt counties, according to the Nebraska Game and Parks Commission.

There were 1,565 lymph node samples collected from deer taken during the 2011 November firearm deer season, with 26 samples testing positive for CWD. In addition, samples were taken from 37 culled deer that showed clinical symptoms for CWD, with one male mule deer from Garden County testing positive. Those symptoms include a rough, emaciated appearance and a lack of fear of humans.

There were a record 51 positives from 3,645 samples in Nebraska in 2010. However, the surveillance effort was reduced in 2011 due to a lack of funds. The 2011 effort focused on central Nebraska, the leading edge of the disease as it spreads from west to east.

Game and Parks confirmed CWD in the state's deer population in 2000. CWD is a disease that can affect deer and elk and always is fatal to the affected animal. Humans have never been known to contract CWD.

In the later stages of infection, deer infected with CWD will show signs of progressive weight loss, listlessness, excessive salivation and urination, increased water intake, depression and, eventually, death. Animals can be infected with CWD for months or years before outward signs of infection are evident. These symptoms are also found when an animal is infected with other diseases.

As more extensive steps have been taken to learn more about the disease, its spread, and its prevalence in both wild and captive deer and elk herds, the body of evidence continues to grow.

Source: Nebraska Game and Parks Commission

Caulk up the Savings

Caulk like a pro with these handy application tips

by Robert A. Dickleman

The greatest sources of heating and cooling losses in your home are often invisible air leaks. As a result, controlling air leaks provides the best way to extend the life of your home, conserve energy, save money, and increase comfort.

Bottom line? If you don't tighten up your home first, money spent on insulation may be wasted.

Fortunately, you can seal a lot of leaks around your home's exterior with less than \$100 worth of caulk. It's generally possible to seal openings up to one-quarter inch between window frames and siding or around door frames. For larger gaps, add a backing material before caulking, or use a spray foam sealant instead.

Most types of outdoor caulk are sold in tubes that fit a caulking gun. In addition, some caulks come in aerosol cans; they're a good choice for filling gaps up to one-half inch around pipes and wires.

When shopping for caulk, there are myriad choices. Prices range from a couple of dollars to several dollars per tube, so be sure to read the labels and choose a product that will adhere best to the materials you're sealing.

If your budget allows, spend a little more for a higher-quality caulk. Inexpensive caulks may last only a few years, while premium-priced caulks are rated for 20 years or more.

Caulk like a Pro

- As a rule of thumb, you'll probably use half a cartridge per window or door and up to six cartridges for foundation work.

- Most caulks pose no known health hazards after they're fully cured. However, some high-perform-

ance caulking compounds contain irritating or potentially toxic ingredients, so you should carefully read the manufacturer's instructions and take the appropriate precautions.

- The best time to apply caulk is during dry weather when outdoor temperatures are above 45 degrees. Low humidity is important during application to prevent cracks from swelling with moisture.

- If the gap you're sealing is too wide, use a special filler made for the purpose. You'll find fillers in the caulking department of your local hardware store or home center. However, note that fillers are not designed for exposure to the elements; so you'll need to caulk or seal over it.

- Before applying new caulk, remove the old caulk or paint

residue with a putty knife, stiff brush, or special solvent.

- Make sure your work area is dry, so you won't seal in moisture.

- Hold the caulking gun at a consistent angle; 45 degrees is best.

- Caulk in a straight, continuous stream, avoiding stops and starts, and make sure the caulk sticks to both sides of the crack or seam.

- Send caulk to the bottom of an opening to avoid bubbles.

- Release the trigger on the caulking gun before pulling it away from the crack to prevent applying too much caulk. A caulking gun with an automatic release makes this much easier.

- Don't skimp. If the caulk shrinks, reapply it to form a smooth bead that completely seals the crack.





- If caulk oozes out of a crack, use a putty knife to push it back in.

- Once you've applied caulk, it takes time for it to dry, or cure. Curing time is described in two ways. The tack-free time tells you how quickly the fresh caulk's outer surface will dry or skin over. The total cure time indicates the time required for the caulk to become



Sealing cracks around doors and windows can help save on your electric bill. Photograph provided by Touchstone Energy Cooperatives

Common Caulking Compounds

Caulk Type	Recommended Uses	Cleanup	Shrinkage	Adhesion	Comments
Silicone 	Seals most dissimilar building materials such as wood, stone, vinyl, metal flashing and brick.	Immediately with dry cloth and mineral spirits or naphtha	Little or none	Good to excellent	Permits joints to stretch or compress. Will stick to painted surfaces, but paint will not adhere to most cured silicones.
Polyurethane, expandable spray foam 	Expands when curing. Good for larger cracks. Use in non-friction areas, because foam becomes dry and powdery over time.	Immediately with solvent such as lacquer thinner	None; expands quite a bit	Good to excellent	Quickly expands to fit larger, irregularly shaped gaps. Flexible. Can be applied at variable temperatures. Must be painted for exterior use to protect from ultraviolet radiation.
Water-based spray foam 	Around window and door frames in new construction or remodeling projects; smaller cracks	Water	None; expands only 25%	Good to excellent	Takes 24 hours to cure to a soft consistency. Will not overexpand to bend window frames. Must be exposed to air to dry. Not useful for larger gaps, as curing becomes difficult.
Butyl rubber 	Seals most dissimilar materials such as glass, metal, plastic, wood and concrete. Seals around windows and flashing; bonds loose shingles	Mineral spirits or naphtha	5%-30%	Good	Lasts 10 or more years. Resilient, but not brittle. Can be painted after one week. Variable shrinkage may require two applications. Does not adhere well to painted surfaces.
Oil or resin-based 	Seals exterior seams and joints on almost all building materials	Mineral spirits or naphtha	10%-20%	Good	Low cost. Rope and tube forms available. Oils dry out and cause material to harden and fall out. Low durability; lasts 1-4 years. Poor adhesion to porous surfaces such as masonry. Should be painted. Limited temperature range.

completely stable—or reach the point where no further drying or shrinking will occur.

- Don't allow pets and small children to come into contact with fresh caulk.

Use expanding foam for large gaps

- Be sure to use the correct type of spray foam for the job. Polyurethane expandable spray foam works well around pipes and gaps around the foundation. However, this type of caulk expands with so much force that it can cause damage to window

frames and door frames. In those spots, use a water-based spray foam specifically designed for the job.

- Expanding foam is ideal for filling cracks that caulks can't handle. It comes in aerosol cans and takes a short time to cure. The foam is very sticky and attaches itself quickly, so be prepared to pick up any messes fast.

- To seal gaps too wide for foam, use foil-faced bubble wrap. For really large holes, cut sections of rigid foam insulation to fit and then glue into place with expanding foam before covering the area with wood

or another appropriate building material.

Sources: U.S. Office of Energy Efficiency and Renewable Energy, ENERGY STAR, and product manufacturers

Bob Dickelman writes on energy efficiency 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 public power districts and electric cooperatives.

A Token of Love



by Dee Ritter

While looking at some old coins that had belonged to my grandmother I found a small, silver lapel pin made from a dime minted in 1876, the year my grandmother was born. One side had been smoothed down and engraved with her initials. When I took it to a local coin dealer he told me it was a love token. I was told that my love token had little value other than sentimental value and should be kept in the family.

Searching the Internet for more information I learned that some people collect love tokens. In fact, there is a Love Token Society. The Society considers love tokens to be any coin or medal on which something has been engraved. They listed the current value of a love token dime at three to five dollars. However, coins with elaborate borders, difficult designs and certain themes or names of prominent persons are worth much more.

A love token isn't really a token. It is a coin or medal that has been defaced by planing off one side, typically the reverse, and engraving it with something meaningful. Occasionally both sides are engraved. This tradition was started by Europeans in the 17th century. Europeans simply called these coins "engraved coins." It was the more romantic-minded Americans who began calling them "love tokens."

The practice of giving love tokens reached its height of popularity in the United States in the late 1880s. The coin most commonly used was the Seated Liberty Dime: a 10-cent piece featuring an image of a seated woman holding a flag and a shield that reads "Liberty." A dime, made of silver, was softer and easier to engrave than a copper penny or a nickel. At the time a dime was the average daily wage for many men.

According to the Love Token Society "Love tokens are known to be made from half dimes, quarters, silver dollars, gold dollars, gold quarter eagles and even \$20 double eagles. They were probably made from just about every denomination available." The Love Token Society states that love tokens must meet the following basic requirements: First, the coin must be taken from circulation. Second, the engraving must be done by hand. Since men with little or no artistic talent did many of the engravings it is amazing to see the detail on some of these coins.

A young man desiring to get married may have taken a dime from his pocket and had it engraved with his last initial and his girlfriend's first



The manufacture and practice of giving "Love Tokens" seems to have originated in Great Britain in the early 1800's, and then migrated to the United States in the mid- to late-1800's.

initial. If she wore it they were considered engaged. Some coins had holes punched in them and were worn on a chain around the neck. Many were made into lapel pins and worn over the heart. Mothers often had bracelets made with the names or initials of their children on the coins.

Some collectors only collect tokens with specific names, initials or symbols. Others collect whatever they take a fancy to: sayings, quotations, special dates or something that has special meaning to the collector.

The denomination selected for the love token factors into the desirability of the piece, as does the quality of the artwork. The more detailed and fancy the engraving, the more valuable the love token will be. Professionals engraved the more desirable tokens. To be collectable a love token need not be done by a professional but it must be engraved by hand. Today if you found someone

willing to engrave a coin for you it would probably be done by machine. The United States Mint, blaming love tokens for the shortage of dimes, officially banned mutilation of coinage in 1909 making love tokens scarce after this date.

From a 1988 survey taken by the Love Token Society it was concluded that the members of the society probably own the lion's share of love tokens in the United States. They accounted for 5,735 at the time of the survey. Most were made from the Seated Liberty Dime.

Sadly, the stories behind the majority of these tokens have been lost. Documentation greatly increases the value of a love token. To come across a love token is common, but to know the story behind the token is the real treasure. Love tokens that have come down through a family from one generation to the next with a story or photograph of the original owner are rare.

THEY CAME FROM

OUTER SPACE

STRANGE AIRSHIP SIGHTINGS REPORTED OVER NEBRASKA

BY STEVEN A. ARTS

ILLUSTRATION BY MATT MIGNANELLI



People were seeing strange lights in the sky at night that they couldn't really understand. Saucer-shaped objects were clearly described by eye witnesses. Sometimes there were supposed to be human, or human-like beings piloting these objects. Sometimes they were downright alien; as in inhabitants of other planets.

Were these strange craft hallucinations, swamp gas, balloons or stars? Maybe the people were perpetrating a great hoax. Newspapers of the time seemed to fan the flames further afield. Were these UFO's? Maybe, but in the era they were sighted, people called them airships. You see, these strange objects were seen above in the skies of Nebraska, and many other states, in 1896 and 1897! About six years before human heavier-than-air craft were perfected.

These airships were first spotted, and reported on, in late 1896 in California and other far west states and territories. Over the months, into early 1897, they moved east across the Rocky Mountains.

One of the first Nebraska sightings of an airship dates to February 1, 1897; where it was reported that a man was experimenting with an aircraft west of Hastings. The reports insinuate that the event happened in the fall of 1896, but nothing has been found to authenticate this. Back during this era some reporters actually back dated sightings, in a kind of one-upmanship against neighboring communities. Like saying I saw an airship before you did, I just didn't report it right away.

Another airship was seen south of Hastings in Inavale and reported on February 6. It was said that twelve people saw an airship after attending a church prayer meeting. The object was said to be 30 to 40 feet long, and have a conical shape with six small lights attached. People reported hearing voices and a mans' laugh coming from the object, just before it disappeared into the night skies.

The Kearney Daily Hub reported on two airship sightings, almost at opposite sides of the state, in York and Big Springs. The North Platte

men saw an airship at Big Springs which had a light the size of a barrel. The airship was said to be 300 feet in the air on a clear and moonlit night.

A couple of dozen people saw a strange sight while attending a party at 20th and H Streets in Omaha on February 16. A young girl was reportedly the first person to see it. This time the craft was said to be 400 to 500 feet in the air.

On February 18, 1897 the Hub reported that City Clerk Charley Prescott saw an airship. It seems as if the Hub reporter had a difficult time believing Mr. Prescotts' account. Prescott was supposed to be a non-believer in airships before this incident. The light, which didn't move much, was said to be the size of a wooden water bucket.

Kearney appears to have had quite a few airship sightings, according to both the Hub and the now defunct Omaha Bee. An artist, several employees, and the Hub editor were said to have seen an airship.

The Nebraska State Journal of Lincoln reported that two York businessmen saw an airship at McCool Junction on February 26. That same day one was sighted in Wood River.

Airships performed a triple performance at Beatrice, Wymore and Hastings, the Nebraska State Journal reported on February 25, 1897. The light was said to be half a mile in the sky, and 100 people saw it at Wymore.

Kites at the time seem to be much referred to in conjunction with airship sightings. The Daily Bee of Omaha reported on February 28 that one J.R. McLean of Juniata was known to be flying kites with lights attached to them. Could this be truthful, or simply 19th century Nebraska newsmen trying to come up with a logical explanation for what people were seeing.

There were numerous other sightings all across the state during the months of February and March of 1897. By far the busiest month for airships that year, both in Nebraska and elsewhere, was April.

On April 6 there was a report that fifty members of the Ak-Sar-Ben

organization saw an airship, as did hundreds of other people in Omaha. This airship was said to be made out of steel, instead of the usual aluminum found in many reports. A passenger and conductor on the Harney Street cable car saw an airship too.

The Nebraska State Journal reported an airship seen in Central City and St. Edward in their April 9, 1897 issue.

Hoaxers reportedly sent up a few balloons in Omaha on that date. Airships were seen in Red Cloud and Omaha.

There were several sightings of airships on the 15th. Clarks reported a sighting, as did Clay Center. People saw an airship from a train by Silver Creek and near Columbus.

On April 17, a man in Harrison said that he recognized a man named Wipple, who supposedly robbed a bank in Crawford. Charles Reif of Grand Island claimed that he rode on an airship, which was supposedly captained by a man named Gearon.

On April 19 Nebraska had some reported sightings at Juniata, Lyons and Bancroft. An airship was spotted at Portal near Omaha. People saw airships at Bradshaw and Table Rock. A man from North Platte was supposed to be the human inventor of the airship.

An Omaha lawyer was said to have plans for an airship on file in his office. At this time, on April 24, the Omaha World-Herald published the story of supposed airship inventor Clinton Case. There was a sighting at Fremont the next day. This sighting was similar to the famous LeRoy, Kansas cattle-napping by an airship. In this case someone in an airship let down a cage and bagged a farmers' chicken. Perhaps this was a way of making fun at the Jay Hawkens. The Omaha Bee printed a letter purported to have been written by the inventor of the airship.

It's about this time that the airship sightings start to peter out in Nebraska and elsewhere. What did

Please turn to page 17

Be prepared for safe winter travel in Nebraska

According to the U.S. Department of Commerce, 25 percent of winter deaths can be attributed to people being caught out in a storm. The National Weather Service reports that many of these winter deaths occur when people attempt to leave their vehicles during a storm to walk to safety.

To stay safe, stranded drivers should stay with the car, tie a piece of colored cloth to the car's antenna, and keep the car running while using the heater 10 minutes out of each hour. People should remember to keep their interior lights on while the engine is running and be sure the exhaust pipe clear of snow and ice. Crack the windows slightly to allow in fresh air and avoid of carbon monoxide poisoning. To prevent hypothermia and frostbite bundle up in woollens or a blanket. If these aren't available, move your arms and legs constantly to keep the blood flowing.

Before driving, be sure to remove all snow and ice completely off the car. This will insure you are able to see out all of the windows and prevent large chunks of snow sliding and covering the windows or flying off and hitting another vehicle. This will also

allow other people and yourself to see the lights from your taillights and headlights.

Don't let four- or all-wheel drive (4WD and AWD) give you a false sense of security. 4WD and AWD systems only provide extra traction when accelerating, not in braking or cornering. So use the above tips no matter what type of vehicle you're driving.

Be extra wary of other motorists. They may not be driving as cautiously as you.

If travel is necessary in stormy weather, it's best to inform someone of the travel route, destination and expected arrival time. Travelers should remember to keep their gas tanks near full to avoid ice in the tank and fuel lines and keep a disaster supply kit in the car.

Winter Travel Survival Kit

Cell phone with charger
Flashlight and extra batteries
Blankets or sleeping bags
Booster cables
Fire extinguisher (5lb., A-B-C type)
First aid kit and manual
Bottled water and non-perishable high-energy foods, such as granola bars, raisins and peanut butter.

Compass and road maps
Shovel
Tire repair kit and pump
Flares
Extra clothing to keep dry
Sack of sand or cat litter (for tire traction)
Tow rope

Source: American Red Cross; National Weather Service; National Safety Council

Murphy



Make electrical safety a priority

The following tips from Safe Electricity will help you to keep your home safe from electrical accidents:

- Electrical outlets – Check for loose-fitting plugs, which can be a shock or fire hazard. Replace missing or broken wall plates so wiring and components are not exposed. If you have young children in the home, make sure unused outlets are covered.

- Faulty appliances/electronics – If you have appliances or electronics

that have given you shocks, blown a fuse, or tripped breakers, replace them. Look for cracks or damage in wiring and connectors. Use surge protectors to protect expensive electronics. Make sure your appliances and electronics are placed in dry locations—away from all water.

- Ground Fault Circuit Interrupters (GFCIs) – GFCIs should be installed in any area of your house where water and electricity are used—including the kitchen, bathrooms, and basement. GFCIs provide protection against shock from appliances that have come in contact with water, as well as damaged or defective appliances. A GFCI constantly monitors the flow of electricity through a circuit and will shut the circuit down if it senses a ground-fault.

For more electrical safety tips, go to SafeElectricity.org.

Nebraska Airships From page 15

these people really see? Were they flying craft actually invented by human beings? There really were people experimenting with flight at this time. Three cases in point are Hiram Maxim, Octave Chanute, Samuel Pierpont Langley and even Thomas Edison. Most of these airship sightings were attributed to Earth-bound inventors, but more than just a few were said to be from Mars or other planets.

We may never know exactly what these people saw, or didn't see, or thought that they saw. It happened well over 100 years ago. There were liars clubs in some places. Other airship researchers have attributed sightings to such things as a railroad and/or telegraphers hoax, newspaper reporters hoaxes, or hoaxes by other people. Readers must make up their own minds.

Protect electronic devices from power surges

by James Dulley

Q : We have many electronic gadgets in our house, and I am concerned about a voltage surge ruining them. Are there whole-house surge suppressors that will protect everything electric in our house?

A : People often think of only electronic gadgets, such as computers, game consoles, and audiovisual items, as being at risk from electrical surges. Actually, nearly every electric item in a house today has some sort of sensitive electronics that can be damaged by a surge. These include kitchen ranges, dishwashers, vacuum cleaners, air conditioners, and fans.

A common source of an electrical surge is lightning during a thunderstorm. The voltage and current spikes from just a single lightning strike are enormous, and there are typically many for the duration of the storm. If your house and wiring experience a direct or very nearby hit by lightning, even a good surge suppressor will probably not be able to protect all electronic items.

When a storm is forecast and you begin to hear the thunder off in the distance, unplug as many of your electronic devices as possible. This actually is a good idea anyway because many devices draw a lot of electricity even when you think they are turned off. Just switching them off may not be adequate protection from voltage and current surges. A huge voltage surge can arc across an open switch and still fry the electronic components in an expensive device.

Many times, it's the repeated smaller electrical surges that damage the majority of electronic equipment. These can be generated by the switching on and off of inductive equipment (usually electric motors) in nearby businesses. Some of these

smaller surges can even be generated by motors from your own vacuum cleaner, refrigerator compressor, or clothes washer through your home's wiring.

It usually takes a long time for these numerous smaller surges to cause failures. One common result is that the wire and circuit board insulation slowly breaks down from each small surge and normal aging.



The electric meter is installed over the top of a base-type surge suppressor. It must be installed by an electrician. Photograph provided by Meter-Treater

Eventually, a wire may short out or the electronic component begins to malfunction, and the device fails. These surges can also reduce the life of many types of light bulbs.

There are several types of whole-house surge suppressors available designed to protect all of the wiring circuits in a house. Some mount on the circuit breaker panel indoors or are built into a circuit breaker. Others are designed to mount at the base of the electric meter. Many electric utility companies sell and install the

units that work with electric meters for you. Check with your local electric utility to see if it offers this service.

There are differences in the protection provided by various surge suppressors. A common design uses metal oxide varistors (MOV) to dissipate the surge before it flows through the house wiring.

You can conceptualize this as a floodgate. At normal voltages, the gate is closed, preventing leaks. But if the voltage gets too high, the gate opens, allowing the excess damaging current to pass to ground, protecting the equipment.

If the components (including MOVs) in a surge suppressor are too small, they can't handle the surge, and they fail. Using larger components, rated to handle more Joules (a measure of energy), allows the suppressor to safely dissipate a larger surge. When comparing surge suppressors, a higher number is better for the total energy dissipation. Clamping voltage is the voltage that is required for the "floodgate" to open—for the MOV to conduct electricity. A lower number for this is usually better.

Even though the surge suppressor protected your electronics, a large surge may burn out the MOVs. Many models have a light on them to indicate if it is still functioning. Check it regularly and especially after a thunderstorm.

It's also important to note that many electronic devices like computers and entertainment systems have multiple connections, including satellite or cable, phone, or network, in addition to the power connection. Any of these can serve as a path for a surge to enter the device and cause damage. Surge suppression installed on the power line doesn't guarantee protection.

Send inquiries to James Dulley, *Rural Electric Nebraskan*, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit www.dulley.com.

Manufactured Savings

by Brian Sloboda

Manufactured homes, sometimes dubbed mobile homes, often log disproportionately higher energy bills than traditional wood-frame or modular homes. But you can take steps to help manage energy costs and increase comfort.

Manufactured homes come in several configurations: singlewide, doublewide, and triplewide. Doublewides and triplewides require a crossover duct to provide air flow between the sections — a major culprit in air leaks that contribute significantly to wasted energy.

Manufactured units must also be transported to a site, and movement can disrupt the integrity of the original construction. Also, homes that sit on jack stands or blocks allow air to flow underneath.

There isn't a magic bullet to lower the energy consumption of a manufactured home. It takes time and hard work to troubleshoot all of the possible causes of energy loss. The most common culprits and ways to remedy them are:

- *Belly board problems* — In most manufactured homes, the belly board holds the insulation in place under the floor and serves as a vapor barrier. Plumbing that runs under the floor is on the warm side of the insulation to keep it from freezing in winter. However, the belly board can be damaged by animals, deteriorate over time, or become torn, allowing the floor insulation to become moisture laden or to simply fall out, exposing ductwork and dramatically increasing energy losses. Often there is also long-term water damage from leaky pipes, toilets, and showers that has compromised floor, insulation, and belly board integrity. These problems must be addressed prior to basic weatherization. Replacing the belly board and repairing leaky plumbing should be the first thing on your to do list.

- *Air leakage/infiltration* — Infiltration of excessive outside air can be a major problem. Specific problems include deteriorated weather stripping; gaps in the “marriage wall” that joins multiple units making up the home; holes in the ends of ducts; gaps around wall registers and behind washers and dryers; and unsealed backing to the electrical panel. This is a dirty job and will require you to crawl under the home and into the attic looking for gaps. Gaps can be filled with weather stripping and insulation.

- *Crossover ducts* — Sealing the ducts that run under the sections making up your mobile home will result in tremendous energy savings and increased comfort. Crossover ducts are often made of flexible tubing and are therefore prone to collapse and are easy for animals to chew or claw into. Crossover ducts made of thin sheet metal can leak air heated or cooled air to the great outdoors, which is what happens when ductwork connections are made with duct tape. Repairs are generally easy, using either special duct sealant or metal tape that can be found at most home improvement stores. If you can afford the upgrade, consider replacing a flexible crossover duct with metal ductwork.

- *Lack of insulation* — Insulation levels and associated R-values in walls, floors and ceilings in manufactured homes can be woefully inadequate. If it is easily accessible, adding additional insulation to ceiling and floors will help. However, adding insulation to walls will be a problem without major renovations that are often not cost justified.

- *Uninsulated ductwork* — Ductwork itself may not be wrapped with insulation, allowing heating and cooling losses. Wrapping ductwork will lead to energy savings. You should be able to find insulation specifically made for ductwork at your local hardware store.

- *Single-glazed windows and unin-*



Sealing your manufactured home, or mobile home, may take a few weekends and a few hundred dollars, but what you'll save on energy costs will be worth it. Photograph provided by Touchstone Energy

- *Insulated doors* — Most manufactured homes come with single-glazed windows and uninsulated doors, which have a low R-value. That means the rate of heat transfer between finished interior spaces and the outdoors is higher than what's ideal. Replacing the windows with double- or triple-glazed windows or adding storm windows will help to make the home more comfortable. An insulated door will also help. However, these solutions can be very expensive. At a minimum, you should add weather stripping to doors and windows. Also, a window film kit is a cheap and easy-to-install upgrade that will help to keep winter winds out of the home.

It may take a couple of weekends and a few hundred dollars, but basic repairs can see significant savings. Savings of up to 50 percent have been reported in manufactured homes that have been properly sealed and had old electric furnaces replaced with new electric heat pumps. The key is to get out there and start hunting for the savings lurking under and inside your manufactured home.

DOWN HOME RECIPES



Greek Turkey Pizza

- 1 Pound Turkey cutlets, cut in thin strips
- 2 Cups thinly sliced red onion
- 1/4 Cup chopped fresh parsley
- 1 Teaspoon lemon-pepper seasoning
- 1 Teaspoon minced fresh garlic
- 1 Teaspoon dried oregano leaves
- 2 Teaspoons olive oil
- 1 Italian bread shell, thin crust (12-inch diameter)
- 1 Cup chopped tomatoes, drained
- 12 Kalamata olives, pitted and slivered
- 1 Package (6 ounces) crumbled Feta cheese

In large bowl combine turkey strips, onion, parsley, lemon pepper, garlic and oregano.

In large non-stick skillet, over medium-high heat, saute mixture in oil 5 to 7 minutes or until turkey is lightly browned and no longer pink in center.

Place pizza shell on (10 x 15 x 2 inch) baking sheet. Top with turkey mixture, tomatoes, olives and cheese. Bake at 450 degrees F for 10 to 12 minutes, or until heated throughout and cheese is melted.

**Recipe provided by the
National Turkey
Federation**

Pork Chili Casserole

- 1 1/2 lbs. boneless pork, cut into 1/2 inch cubes
- 1 tablespoon cooking oil
- 1 (15 oz.) can black beans, rinsed and drained
- 1 can cream of chicken soup
- 1 (14 1/2 oz.) can diced tomatoes, undrained
- 1 (4 oz.) can chopped green chilies
- 1 cup instant rice
- 1/4 cup water
- 2-3 tablespoon salsa
- 1 teaspoon ground cumin
- 1/2 cup shredded cheddar

In a large skillet, sauté pork in oil until no pink remains, drain. Add the beans, soup, tomatoes, chilies, rice, water, salsa, and cumin; cook and stir until bubbly. Pour into an ungreased 2 qt. baking dish. Bake uncovered at 350 degrees for 30 minutes or until bubbly. Sprinkle with cheese; let stand for a few minutes before serving. This can also be put into a crockpot instead of the oven. Cook on low in the crockpot for about 4 hours. Serve with tortillas.

Bridget Johnston, Alliance, Nebraska

Butter Brickle Bars

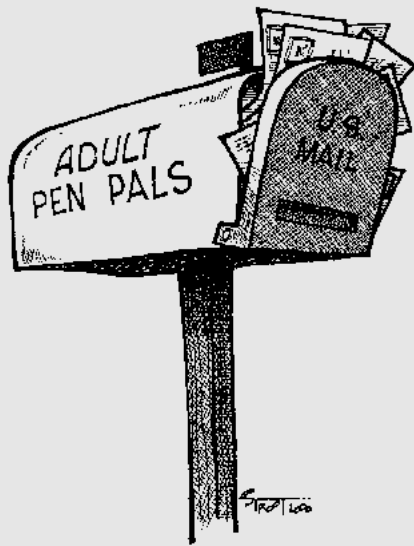
- 1 pkg yellow cake mix
- 1 large egg
- 1/3 cup butter, melt
- Mix above ingredient together and pour into an 11 x 15 inch cookie sheet.
- Pour over mixture:
- 1 cup sweetened condensed milk
- 1 pkg. butter brickle chips
- 3/4 cup pecans
- Bake at 350 degrees for 20-25 minutes. Can use other chips if desired.

Dolores Florian, Ord, Nebraska

Creamy Potato Soup

- 4 cups diced potatoes
- 1/2 cup chopped onions
- 1/2 cup chopped carrots
- 1/2 cup chopped celery
- 1 teaspoon salt
- 3 cups boiling water
- 1/3 cup oleo
- 1/3 cup flour
- 2 cups milk
- 1 teaspoon salt
- 1/2 teaspoon dried mustard
- 1/4 teaspoon pepper
- Combine above ingredients. In saucepan, melt oleo and blend in flour. Add other ingredients and cook until thick. Add to potato mixture and simmer. Serves 5.
- Bring to a boil, cover, and simmer 15 to 20 minutes or until vegetables are cooked.

Mildred Marcum, Spencer, Nebraska



To appear in print

The Rural Electric Nebraskan Adult Pen Pal Service is exclusively for member-readers ages 18 and over. To be considered for use, submissions must: (1) Identify rural electric system providing magazine; (2) Include \$6 to cover mail forwarding costs; (3) Be 25 words or fewer; (4) Include full name and mailing address (will not be used in magazine); and (5) Be first person, submitted directly by person to receive responses. Acceptance, editing and issue scheduling is at editor's discretion.

Address all submissions to Rural Electric Nebraskan Adult Pen Pal Service, P.O. Box 82048, Lincoln, NE 68501. All responses received by the Adult Pen Pal Service are routed directly, postage paid, to the response number assigned to each submission.

To write

To respond to one of the adult pen pal requests, write letter, place in envelope, seal and affix first class postage. Address to full, correct response #, c/o Rural Electric Nebraskan Adult Pen Pal Service, P.O. Box 82048, Lincoln, NE 68501. Your letter will be forwarded unopened. Do not send money or additional postage; forwarding is prepaid. Enclose your full mailing address for return correspondence.

Once again . . . it is very important that all responses carry the full response number—both month and number—to be properly forwarded.

Abbreviation Code

C — Christian; *C/W* — Country-western;
D — Divorced; *F* — Female; *M* — Male;
NS — Non-Smoker; *ND* — Non-Drinker;
R&R — Rock and roll; *S* — Single;
W — White; *Wid* — Widowed

FEB-1: SCF, 25 NS, Farmer's daughter, College educated. Enjoy animals, rodeos, dancing, C/W music & concerts, movies, and quiet evenings at home. No children, but would like some in the future.

FEB-2: SDWM, 48, looking to meet a great gal 38-50. I'm a hard-working guy from northeast Nebraska. I'm quiet, soft-hearted, easy-going, that likes Nebraska football, dining out, movies, the outdoors, being with friends and family for companionship. Please send phone number & photo.

FEB-3: SWF, 61, from the Sandhills looking for a NS/ND, nice guy, 55-61, who loves animals and loves to go for walks.

FEB-4: SWCF, petite, green eyed redhead, from south central Nebraska would like to meet a gentleman 60-70. Enjoy cooking, home, family, gardening and being near the people I care about. Looking for that special someone. Please send phone number & recent photo.

FEB-5: SWCF, NS/ND, 5'7", never married, fun loving, hardworking,

no children, looking for a fun loving guy NS/ND, 28-39, willing to live in north central Nebraska who shares similar interests. Church, cooking, people, children, country life, skiing, being outdoors & running my own business are a priority. I enjoy sports, concerts & fishing. Want to meet a man who church, character, & respect are priorities. No swearing or bad tempers wanted.

FEB-6: SWM, NS, 30, 5'11", 165 lbs., good built, nice looking, occasional drinker. I'm a quiet, hard working country guy who likes 4-wheeling, traveling, camping, fishing, good times, & enjoys life. Looking for slender gal that enjoys farm life. Please send phone number & photo.

FEB-7: SWM, NS, occasional drink, 70, 6'1", healthy, semi-retired country fellow. I like CW music and dancing. Would like to meet a nice lady in her 60s, slender to average built, to go places, etc. Send photo & phone number.

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