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NEWS *from the* REC

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Energy Myths: Business Energy Use

In the face of rising energy costs, businesses are looking for ways to reduce their energy use. Although there are a lot of good ideas out there, there are also a lot of misconceptions about what are effective energy-efficiency measures. Here are some of the most common myths and the facts to set you on the right path.

Myth. Screen savers reduce energy use.

Facts. Screen savers don't cut energy use. Screen savers were developed to mitigate a problem called "screen burn-in" that can occur in both cathode ray tube (CRT) and liquid crystal display (LCD) computer monitors and TV screens. Burn-in occurs when a given image, such as a logo or a menu bar for a computer program, appears on a monitor for a long period of time. To save energy, adjust your computer's power management settings to automatically shut the monitor down after a specified period of idle time, and simply



turn off the monitor if you are not going to be using it for 15 minutes or more.

Myth. Computers, monitors, and other office equipment will use less energy and last longer if they're left running all the time.

Facts. Turning equipment off overnight does not shorten its life, and the small surge of power that occurs when some devices are turned on is much smaller than the energy used by running equipment when it's not needed. In fact, leaving computers and other office equipment on overnight and on weekends wastes significant amounts of energy and also adds to the wear and tear on the equipment. In general, turn off equipment you are not using or make sure that energy-saving features on networks or individual machines are enabled. Some office equipment, including printers and scanners, features small transformers that use energy even when the equipment is turned

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TIPS from the REC

Counterfeit circuit breakers, power strips, extension cords, batteries, and holiday lights can cause fires, explosions, shocks, and electrocutions.

In recent years, the Consumer Product Safety Commission (CPSC) has recalled more than 1 million counterfeit electrical products, including circuit breakers that did not trip when overloaded, cell phone batteries without a safety device in the circuitry to prevent overcharging, and extension cords with mislabeled, undersized wiring that overheated.

Counterfeits can be extremely difficult to spot. They could be a knock-off of a name brand product, or bear an unauthorized certification marking. Here are some tips to protect yourself from the dangers of counterfeit electrical products:

- Scrutinize the product, packaging, and labeling. Look for certification marks from the manufacturer and an independent testing laboratory—such as Underwriters Laboratories or the Canadian Standards Association. Trademarked logos that look different than usual may signal a counterfeit.
- If the price is “too good to be true,” it could be because the product is inferior and unsafe.
- Be careful when buying from an unknown source, such as a street vendor. Use established stores who purchase their goods from legitimate distributors and genuine manufacturers.
- Check the warning label. It should be free of grammatical errors and not conflict with information elsewhere on the package.
- Avoid no-name products.
- Look for the name and contact information of the manufacturer. If you find the information missing, consider purchasing electrical products elsewhere.
- Sign up for CPSC e-mail alerts at www.cpsc.gov to stay informed about product recalls ♦

Sources: Consumer Product Safety Commission;
Electrical Safety Foundation International

Estimating appliance and home electronic energy use

If you're trying to help your customers decide whether to invest in a more energy-efficient appliance or to determine their electricity loads, you may want to estimate appliance energy consumption.

You can use this formula to estimate an appliance's energy use:

Wattage × Hours used per day × Days used per year ÷ 1000 = Kilowatt-hour (kWh) consumption per year

For example: Personal computer (120 Watts) and monitor (150 Watts): (120 Watts + 150 Watts) × 4 hours per day × 365 days per year ÷ 1000 = 394 kWh/year. Then, calculate the annual cost to run an appliance by multiplying the kWh per year by your local utility's rate per kWh consumed. 394 kWh × \$0.104 (current national average) = \$40.98 per year

You can usually find the wattage of most appliances stamped on the bottom or back of the appliance, or on its nameplate. The wattage listed is the maximum power drawn by the appliance. Since many appliances have a range of settings (hairdryers), the actual amount of power consumed depends on the setting used at any one time.

Here are some examples of the range of nameplate wattages for various household appliances:

- Clothes washer = 350–500 Watts
- Clothes dryer = 1800–5000 Watts
- Dishwasher = 1200–2400 Watts
- Hair dryer = 1200–1875 Watts
- Microwave oven = 750–1100 Watts
- Personal computer
 - CPU - awake / asleep = 120 / 30 or less
 - Monitor - awake / asleep = 150 / 30 or less
- Laptop = 50 Watts
- Refrigerator (16 cubic feet) = 725 Watts
- Televisions; 27" = 113 W, 36" = 133 W, 53"-61" = 170 W, flat screen = 120 Watts
- Water heater (40 gallon) = 4500–5500 Watts ♦

Source: 2007 E Source Companies LLC

Northwestern REC will soon launch a new energy consumption calculator on its Website. This calculator will provide estimates of energy use costs based on user inputs. The estimated Annual and Monthly results given will provide a comparison platform to give users the differences between the energy a home is currently using versus various “Scenario” variations. Check NorthwesternREC.coop for more information. ♦

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off. Plug all such devices into a power strip so that they can be shut down completely with one flick of the switch.

Myth. When leaving a room for a short period, it's better to leave lights on than to turn them off.

Facts. For incandescent bulbs, it's always better to turn the lights off. For fluorescent lights, there are some trade-offs: Fluorescent lights use slightly more energy on start-up, but the light needs to be off for only about a second to make up for that surge. The life of a fluorescent light is also shortened by frequent on-and-off switching. The actual break-even point depends on the cost of the lamp and the local electricity costs and is typically 5 to 15 minutes. However, a good guideline for fluorescent lighting is: Unless you're switching the lights every few minutes, it is generally cost-effective to turn the lights off whenever you leave the room. ♦

Source: 2007 E Source Companies LLC

News from the Co-op

COMING SOON! Contractor Training Session at Northwestern REC. Training will focus on the NEW Acadia all-climate heat pump, as well as the various Steffes ETS heating options. Dates and times will be posted on Northwestern REC's website: NorthwesternREC.coop, and presented in upcoming News from the REC newsletters.

Nominating & Member Resource Meetings

Each spring, Northwestern REC holds several nominating and member meetings primarily to nominate Co-op members who would like to run for the Board of Directors, and to educate members regarding Co-op happenings. The following meetings have been scheduled for this year:

- District 7 Nominating Meeting - April 15 in Centerville
- District 8 Nominating Meeting - April 17 in Meadville
- District 9 Nominating Meeting - April 21 in Blooming Valley
- Resource Meeting - April 22 in Edinboro
- District 6 Nominating Meeting - April 28 in Townville

Visit Northwestern REC's website (Northwesternrec.coop) for information, or contact the Co-op at 800/472-7910.

Want more information?

To find out more about the all new Acadia all-climate heat pump and other electric heat options available through Northwestern REC, come visit our booths at the following events:

- Erie Home & Garden Expo - February 21 - 24, at the Bayfront Convention Center in Erie.
- 48th Annual Home Show - April 3 - 6, at the Family First Sports Park on Oliver Rd. in Erie.

Upcoming Rate Change - Due to the increased cost of materials and general every day cost of doing business, Northwestern REC will implement its first rate increase since 2002 on April 1, 2008. On average, residential members will see a rate adjustment of 5.41%. Northwestern REC strives to operate efficiently and always looks for ways to manage costs and keep rates down. For more information, contact Northwestern REC at 800/472-7910.