Norris Electric News
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Do-it-yourself home energy audits

One of the first steps to making your home more efficient involves understanding how it uses energy. Just as a doctor has to do a thorough examination of a patient before writing a prescription, your home will need a good inspection before most inefficiencies can be identified and corrected.

You can easily conduct a basic home energy audit with a simple but diligent walk-through. When auditing your home, keep a checklist of areas you have inspected and problems you find. Full lists are available online — Touchstone Energy Cooperatives® Home Energy Saver (at www.touchstoneenergysavers. com) and the Alliance to Save Energy Home Energy Checkup (search for it at www.ase.org) are both useful — and most trouble spots can be found in a few key areas.

Locating Air Leaks

First, make a list of obvious air leaks (drafts). The potential energy savings from reducing drafts in a home may range from 5 percent to 30 percent per year, with a much more comfortable residence as the result. Check for indoor air leaks, such as gaps along a baseboard or edge of the flooring and at junctures of walls and ceiling.

Inspect windows and doors for air leaks. If you can rattle them, movement means possible air leaks. If you can see daylight around a door or window frame, then the door or window has a leak; you can usually seal these through caulking or weather stripping.

On the outside, inspect all areas where two different building materials meet, including all exterior corners, siding and chimney junctures, and areas where the foundation and the bottom of exterior brick or siding join. You should plug and caulk any holes or penetrations for faucets, pipes, electric outlets, and wiring. Also, look for cracks and holes in the mortar, foundation, and siding, and seal them with the appropriate material.

Check the exterior caulking around doors and windows, and see whether exterior storm doors and primary doors seal tightly. When sealing any home, be aware of indoor air pollution and appliance "back drafts." Back drafting occurs when various appliances that burn fuels and exhaust fans in the home compete for air. An

exhaust fan may pull combustion gases back into the living space. This can obviously create a very dangerous and unhealthy situation.

Insulation

Heat loss through the ceiling and walls in your home could be very large if insulation levels are less than the recommended minimum. When your house was built, the builder likely installed the amount of insulation recommended (if any) at that time. Given today's energy prices (and future prices that will probably be higher), your insulation might be inadequate, especially if you have an older home. Online energy audits will provide more details on checking insulation levels in the attic, walls, and basement.

Heating/Cooling Equipment

Inspect heating and cooling equipment annually or as recommended by the manufacturer. If you have a forced-air furnace, check filters and replace them as needed. Generally, you should change them about once every month or two, especially during periods of high use. Have a professional check and clean your equipment once a year.

Lighting

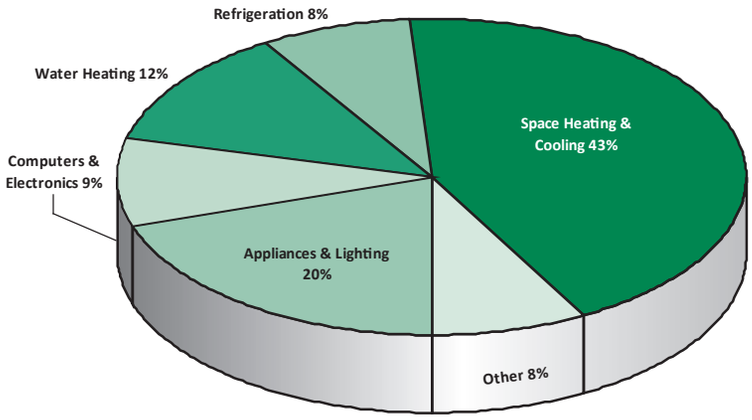
On average, lighting accounts for about 10 percent of a home's electric bill. Examine the wattage size of the light bulbs in your house. You may have 100-watt (or larger) bulbs where 60 or 75 watts would do. You should also consider compact fluorescent light bulbs for areas where lights are left on for hours at a time.

More information on both do-it-yourself and professional energy audits can be found at www.energysavers.gov.

Article courtesy of the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy.

Average Home Energy Costs

The first step in reducing your home energy costs is to review last year's utility bills and see where your energy dollars are going. The U.S. Department of Energy Office of Energy Efficiency and Renewable Energy claims the average homeowner spends most energy dollars on heating and cooling.



Source: 2007 Building Energy Data Book, Table 4.2.1, 2005 Energy cost data

See "Power for the Parkinsons" on PBS!

The 57-minute documentary "Power for the Parkinsons," produced, directed and written by Dr. Ephraim K. Smith, will be aired on PBS station WEIU on March 15. Narrated by broadcast-news icon Walter Cronkite, the documentary tells about making the classic film "Power and the Land" in 1939-1940, produced by the Rural Electrification Administration. At that time, fully 90 percent of the nation's farms were without electricity, including the one near the Ohio-West Virginia border operated by Bill and Hazel Parkinson, the original film's central characters. The Parkinsons allowed Dutch director Joris Ivens to film their family for "Power and the Land" doing their typical farm and household chores both before and after the arrival of electricity. Ephraim Smith said it's "the film and family that helped electrify the American farm."

"Power for the Parkinsons" tells the story that was repeated in Illinois and across the country in the 1930s and 1940s, as farms and rural homeowners got electricity for the first time. WEIU will be showing this historic program at 11 p.m., Monday, March 15 and again at 4 a.m. on Tuesday, March 16. (Set your VCR or DVR!) WEIU is based in Charleston, Ill., and is carried on most of our local cable systems as well as Channel 51 on DirecTV and Dish Network. To see if your provider carries WEIU go to www.weiu.net - then click on "Program Schedule" menu tab – then click on "Change Provider".

WEIU plans to air this program again in future months, and we'll provide notice whenever possible to help more people catch a glimpse of our rural history.

Tracking the electricity you use

Eat potato chips straight out of the bag and they'll be gone in no time. Pour them into a bowl first and they disappear a little slower.

The same goes for electricity. Learning to track how much electricity your home consumes remains a good way to start managing electric use billed by your electric co-op in kilowatt-hours (kWh).

Devices are appearing in stores that provide a constant, digital reading of how much electricity your home or even individual appliances are using. One type, like the Kill A Watt™, fits between an electrical outlet and an appliance to give you an instant reading of how much electricity an appliance draws.

Another type connects to your electricity meter and wirelessly relays use information to a small screen inside. Called an in-home display, the device looks similar to a wireless weather monitor and can help make consumers more aware of energy being used day to day. Research conducted by the Arlington, VA-based Cooperative Research Network (CRN), the research arm of Arlington, Va.-based National Rural Electric Cooperative Association, shows that most consumers who have an in-home display use less energy than those without one. And even after homeowners stop paying attention to the devices, most still use 1 to 3 percent less energy than before.

"The question of whether in-home displays catch on and become permanent fixtures in the American home is still open," explains Brian Sloboda, program manager with CRN. "However, for anyone wanting to take a proactive approach to understanding electric consumption, the in-home display may be worth exploring. You could use the knowledge that an in-house display provides to change the way you use electricity in your home and save some money."

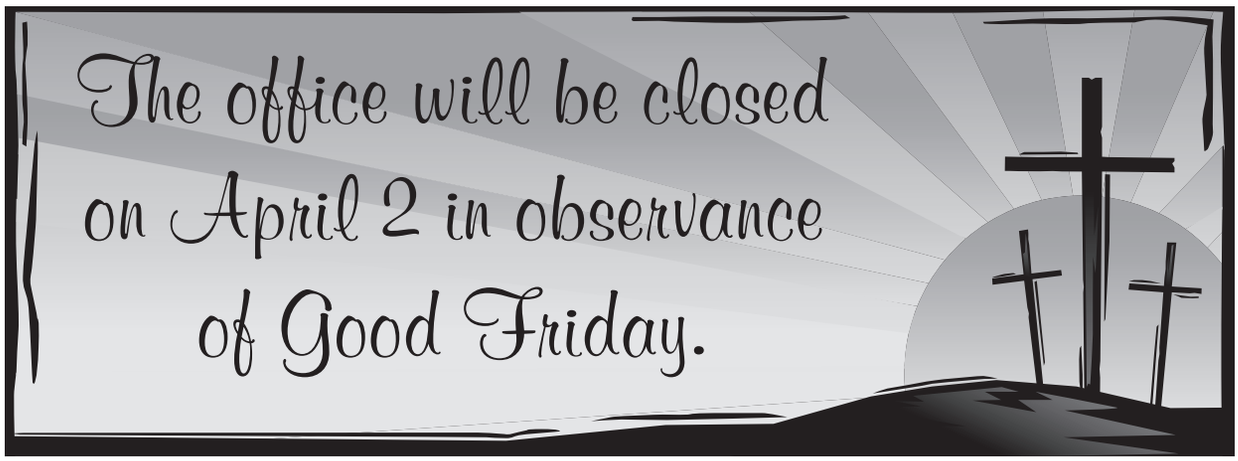
There's also the old-fashioned way of tracking electricity use: reading your meter. As your home draws current from power lines, your electricity meter keeps a steady record of every watt being used. Many meters today are digital, replacing the older — though still reliable — design that uses spinning disks and dials.

Digital versions make tracking energy use a breeze: Jot down the number you see, and check it again in a month. The difference between the two represents the amount of electricity that has been used for that month, or a typical billing period. Check it more frequently to get an idea of how you use electricity in a given week, or even day by day.

To read an older model meter (with spinning dials), write down the numbers as shown on the small dials from left to right. Some of the dials spin clockwise, some counterclockwise, but record each number closest to the dial hand. Once you have the full reading it can be compared to later readings, as described above.

If you have any questions about reading your meter or learning more about how much electricity your home uses, please contact Norris Electric Cooperative at 877-783-8765.

Sources: Cooperative Research Network, U.S. Department of Energy



Regulation on horizon for carbon, with or without congressional action

Likely increases in electric bills will result

Federal curbs on emissions of carbon dioxide, a greenhouse gas blamed as a principal cause of climate change, are quickly becoming a reality. It's just a matter of which government branch gets there first: legislative, executive — or both.

In December the U.S. Environmental Protection Agency (EPA), part of the executive branch, declared that six key greenhouse gases, including carbon dioxide, are endangering public health and welfare. Emissions from motor vehicles of four of those greenhouse gases, including carbon dioxide, are also said to contribute to dangerous air pollution under this "endangerment finding."

"This action puts a 'foot in the door' for EPA to promulgate sweeping new regulations that could impose strict limits on carbon emissions from power plants, driving up electric bills," warns Glenn English, CEO of the Arlington, Va.-based National Rural Electric Cooperative Association (NRECA), which represents the interests of the nation's 900-plus consumer-owned and governed electric cooperatives.

The concern is that with carbon dioxide emissions from vehicles falling under federal Clean Air Act regulation, other emitters of carbon dioxide — fossil fuel-fired power plants included — may also soon be subject to EPA oversight.

"The Clean Air Act as written was never designed to deal with carbon, and it would be awkward at best and probably a disaster at worst," English adds.

Electric co-ops believe that any controls on carbon dioxide should be established by Congress, where the impact of these proposals can have a full public debate. Unfortunately, a climate change bill passed by the U.S. House last summer (H.R. 2454) and another reported by the U.S. Senate Environment and Public Works Committee in November (S. 1733) include unachievable goals and timelines for reducing carbon dioxide emissions, inadequate technology development incentives and no guarantee that electric bills will remain affordable. Current proposals will unfairly penalize consumers in fossil fuel-dependant states by saddling them with higher bills to essentially subsidize and lower electric bills for those in other regions.

What's more, Senate leaders have admitted that climate change legislation has stalled and will likely be picked up sometime in the spring. This legislative logjam makes it all the more important for co-ops and consumers to pay careful attention to EPA's current efforts.

English insists that any climate change legislation should protect consumers and preempt use of the federal Clean Air Act and any other existing laws. Otherwise, utilities and businesses could be burdened with the task of trying to comply with more than one set of regulations.

"Regulation of carbon dioxide as a pollutant will occur with or without congressional input," English explains. "But Congress must not simply add new legislation on top of old regulations. Any climate change bill should become the roadmap — the single strategy — for reducing carbon dioxide emissions at federal, state, and local levels."

He continues: "By staying engaged in the process, electric co-ops can have a measureable impact on the outcome."

Electric co-ops are fighting to ensure that any climate change policy goals adopted are fair, affordable and achievable. To make your voice heard in this debate, join NRECA's Our Energy, Our Future™ grassroots awareness campaign at www.ourenergy.coop. To date, more than 600,000 of your fellow co-op consumers across the country have already done so.

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