



How To

Find and Fix Air Leaks In Your Home

Air leaks can lead to high-energy bills. Use these steps to find leaks in your home. Also, call your electric cooperative to find out if they conduct home blower door tests that will find air leaks for you.

1. Start outside. Look for gaps between your house and its foundation; gas, electric, phone, satellite, Internet and cable lines; your dryer vent; outdoor water faucets. A way to find large gaps in these places is to have someone shine a flashlight at night on one side

while you're on the other. If you can see light, air can certainly get through. Expandable foam may work well to fill in these gaps.


2. Next check the door and window frames. You can use a piece of paper slipped between the frame and window or door. If you can pull out the paper without it tearing, air can get in. Weatherstripping will seal these areas.
3. Search for small leaks using an incense stick. Pass the lit stick

along the edges of a suspected leak and see if the smoke blows in or out. Do this on a windy day. Check for small leaks around outlets on outside walls, ceiling fans, recessed lights, vent fans, etc. Caulk and weatherstripping can help stop these leaks.

Remember: If you find leaks, seal them! A variety of products, from caulk to foam sealers can be found at your local home store to help tighten up your home. Or call your co-op for more information.



Rock Energy Cooperative

Your Touchstone Energy® Partner 



By *Shane L. Larson,*
Chief Executive Officer

More Power To You

Happy New Year! It's hard to believe we're now writing 2009 on our checks (I usually write the past year for a month or so). Maybe it's just me, but it seems like only a year or so ago that we were all holding our breath, waiting for civilization as we know it to come crashing down,

all because of that Y2K thing. It's amazing how fast nine years have gone.

Every year, New Year's resolutions are made and predictions are prognosticated. Usually, both fall away in short order. As we turn to energy, the crystal ball appears to be very cloudy when it comes to predicting where prices will go.

Like so many, I was glad when the political election season was finally over. Here's something from the unbelievable file: According to those who track such things, the two presidential candidates spent more than \$1 billion for a job that pays \$400,000 a year, plus benefits. And when all elections were totaled, a record-shattering \$5.3 billion was spent by all candidates, political parties and interest groups. I'm just one guy, but something seems terribly amiss about the whole process and the amount of money being spent.

After all the ballots were finally counted, Congress, the White House, and every statehouse in the country will have some new faces as well as some that are not so new. Based on the election results, we can be certain that when it comes to energy, there will be strong attempts to make substantial changes, espe-

cially in areas dealing with environmental issues.

Carbon dioxide (CO₂) will be in the legislative crosshairs. Over the next few years, we are going to be hearing a lot about cap and trade, carbon footprints, carbon tax, carbon sequestration, and carbon intensity, to name just a few.

The desire to limit CO₂ will be very interesting, to say the least, from an energy perspective. We as a country, use lots and lots of coal to generate electricity. Illinois, like the United States as a whole, generates 50 percent of its power from coal, while Wisconsin generates 70 percent.

While not all pollutants have been eliminated from coal generation, certain pollutants like NO_x and SO_x have been reduced over the past decades; but CO₂ is another matter. Carbon dioxide is relatively new to the "pollution" debate, so very little has been done to reduce CO₂ at coal generation plants.

Because coal plants emit massive amounts of CO₂ and because there is such a strong desire in the political realm to address climate issues, one could conclude that

coal generating plants will be subject to some type of CO₂ legislation. What the impact will be to energy prices remains to be seen. As I said, the crystal ball is cloudy and it's early in the game.

We'll do our best to keep our members informed of important energy issues. I would encourage you to read energy articles in this magazine; the writing staff does an outstanding job presenting timely, informative, and interesting pieces on energy.

Rock Energy Cooperative truly appreciates your patronage; it is a pleasure to serve your energy needs. If we can improve our service to you, please let us know. ■





PORTABLE ELECTRIC HEATERS

Don't Be Misled; Read This Before You Buy

With the cost of home heating fuels skyrocketing, homeowners are looking for ways to cut their heating bills. A number of portable electric heaters are being marketed using very misleading information. The fact is, it doesn't matter who makes the heaters, or how they are manufactured. ALL electric heaters, portable or otherwise, are 100 percent efficient and watt per watt, they all provide the same heat output and cost the same to operate. Heat pumps, however, do operate differently, resulting in efficiencies two to five times higher than the heaters we are referring to. Therefore, this information does not apply to heat pumps.

When selecting a portable electric heater to purchase, the most important consideration is the number of watts it draws. The higher the watts, the more heat it will deliver and the more it will cost to operate. Most portable heaters do not exceed 1,500 watts because a higher wattage would overload a typical 15-amp outlet and likely trip a breaker or blow a fuse.

A 1,500-watt heater delivers approximately 5,120 BTUs. BTU stands for British Thermal Unit and is the unit of measure for the output of heating and cooling systems. Typical residential furnaces range from 30,000 to 90,000 BTUs. If you purchase a portable heater that delivers 5,120 BTUs and you plan to heat your entire home with it in place of your central furnace, be sure to also purchase plenty of heavy blankets and winter clothing for use indoors — you are going to need them.

Electric heating devices will cause significant increases in the electric bill if used for long periods of time. Here's the formula to calculate the cost of operation:

$$A \text{ (amps)} \times V \text{ (volts)} = W \text{ (watts)}$$

$$W \text{ (watts)}/1,000 \times (\text{hours of use/day}) \times (\text{number of days used}) \times (\text{electric rate})$$

Example using 12.5 amp space heater:

$$12.5 \text{ amps} \times 120 \text{ volts} = 1,500 \text{ watts}$$

$$1,500 \text{ watts}/1,000 \times 4 \text{ hours per day} \times 30 \text{ days} \times .0925/\text{kwh} = \$16.65/\text{month}$$



Don't be misled by marketing hype: All 1,500-watt electric heaters, including this basic portable heater, cost the same to operate and deliver the same heat output.

Here are some other examples:

- **Portable heaters:** Most portable heaters draw 1,500 watts. $1,500 \text{ watts} / 1,000 = 1.5$. Multiply that by 8 cents and that totals 12 cents per hour. Twelve cents an hour doesn't sound like much, but that can add up to more than \$86 per month.
- **Stock tank heaters:** Many stock tank heaters draw 1,500 watts, or 12 cents per hour. As with a portable heater, that can add up to more than \$86 per month.
- **Engine heaters:** Most engine heaters draw between 850 and 1,500 watts, or 6.8 cents to 12 cents per hour. Over a month, that's \$49 to \$86.
- **Heat tapes and heat lamps:** The wattage of these varies widely. Look for the watts listed on the item and use the formula provided above.
- **Ovens:** Every year, we hear of someone who ran out of heating fuel and used their electric oven for heat. 5,000 watts is not uncommon for ovens. If you do the math, that's about 40 cents per hour, or \$288 per month. ■

Learn the Signs of a Natural Gas Leak

Natural gas is completely safe when it's sealed inside pipes and used correctly. Danger occurs when natural gas leaks out or doesn't combust properly in appliances. Because natural gas is colorless and odorless, utility companies add an odorant that smells like rotten eggs.

If there is a faint rotten egg smell in your home, check range burners and the pilot lights on your natural gas appliances. If you hear an unusual hissing or whistling sound, or if you see unexplained dead or dying grass in an otherwise healthy area, dirt or debris blowing in the air or water bubbling in a puddle, pond or creek, it may be the result of a leak. If you have a sudden or strong rotten egg smell in your home, get everyone out of the house immediately.

- Don't stop to open a window.
- Don't touch anything that might create a spark. Some ignition sources include telephones, cell phones, pagers, light switches, garage door openers, flashlights, vehicles and other operating equipment... carpeted areas can even spark with static electricity.

Appliance Check

An easy way to tell if natural gas appliances are adjusted properly and getting enough oxygen is to check the color of the flame. The flame should be about 90 percent

blue. A yellow flame indicates the appliance isn't working right and could be giving off harmful fumes. Remember, not all problems with natural gas appliances will have the symptom of a yellow pilot light — and not all pilot lights are visible.

Natural Gas Safety Tips

- Keep all natural gas appliances clean and properly vented.
- Never cover vents that supply air to your appliances.
- Do not store any flammable materials in or near the natural gas appliances.
- Don't use the oven as a storage area.
- Never use your oven or stove top to heat your apartment or dry your clothes.
- Keep the area around your furnace and water heater clear. ■

Cutting Winter Heating Costs

- **Maintain air filters and HVAC equipment** — Well-maintained equipment runs more efficiently, so change your air filter monthly or as needed and tune up your HVAC equipment yearly.
- **Set your thermostat as low as is comfortable** — Roll temperatures back by 10 to 15 degrees before bed and before leaving for work.
- **Take advantage of the sun's heat and light** — Keep your south-facing windows clean. Open curtains on south-facing windows during the day and close all curtains at night.



**Do You Need Help
Paying Your Bills
This Winter?**

Federal and state funded bill paying assistance programs for families that need help with their energy bills are now open in Illinois. Applications and complete details are available through your county government offices. To find out which office covers your area, please contact:

Call 1-877-411-9276 or 1-217-785-6135 or visit:
<http://www.illinoisliheap.com/>

LAST CHANCE...



**The 2009 Rock Energy Scholarship
application deadline is January 9, 2009.**

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Locally owned and operated for three generations... offering the best tire products and services available – large

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\$10 Gift card with purchase of four tires (passenger car or light truck only)

For a complete listing of current "deals" visit www.rock.coop; terms and conditions of "deals" subject to change as desired by individual participating businesses.



Monthly Notes on Issues Affecting Wisconsin Consumers

Doubling up... Conservation efforts notwithstanding, the U.S. Energy Information Administration (EIA) expects **world electricity usage** to double by 2030, compared with 2005 levels, with developing nations—no surprise—leading demand growth at 4 percent annually, vs. 1.3 percent in developed countries. EIA predicts total generation in developing nations will be nearly half again that of developed nations by 2030. Meanwhile, the United Nations' International Energy Agency (IEA) says coal will continue as the main generation fuel worldwide at least until 2030. **The nuclear option** should be on the table in **Wisconsin**, according to state lawmaker Jim **Soletski** (D–Green Bay). Soletski's views take on added weight with his December appointment to chair the Assembly Committee on **Energy and Utilities** in the 2009–10 session. Some tout new nukes as an answer to **Global Warming**, as the debate simmers with **2008** found to be the **coolest year of the decade** and the third consecutive year of falling global average temperatures since 2005, a British climate agency finds.



Energy Efficiency

Tip of the Month

Close your refrigerator door on a single sheet of paper that is half in and half out of the refrigerator. If you can move the paper easily without opening the door, you may need to adjust the door latch or replace the seals.



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