Energy Checklist

Things to think about--ways you might conserve. (What causes higher electric bills?)

General Questions affecting your bill:

- How many days are in the billing period on your bill?
- Has the weather been extreme?
- Remember the current bill is for a period approximately 30 to 60 days prior.
- How does the bill compare to the same period 1 year ago?
- Have you had any company visiting?
- Did the bill cover a holiday period?
- Have you enlarged your home?
- Have you added any new appliances?
- Have you had a new baby recently, or had others move in with you?

Water Heating:

- Have you checked the water heater for sticking thermostats, faulty heating elements, Etc.
- Is the water hotter than normal or is the pop-off valve popping off?
- Have you turned the WH thermostat lower? Scalding hot water out of the faucet generally means the water temperature istoo hot.
- Consider a WH insulating blanket.
- Consider low-flow shower and faucet.
- Leaking hot water pipes under your home will cause the water heater to work overtime.
- Did you leave the water heater on while you were away for an extended time?
- Make sure you purchase any new water heater with a high EF (Energy Factor).

Heating System:

- Is the heating system working properly? Have you had it serviced? Check for leaky or loose joints in the
- ductwork. Do you change your filters every month when your electric bill arrives?
- Where is your thermostat setting? Each degree change equates to energy used or energy saved.
- Do you turn the thermostat down when you are away for an extended period?
- Use a ceiling fan in reverse to circulate hot air out of high ceilings and A-frame ceilings.

Insulation and air filtration:

- Do you have adequate insulation in the attic, floors and walls? (R-30 Minimum in attic) (R-19 under the floor.)
- Is there air infiltration around your doors or windows? Can you see light around the door? Is the weather stripping damaged or worn? Are the windows locked? This will help tighten the seals.
- Do you use the fireplace while other heat sources are being used? (It acts like a large vacuum cleaner) Have you closed the damper tightly or insulated it?
- Do you have drapes or to cover your glassed areas? They can help keep the cold outside.
- Do you have single pane windows or insulated windows?
- Storm windows over single pane windows can help keep the cold outside.
- Have you checked the attic access door to make sure it is insulated and tightly sealed?
- Do you have a window air conditioner that is not sealed well and insulated? It can be like an open hole in the wall. Consider removing it for the winter.

Lighting:

- Replace all your incandescent light bulbs with high efficiency CFL bulbs.
- Do you turn the lights off when not needed?

Other Places to Look:

- Do you have a 2nd refrigerator or freezer that you can do without? Unplug them.
- Using the dryer cycle on your dishwasher costs extra money.
- Do you wash or dry partial loads instead of full loads?
- Most electronic equipment uses power even in the standby mode. Unplug them if you seldom use them.
- Open your refrigerator or freezer for only short periods of time. Sometime children hold those doors open for extended times.
- Have you closed off any unused rooms to prevent having to heat them?
- Make sure you buy an Energy Star model when purchasing any new appliance.
- Does your coffee maker keep the water hot all the time or just when coffee is being made?
- Have you underpinned the area under your manufactured home?

Getting ready for winter

"Winter is about here, so we need to start thinking about keeping warm, as well as making sure our utility bills are under control," Did you know that every year, American homes lose $13 billion worth of energy. That's an average of $150 per family!

Don't let your hard-earned energy dollars disappear into thin air – easy and low-cost **insulation and weatherizing** will help tighten up your home.

The first step in tightening up your home is **finding the air leaks** that need to be sealed.

Why? A 1/16th-inch unsealed crack around a window can let in as much cold air as leaving the window open three inches!

An easy way to find air leaks is to hold a tissue between two fingers and hold it over the area. Drafts will cause the tissue to blow around.

Use the right caulk

Latex and acrylic are easier to use than silicone, but they don't last as long. They clean up with water, and they can be painted. Use latex or acrylic in cracks that won't expand and contract beyond 1/8th of an inch.

Silicone lasts longer and adheres better than latex or acrylic, but it sets up quickly, making it harder to clean up mistakes. This is the best type of caulk for gaps that may expand and contract. In addition, silicone cannot be painted - the paint won't stick.

A typical home will need about $50 in **weatherizing materials** - and the cost can be paid back in energy savings in just a few weeks.

- **Caulk** is a homeowner's best friend. The staff at your home center or hardware store can help you find the type of caulk you need. One canister is enough to weatherize two windows or doors.
- **Rope caulk** is great for temporary use. It feels like modeling clay - it comes in a roll and peels off in a long strip. Use it around movable parts of windows and around doors you don't use.
- **Expandable foam sealant** works well in larger holes and crevices on the exterior of your home, such as air conditioner hoses. Be careful when using this product - it's difficult to clean, and the rapid expansion can split wood if you use too much.
- **Window glazing** seals the glass windowpane against the frame. Tap lightly on your windowpanes - if they're loose, they're leaking air. Glazing comes in canisters, tubes or rope.
- **Weather-stripping** blocks drafts along the edges of doors and windows. It comes in strip of foam, or thin V-shaped metal.
- Rubber or vinyl door sweeps and adjustable vinyl thresholds stop cold drafts from blowing in under your doors.
- **Outlet gaskets** are thin rectangles of foam that fit behind the covers of electrical outlets and light switches. You'll find these in the electrical section of the home center or hardware store.
- **Outlet safety caps**, designed for childproofing, are also great for block air drafts. Look for these in the electrical section, or in the baby products aisle.

Some people think it's inefficient to reheat a house after the temperature has been turned down at night or during the day when families are away from the home.

It still is much more efficient to turn the thermostat down and then back up again than to leave it on all the time. The only exception may be a heat-pump-type heater that automatically adjusts itself. For these heaters, adjusting the temperature too much can cause problems.

By using programmable thermostats, homeowners don't have to worry about forgetting to adjust the heat.

- Have your heat system serviced to make sure it is running efficiently. This will save money throughout the winter.
- If you have single-pane windows, put in double-pane windows or storm windows. The storm window can be just a sheet of clean plastic.
- Insulate your hot water heater and pipes, if they're located in a cold area, such as an outer wall or a garage.
- Turn the temperature down and wear layers of clothing to stay warm.
- Open drapes, blinds and shades during the day to let the sun shine in and warm up the house. Close them at night to keep out the cold.
- When you finish using a fireplace or wood-burning stove and the fire is out, make sure the dampers and doors are closed, preventing heat loss.
- The attic opening is another drafty spot. Install insulation over the back of the attic door; if you have hatch-type access, add foam weather-stripping around the top edges of the openings.

Understanding R-value

Insulation is rated by its **R-value**, which measures its thermal resistance or how well it holds back heat. The higher the R-value, the better.

Bare concrete walls are about R-1, while attic insulation in newly-built homes in our area generally measures between R-30& R-38.

R-value is proportional to the insulation's thickness, but it also depends on the type of material and its density. The more air pockets an insulating product has, the higher the R-value.

For example, R-38 attic insulation may be 12 inches of fiberglass batts, 10 inches of rock wool loose-fill or seven inches of expanding foam.

Information obtained from:
http://www.powerhousetv.com/stellent2/groups/public/documents/pub/phtv_se_we_index.hcsp