Prepare for Summer Heat, Increase Energy Savings

BY B. DENISE HAWKINS

Adding a few items to your list of spring chores can help make your home more energy efficient and deliver electric bills that won’t make you sweat when temperatures soar.

Start with Your Air Conditioner

Spring and early summer are good times to make sure that your air-conditioning unit is ready to work when you flip the switch.

► Have a professional inspect and service your unit. The service should include a thorough check of wiring and electronic and mechanical systems, lubrication of all moving parts, and calibration of the thermostat.

► Give your air conditioner a do-it-yourself cleaning. Shut the unit off and clear away weeds, leaves and yard debris from the outside condenser. Inside the unit, clean or replace filters. Dirty filters can restrict airflow and reduce overall efficiency by making the air conditioner work harder on hot summer days. Dust the fan blades if you can do so safely. Make sure air can flow freely over the inside and outside coils. Vacuum registers to remove any dust buildup.

► When using window units, ensure that weatherstripping is in place. Placement should be between the middle of the top and bottom window panes.

Examine Your Roof

See how well your roof has weathered the winter. Few things can shorten the life of your home faster than a roof leak. Even a minor one can damage your attic insulation before you know it.

A roofing professional can assess the roof’s condition and repair loose or missing shingles, plug leaks and clear gutters.

Make Your Electric Cooperative a Resource

The energy advisers at Wood County Electric Cooperative can help you determine the right steps for your home, including whether an energy audit will help find more savings. You can also visit wcec.org to find out how little measures around the house can add up to big energy savings as temperatures outside climb.

B. Denise Hawkins writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.
‘E’ Stands for Energy Efficiency This Earth Day

Earth Day is April 22, and this year, “E” stands for energy efficiency. It serves as an important reminder that you can care for Mother Earth and reduce your energy bills at the same time. The cleanest, greenest energy is the energy we do not use. So this Earth Day, the Energy Education Council encourages you to discover ways that you can become more energy efficient.

An easy first step to learn more is to check out all of the helpful tips and resources on EfficiencyResource.org. The site has a variety of articles, videos, games and educational materials. Many people do not realize just how easy it is to cut their energy bill by replacing their most used incandescent lightbulbs with compact fluorescent lamps or light-emitting diodes. Even simpler, just unplugging electronics when they are not in use can save you money.

Here are some efficiency actions you can start incorporating into your energy habits this Earth Day:

- Put a thermal blanket, sold at hardware and home-improvement stores, on your older water heater to help water in the tank stay hot.
- Install low-flow showerheads and faucet aerators to help you save water, which takes energy to pump and heat.
- Set your thermostat higher in the summer when you can accept warmer conditions. This generally includes nighttime and whenever you leave your home for several hours. Many people find it easier to use a programmable thermostat that can be set to automatically adjust.
- Separate your electricity and natural gas bills. Target the biggest bill for energy conservation remedies.
- Assess your heating and cooling systems and determine whether replacements are justified or whether you should retrofit them to make them work more efficiently and provide the same comfort (or better) for less energy.
- Insulate hot water pipes and air ducts that run through unheated areas.
- Have an energy auditor with a blower door determine where the worst cracks are. Small invisible cracks and holes may add up to as much as an open window or door—without you even knowing it!

Visit EfficiencyResource.org, an initiative of the Energy Education Council, and make your energy use more efficient.
Storm Safety

When thunderstorms and tornadoes strike

BY B. DENISE HAWKINS

Beware. Spring can usher in more than April showers. From now through the summer months, thunderstorms can quickly roll in and tornadoes can touch down, often during the afternoon and evening hours, according to researchers at the National Severe Storms Laboratory, part of the National Oceanic and Atmospheric Administration.

Follow these tips from NOAA and the American Red Cross to keep you and your home safe when tornadoes and severe thunderstorms come your way.

► Remove diseased and damaged tree limbs before storm season begins.
► Listen to local news or National Weather Service broadcasts to stay informed about tornado watches and warnings.
► If you are in a mobile home, immediately head to a sturdy shelter. Mobile homes, especially hallways and bathrooms, are not safe places to take shelter during tornadoes or other severe winds.
► Designate a family meeting place for shelter during and after a storm. If possible, go to your home’s basement, a small interior room, or under stairs on the lowest level. Also, have a battery-operated weather radio handy along with emergency supplies.
► Unplug electronics. Avoid using electrical equipment and corded telephones while lightning is in the area.
► Remember that there is no safe place outside during a severe storm. If you are caught in a storm while driving, switch on your headlights, try to safely exit the roadway, and park. Stay in the vehicle with your seat belt on, and turn on the emergency flashers until the heavy rain ends. If thunder and lightning is occurring, avoid touching metal or other surfaces that conduct electricity in and outside the vehicle.
► As a storm moves in, move or secure lawn furniture, trash cans, hanging plants or anything else that can be picked up by the wind and become a projectile.
► Stay safe after a storm. Remain indoors at least 30 minutes after the last clap of thunder. Also, stay away from downed power lines and avoid flooded areas. Power lines could be submerged and still live with electricity. Report them to public safety authorities and Wood County EC at (903) 763-2203 immediately.

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A fire can start with a simple request: “I want the new picture right there, dear.” With those explicit instructions you begin hanging a large picture and frame above the sofa. Because of its size and weight, you use a large nail, find the stud and begin to pound.

However, hidden behind the wallboard was a wire that provided electricity to an outlet behind the sofa. Your nail penetrated the wallboard, clipped the edge of the stud, and poked deep into the wire, tearing the insulation and shorting the electrical circuit to the living room. The wall soon became hot, a smoke odor was prevalent, fire erupted behind the wall, and down fell the picture you just hung. Never mind that the picture and frame were destroyed, your house was on fire!

Hours later, the fire inspector finds you sifting through the remains of your home and asks what you might know about the start of the fire. Taking notes, he writes, “hanging picture, nail through the wallboard,” and he stops to ask if you had an arc-fault circuit interrupter. Because you have never heard of one, he explains that a relatively inexpensive AFCI would have saved your home. Had one been installed, it would have detected the short circuit behind the wallboard and cut the power to the circuit, and you would be living in your home, instead of with your in-laws.

Arc faults are common and cause many of the electrical fires in homes every year. When unwanted arcing occurs, the electricity raises the temperature, which can cause wood, paper, wallboard and carpet to catch fire. Such faults occur where circuits have been damaged in some way—whether the wires were damaged or failed because the aged insulation deteriorated. Other reasons include improperly installed switches and outlets, cords mashed by doors or under furniture legs, and various environmental conditions.

An AFCI monitors the current flow, and when it senses an unwanted arcing condition, the circuitry trips the internal contacts and interrupts the circuit before a fire can occur.

Standard panels like the one below can be retrofitted with AFCI breakers.