

One word makes the difference.

It brightens the room
when you walk into it, and lightens
the load when you have a problem that's
bigger than you are. It describes that human
tendency to help a neighbor or a stranger. It makes
life a lot easier in the countryside, and it continues to
work – creating jobs, providing drinkable water, helping
teachers in their classrooms and entertaining families in their
homes. It's a proven success story. One word makes a difference.

Cooperation.



Electric Cooperatives of Illinois

Good for ALL Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

A new year is on the way!

The Christmas season has been busy and festive for everyone, but take a moment to think about

a resolution or two for the future.

At the top of our list is a pledge to continue providing the best service possible for you — our consumer-owners — because the cooperative belongs to you and your neighbors.

We also invite you to share your thoughts and ideas with us to let us know how we're doing in serving you and our community

So, enjoy the upcoming year, make a resolution or two, and may you welcome in the New Year with good health, happiness and prosperity!!

**Health and happiness to you
and your family**

Be prepared for winter storms when traveling

During this time of year, you never know when a winter storm may occur. It is important to take certain precautions and be prepared — especially when traveling.

If possible, you should avoid unnecessary travel before, during and after a storm. But if you must go out, follow these helpful hints:

- If you go outside, always remember that several layers of clothing will keep you warmer than a single heavy coat. And make sure your hands and head are covered.

- Keep the gas tank full for emergency travel

and to keep the fuel line from freezing.

- Before every trip, let someone know your destination, route and estimated time of arrival.

- Keep emergency supplies in the trunk of your car.

- If you get stuck, remain visible to rescuers by keeping the overhead light on and attaching a brightly colored cloth to your antenna.

- As you sit in a stalled car, move your arms and legs to keep blood circulating.

- Keep one window slightly open to let fresh air in.

Clear trail ahead?

You know this terrain like you know your own back yard. You walked it as a barefoot child and helped plow it as a young adult. Now, in your shiny new snowmobile, you can cover that ground as never before. You whiz by that familiar old locust tree, bounce over the dried up creek bed ... But did you remember that utility guy wire?

When winter snow covers Illinois, thousands of people take to their snowmobiles for transportation and sport. If you're one of them, be on the lookout for obstacles like trees, fences, other snowmobilers, and utility pole support wires. Those guy wires can be hard to see against bright snow or at dawn and dusk. You may think you know the area, but beware of hidden perils.



The Pioneer plant near Good Hope

Pioneer – a strong contender

Pioneer Hi-Bred International Inc. is the world's first and largest producer of hybrid seed corn. Breeding, producing, selling and delivering the millions of bags of seed is accomplished by the 4,000 hard-working people employed by Pioneer throughout the United States. Locally, the Pioneer Hi-Bred plant located near Good Hope began operation in 1981 when its first crop was harvested. Pioneer at Good Hope employs 26 full-time employees, 2,500 detassellers during the summer and 200 employees for fall harvest-sorting.

"Pioneer Hi-Bred contracts with area farmers to raise seed corn," says plant manager Rick Battles. "The area's best-suited seed corn production farms make up a core group of 70 farms," adds Battles. Pioneer pays a 7 percent premium above market price for the crop grown. This promotes good interest and

a solid relationship with area farmers. Most corn is grown within 35 miles of the plant, but some is grown as far as 70 miles away, in the Manito area. Pioneer has growing plots in Mason, Fulton, Warren, Tazewell, Hancock and McDonough counties. Acreage-wise, Pioneer harvests 7,500 to 12,000 acres annually, depending on demand for the product.

Three steps are necessary to bring the ear corn to the production plant:

Roguing — when all genetically unsound matter is removed from the plant;

Detasseling — which involves removing the actual tassel on the plant either mechanically or manually; and

Finally, the crop is harvested and trucked by local trucking companies who receive custom rates for their hauling services.

Seed harvesting begins at 35

percent moisture rate. In the peak of the season, the plant handles nearly 35,000 bushels of ear corn per day.

The corn is first weighed, husked, sorted, dried, stored, shelled, conditioned and finally treated and bagged. The bags are then stacked on pallets, wrapped in plastic and moved by forklift into the warehouse. Throughout the operation, the seed undergoes frequent sampling and quality checks. Shipping the product begins in December to sales representatives and other regional seed plants.

Pioneer Hi-Bred also conducts its own quality inspection in the spring, ensuring product quality is maintained in their plants.

McDonough Power is very pleased to be the power supplier to this facility and supports Pioneer Hi-Bred International in its continued success and growth.

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Often-overlooked energy-saving measures

Some ways to protect the environment—recycling, composting, switching to environmentally safe products—have become popular choices for homeowners. The following home energy-saving tips—even though they're often overlooked—help protect the environment too, because they help you use your energy more efficiently, according to the National Rural Electric Cooperative Association and the Edison Electric Institute, two national electric utility trade associations.

Insulating doors and windows

Start with your home's biggest energy wasters—the windows and exterior doors. You lose more of your heating and cooling dollars through these—per square inch—than through any other part of your home. For instance, heat passes through a window with a single pane of glass 14 times faster than through a well-insulated wall. So, even with an attic full of insulation, you still can be wasting money and energy through your windows and doors.

Install storm or double-pane windows to cut this energy drain in half. Add storm doors to create the same insulation effect there.

Caulking and weatherstripping

After insulating your windows and doors, don't overlook their caulking and weatherstripping needs. Almost 40 percent of your monthly heating and cooling bill could be going through cracks due to poorly caulked and weatherstripped doors and windows.

Caulking is a rubber-like material that can expand or contract and seals air leaks around each pane of window glass and between the door and window frames and the house. Weatherstripping is a flexible material (foam rubber, felt, or aluminum) that helps to assure a snug fit between the parts of windows and doors that open and close.

Water heating

In the average American house, water heating is the second largest energy user. Save water and the energy needed to keep it hot by maintaining an energy-efficient water heating system and conserving hot water.

Start with the water heating tank itself:

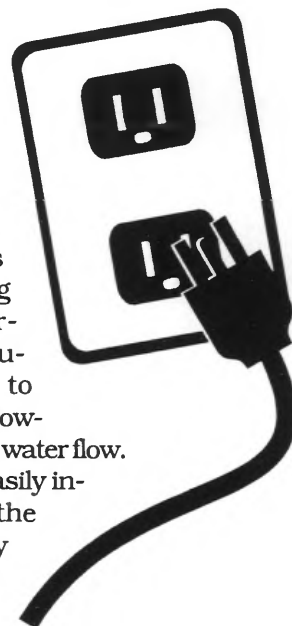
- Get the right size water heater. Keeping more hot water on hand than you need can waste energy.
- For every 10 degrees you can lower the tem-

perature, you can save about 6 percent of your water heating energy.

- If the sides of your water heater feel warm to the touch, you may need more insulation. Wrap a water heater blanket around the water heater, especially if the water heater is located in an unheated area of your home.

- In addition to insulating the water heater, you will also save money by insulating the hot water pipes leaving the water heater.

Low-flow shower heads and faucet aerators reduce water flow, saving both water and energy. Aerated showerheads and faucets mix air with water to maintain pressure, and low-flow showerheads pulse the water flow. These simple devices are easily installed and can reduce the amount of water and energy used by 50 percent.



Duct sealing

These are the ducts that carry heated or cooled air to the registers in each room of your house. Doing a checkup here can save 10 to 15 percent on your energy bill. All ductwork should be sealed at the joints to prevent leakage. Ducts located in unconditioned areas of your home (attic or crawlspaces) should be insulated.

Thermostat set-back

A set-back thermostat allows you to change the temperature setting or turn off your heating or cooling system at preset times. Each morning when you leave and each evening when you return, the temperature changes to save energy, automatically. Heating or cooling is done only when someone is home.

By using these easy and cost-effective, energy-saving guidelines, you can stay comfortable all year-round and still save money.

For more information on how you can save energy all around your house, call your electric cooperative.

Carbon monoxide danger increases in winter

Two people passed within an hour of death when their apartment building became a carbon monoxide gas chamber. An after-the-fact assessment found that the building's furnace did not draft properly, backing exhaust into several apartments. One of the people, sleeping in a basement apartment, was saved only by 10 minutes of persistent knocking on her door by a utility company employee responding to a neighbor's complaint of fumes.

When doctors examined that victim, they found her blood contained a near-fatal concentration of carbon monoxide. The neighbor who called for help was found with a slightly higher level in his blood. Without immediate attention, both would have been dead within an hour, authorities said.

They were among 10,000 Americans expected to be temporarily or permanently disabled by accidental exposure to carbon monoxide each year, according to the Centers for Disease Control in Atlanta. In 1991, the last year for which figures are available, 594 people died from unintentional exposure to carbon monoxide.

Carbon monoxide is an odorless, invisible and highly poisonous gas that results from incomplete combustion of wood, charcoal, natural gas, kerosene and other carbon-based fuels. Its chemical designation is CO.

While the number of CO-related deaths has steadily declined in recent years, high profile accidents such as the CO-induced death in September of tennis star Vitas Gerulaitis in New York underline the continuing need for vigilance against CO poisoning. Inves-

Symptoms of carbon monoxide poisoning

If you discover someone overcome by carbon monoxide, act fast. Get them to fresh air quickly. If that's not possible, open nearby doors and windows. Then call for medical help.

Have conscious victims lie down. Keep them warm and calm. If they are not breathing, give them artificial respiration. Tell emergency personnel that you suspect CO poisoning.

% of blood saturation	Symptoms
0-10	None
10-20	Tightness across forehead, possible headaches
20-30	Headaches, throbbing temples
30-40	Severe headaches, weakness, dizziness, dimness of vision, nausea, vomiting and collapse.
40-50	Previous symptoms continue, greater possibility of collapse and loss of consciousness, increased pulse and respiration.
50-60	Loss of consciousness, increased respiration and pulse, coma with intermittent convulsions.
60-70*	Coma, intermittent convulsions, depressed heart action, possible death.
70-80*	Weak pulse and slowed respiration, respiratory failure and death.

*When high concentrations of CO gas are inhaled, the victim may not experience any of the above symptoms but may suddenly collapse. Death in these cases is the result of paralysis of the respiratory system.

tigators suspect a faulty pool heater vented exhaust into Gerulaitis' cottage as he slept.

In its initial stages, carbon monoxide poisoning is difficult to distinguish from the flu. Both cause headaches, dizziness, nausea, vomiting and fatigue.

Carbon monoxide kills by limiting the body's ability to use oxygen. Normally, oxygen molecules in the lungs are absorbed into the blood stream, where they attach themselves to hemoglobin proteins. Hemoglobin carries the oxygen to the heart, brain, muscles and other organs. But carbon monoxide attached to hemoglobin 300 times more easily than oxygen, pushing aside oxygen molecules and rendering them useless. As CO builds up in the bloodstream, the unsuspecting victim slowly suffocates.

Simply leaving a CO-saturated space may not immediately result in a return to normal blood oxygen levels. Carbon monoxide can take twice as long to leave a

human body as it did to accumulate, and victims often need pure oxygen or other treatments to purge their bodies of CO.

A second, rarely discussed danger from carbon monoxide is that it is explosive. Air containing between 12.5 percent and 74 percent CO will explode if ignited.

Defective furnaces, fireplace flues and oil heaters have long been primary causes of accidental CO poisoning. In addition, carbon monoxide is found in exhaust from automobiles, lawnmowers, kerosene space heaters, charcoal grills and other appliances that burn carbon-based fuels.

To protect families against accidental CO poisoning, utilities recommend annual furnace and appliance checks by a qualified gas appliance or heating contractor and installation of plug-in or battery CO detectors with audible alarms near sleeping areas.

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The bills have been mailed this week, and as usual we are receiving a number of calls from members who thought there was just no way they could have used that much electricity during the last billing period. Many of these calls are from members who have been gone on vacation or students who went home over break and consequently did not occupy the residence during a substantial part of the period. Typically, these members feel that since they were not there, energy usage should have been down drastically, especially since they turned the thermostat down.

While it is true that the heating system will run less when the thermostat is turned down, never-the-less it still will run. If you set the thermostat at 55 degrees and the outside temperature is 20 degrees, the heating system must make up the temperature differential. A reduction in the setting by 15 degrees will mean that the heating system will not have to make up that part of the temperature differential, but part of that gain is lost due to the fact that you are

not there putting body heat or using various appliances or lights that contribute to the heat gain.

There are other appliances besides the heating system that run even if you are not home. The refrigerator and water heater are usually left on and continue to operate.

The primary thing to consider in reviewing your electrical usage is to bear in mind the period covered and what the weather conditions were for the period. All of us tend to forget those extremely cold days when we get the bill and the weather is sunny and near 50 degrees.

Weather is, however, the factor that has the greatest impact on your bill and temperatures alone do not tell that whole story. Wind and overcast skies will cause much more energy to be consumed than on a still and sunny day, even though the actual temperature outside is the same.

While everyone would like to believe that the meter is wrong, that is seldom the case. The usage can usually be explained if we really think it through and evaluate all the facts.

If you really want to see the impact of the weather and various other factors on your usage, read your meter daily at approximately the same time. You should also record the daily weather and your living activities, such as drying clothes, extra cooking or company over the weekend.

I have been told that the appliance in the home that uses the most electricity is a teenager, and having had four of my own, I can believe that.

Simple pointers reduce energy use of water beds

For some people, crawling into a nice, warm water bed is the best way to survive a cold winter night. By following a few simple pointers regarding your water bed, you can stay warm and save money on your electric bill.

First of all, remember that a water bed uses more energy to maintain its temperature in a cold room. In some cases, however, turning down your room thermostat will offset the increase in the bed's electricity usage.

The average water bed uses 90 to 150 kilowatt-hours a month. The amount of electricity costs \$9 to \$15.

Covering your water bed will reduce energy use.

A partially unmade bed uses 30 percent more energy than one that is made.

If you have a standard water bed, insulate the bottom and sides with polystyrene insulation. Place it around the sides and underneath, between the wood deck and plastic liner. This can reduce your operating costs by about 25 percent.

An alternative to insulating is to buy an insulated liner. Tests have shown that these liners save about 13 percent on a standard king-size bed.

Keep in mind that the size of the water bed, the design of the mattress, the efficiency and size of the heater, as well as your lifestyle, will affect the water bed's electrical usage.

You are safe: True or false?

Electricity's many conveniences are great, but like all good things a risk is involved. **Caution** is the watchword for the electrical industry. The following are some questions that will give you an idea of the apparent and not-so-apparent dangers of distributing electrical power.

1. Power linemen can be injured if posters for garage sales and political candidates are tacked to utility poles.

TRUE. Tacks, nails and staples stuck in utility poles can cause climbing equipment to slip. They can also tear protective rubber equipment exposing the linemen to electrical shock.

2. Overhead power lines are always fully insulated and safe to touch.

FALSE. There is NO insulation on overhead lines. The bare wire is extremely dangerous.

3. Climbing a tree that has grown into power lines could risk an electrical shock.

TRUE. Before climbing or trimming a tree, make sure that no tree limbs are touching power lines.

4. A downed power line can be safely moved by using a wooden pole or dry wood.

FALSE. Though it seems dry, a piece of wood may contain enough moisture or resin to conduct electricity, sending a current through the wood to you.

5. Unlike overhead power lines, household current is not strong enough to cause permanent injury.

FALSE. Household current can kill. Nine out of 10 deaths by electricity each year are the result of contact with household current.

6. If a fallen power line lands on your car, you are safe as long as you stay in the vehicle.

TRUE. You are safe in the car because your body is at the same potential as the car, just like a bird on an overhead power line.

7. If fire or other threat forces you to leave a car, jump clear of the vehicle and don't touch the car and the ground at the same time.

TRUE. You can leave the car safely by jumping away as long as you don't touch the ground and the car at the same time creating a path for the electricity to ground.

Poetry by Candlelight

(This poem was written by Annette Mates, a McDonough Power Cooperative member in the Cameron area. She wrote this poem on the evening of December 9, 1994, when a major outage was experienced in her area.)

The Lights Went out at 7:31
 The TV Blacked Out, There Went My Fun.
 I Sat In Confusion For A Second Or Two,
 To Consider The Best Thing That I Could Do.
 I Went For The Flash Light To Get Candles and Such,
 At Last I Had Light, But Not Very Much
 I Called Up My Neighbor To Ask Of Their Plight,
 But He Wasn't Surprised, Said "We Have Ice Tonight."
 Then I Thought Of The Number You Call In Distress,
 For Some Kind Of Magic To Get Out Of This Mess.
 But Their Phone Was Busy, Some One Else Was Calling,
 I Put On More Clothes, The Temperature Was Falling.
 I Put A Pan Full Of Water On The Stove To Get Steam,
 I Could Go To Bed, and Get Warm In A Dream.
 So I Made Me Hot Chocolate My Insides Are Content.
 Here Comes The Power Truck, My Problem Just Went.

By Annette Mates

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The things we value



Some things that we value can't be measured in terms of money.

A vivid sunset, a starry summer night accompanied by a cricket's song...they don't have a price tag.

Seeing the baby take a first step, romping with your dog in fresh snow...those times aren't for sale.

Value is relative. In your own home, for example, that feeling of love and security won't equal a stack of silver.

But for your home's heating and cooling comfort, for constant comfort throughout the house, for safety and security, electricity's value can be seen in dollars and cents. For the greater enjoyment of those times you value, go with the energy that delivers the most value.



Electricity. A source of comfort.



Electric Cooperatives of Illinois

Getting the job done . . . TOGETHER

Lighting

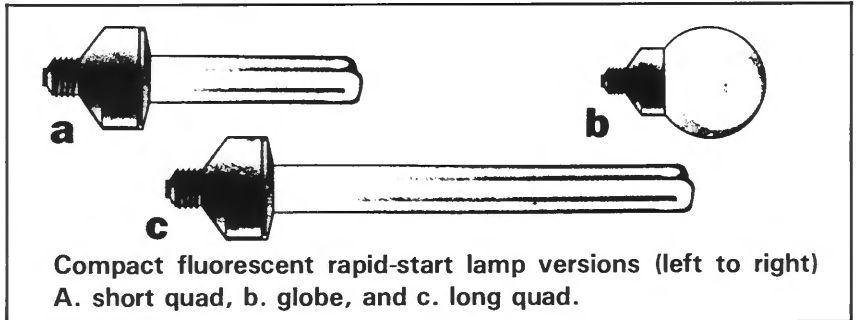
Don't use more light than you need. About 15 percent of the electricity we use in our homes goes into lighting. Most Americans overlight their homes, so using lighting efficiently is an easy conservation measure. The U.S. Department of Energy has these suggestions. Some may be appropriate for your situation.

Indoor lighting

- Turn off lights in any room not being used.
- Light-zone your home and save electricity. Concentrate lighting in reading and working areas and where it's needed for safety (stairwells, for example).
- To reduce overall lighting in non-working spaces, remove one bulb out of three in multiple light fixtures and replace it with a burned-out bulb for safety. Replace other bulbs throughout the house with bulbs of the next lower wattage.
- Consider installing solid state dimmers or high-low switches when replacing light switches. They make it easy to reduce lighting intensity in a room and thus save energy.
- Use one large bulb instead of several small ones in areas where bright light is needed.
- Use compact fluorescent lights whenever you can; they give out more lumens per watt. These lights can fit into many incandescent lamp sockets and provide the same quality of light. With efficiencies of 50-60 lumens per watt, the compact fluorescent lamps are three to four times more efficient than conventional bulbs and last 10 times as long. For example, an 18-watt compact fluorescent lamp produces the same amount of light as a 75-watt incandescent lamp. Although the initial cost is higher, the savings in

electricity costs could pay for the compact fluorescent bulb in about a year.

- Consider fluorescent lighting for the kitchen sink and counter-top areas. These lights, set under kitchen cabinets or over counters are pleasant and energy efficient.
- Fluorescent lighting also is effective for makeup and grooming areas. Use 20-watt deluxe warm white lamps for these areas.
- Need new lamps? Consider the advantages of those with three-way switches. They make it easy to keep lighting levels low when intense light is not necessary. Use the high switch only for reading or other activities that require brighter light.
- Always turn three-way bulbs down to the lowest lighting level when watching television. You'll reduce the glare and use less energy.
- Use low-wattage night-light bulbs. These come in 4-watt as well as 7-watt sizes. The 4-watt bulb with a clear finish is almost as bright as the 7-watt frosted bulb, but uses about half as much energy.
- Try 50-watt reflector floodlights in directional lamps (such as pole or spot lamps). These floodlights provide about the same amount of light as the standard 100-watt bulbs but at half the wattage.



Compact fluorescent rapid-start lamp versions (left to right) A. short quad, b. globe, and c. long quad.

• Try 25-watt reflector flood bulbs in high-intensity portable lamps. They provide about the same amount of light but use less energy than the 40-watt bulbs that normally come with these lamps.

- Keep all lamps and lighting fixtures clean.
- You can save on lighting energy through decorating. Light colors for walls, rugs, draperies, and upholstery reflect light and therefore reduce the amount of artificial light required.

Outdoor lighting

- Have decorative outdoor gas lamps turned off, unless they are essential for safety. Just eight gas lamps burning year round use as much natural gas as it takes to heat an average-size home for a winter heating season.
- By turning off one gas lamp, you might save from \$40 to \$50 a year in natural gas costs.
- Use outdoor lights only when they are needed. One way to make sure they're off during the daylight hours is to put them on a photocell unit or timer that will turn them off automatically.
- Consider installing solar-powered outdoor pathway lamps or high-efficiency sodium lamps for outdoor security lighting. They are available at many local hardware stores and building suppliers.

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This is the third year that McDonough Power Cooperative will send two young people to Washington, D.C., in June on the "Youth to Washington" program. During a week in the nation's capital, these students get an up-close, first-hand look at democracy in action. They meet the Illinois Congressional delegation first-hand, along with many of their staff members. The finalists in this program will tour the state capital and meet their state legislators and other elected officials during Illinois Rural Electric and Telephone Youth Day on May 10.

Through these programs, students learn how government works and why it's important for every citizen to get involved in government.

Your cooperative has a stake in the future of our area, and our young people represent that future. Your cooperative's board members feel that it's important for young leaders to be exposed to government and to learn more about it. Along the way they learn about the cooperative form of business as well.

That's why the cooperative participates in these programs. McDonough Power Cooperative and the other electric and telephone cooperatives in the state have been sending students to Springfield and Washington, D.C. since 1957. During that time we've helped introduce hundreds of future young leaders to government and cooperatives. Since then many of our "alumni" have gone on to leadership positions in our area communities.

Today, past Youth Tour participants serve in state and national government. Two members of the Illinois General Assembly, Representatives Tom Ryder of Jerseyville and Art Tenhouse of Liberty, were originally introduced to state

government through these programs.

We're pleased to sponsor the Springfield and Washington program for area youths. In addition to taking trip winners from across the state, a few extra seats will remain for the 1995 tour. If your high school son, daughter or grandchild is interested in government and participating in the best available tour of Washington, D.C., contact the Cooperative as soon as possible.

The electric cooperative's trip is recognized as one of the best tours of the nation's capital. The students will tour the monuments, memorials and shrines of the capital, as well as Arlington Cemetery, George Washington's home at Mount Vernon, historic Alexandria, the Supreme Court and the U.S. Capitol. The students will visit the National Cathedral, Smithsonian museums, the FBI and Bureau of Engraving and Printing. They'll meet with Illinois Senators Carol Moseley-Braun and Paul Simon and dine with the downstate Illinois congressional delegation at a Capitol Hill luncheon. There's also a twilight cruise on the Potomac River and a reception at the Royal Embassy of Saudi Arabia. And that's just the beginning.

For further details and information about the tour, contact me or Jill Guarin at the Cooperative.

Save the watts

You can manage your energy use and make the most of your energy dollars using those precious watts as wisely and economically as possible.

It's easy and involves only some common sense along with tried and true guidelines. For example:

- Set the thermostat at 55 degrees when you are away from for a few days; pipes won't freeze at this temperature.
- Vacuum the coils of your refrigerator every three months to help the condenser run better.
- Drain a gallon of water once a year through the bottom of your water heater; that removes sediment that decreases energy efficiency.

There's lots more you can do, of course. Simply contact us and we'll be glad to help you increase your list of ways to watch your watts and get your money's worth of home energy use.

Coping with a winter outage

Winter outages can be miserable. It's almost always dark, always cold, always dismal. Try as we might, they'll always be with us. But a winter outage doesn't have to be disastrous, and you can be relatively cozy if you do some planning and take a few precautions.

If the power goes off, the first thing to do is disconnect those electric circuits that serve delicate electronic appliances and entertainment equipment. This will protect them from any surges that may occur when the power is restored. When it is restored, wait for 15 to 30 minutes to ensure that the outage is over, then reconnect those circuits.

And, if the lights go dim and stay that way, disconnect those circuits that serve motor-operated appliances. Dim lights mean the voltage coming into the home is not high enough to adequately serve motors—a low voltage situation. Operating motors at low voltage may damage them.

For warmth

1. Several layers of lightweight clothing will keep a body warmer than one heavy piece.

2. A backup heater can be used, but carefully. If the heater has a flame, ventilation must be provided.

3. During an extended outage, use one room (preferably one on the sunny side of the house with few windows) to conserve as much heat as pos-

sible. Open curtains during the day and close them at night.

For light

1. Know where the flashlight and fresh batteries are.

2. For safety, place lighted candles in containers such as coffee cans.

3. Have extra lantern fuel on hand if lanterns are used for light. Refill the lanterns outdoors.

For food

1. Stock supplies of food such as canned meat, tuna, powdered milk and juices, cereal, peanut butter and crackers.

2. Fill plastic jugs with water.

3. Have throwaway plates, plastic silverware and a manual can opener on hand.

During an extended outage

1. Shut off the water supply (and the electricity to the pump, if you have one) and drain the system. Pour antifreeze into the plumbing fixtures in the bathroom and the kitchen.

Have these on hand

1. Wind-up alarm clock

2. Battery powered radio

3. Extra blankets

Prepare as if every winter outage will be a long one and you'll not be caught short of creature comforts. You can be confident and rest assured that your employees will work around the clock to restore service to all members as quickly as possible.

May we say thanks to our members

- Who call us promptly to notify the office when a power outage occurs, telling us exactly where the trouble is located and the cause.

- Who grant right-of-way for construction and maintenance of line to serve your neighbor, providing adequate and reliable electric service to everybody on the system.

- Who notify the office when moving so electric service can be transferred to the new owner or disconnected if no one will be using power.

- Who keep television antennas, silo-filling pipes and other equipment clear of falling distance on all electric lines.

- Who teach children all the rules of electric safety, both indoors and outdoors.

- Who are careful when using trucks and farm machinery around poles, lines and guy wires.

- Who use extreme care when cutting trees near your electric lines.

- Who report anything that is wrong with the lines such as bad poles, broken guy wires, broken strands on the line conductors and cracked or broken insulators.

- Who keep signs, fence wires, nails or other hazards off the poles for the safety of our linemen.

Paying on time saves everybody money

Thank you for paying your bill on time. A majority of our members pay their electric bills promptly each month.

This promptness saves money, helps us hold down operating costs and our rates. Those who do

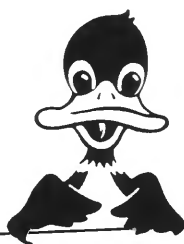
not pay on time cost us extra money and contribute to increased costs.

Paying after the 17th of the month will add at least 5 percent to your bill. Why not at least save this much?

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Time to DUCK again!

Ahhh, it's great to be outside again, even if it means there's work to be done. The TV antenna's a little crooked, there are some tree limbs to cut, and the ol' swimming pool will need cleaning. That means it's time to DUCK. When you're moving the grain auger, raising the TV antenna – anytime you use tall equipment – make sure you stay clear of the power lines. Duck down and keep poles, augers and other equipment away from overhead electric wires. Whether you're outside your home or out in the farm field, get your jobs done the safe way.

Look up and live.



Electric Cooperatives of Illinois

Good for ALL Illinois

Appliance labeling

About 20 percent of all the energy used in our homes goes into running electrical appliances, so appliance use and selection can make a considerable difference in home utility costs. Buying an energy-efficient appliance may cost a bit more initially, but that expense is more than made up by reduced operating costs over the lifetime of the appliance.

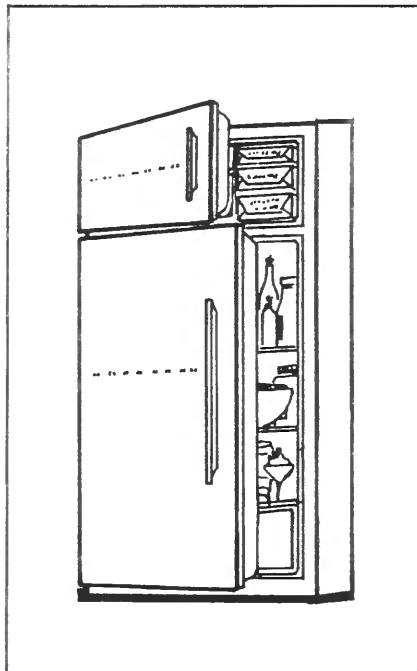
Energy efficiency can vary considerably among appliances of similar size and features, though individual models may seem alike. To help consumers evaluate energy use by an appliance, the federal government has developed a labeling program that covers the following appliances:

- Furnaces
- Clothes washers
- Water heaters
- Dishwashers
- Refrigerators and freezers
- Room air conditioners
- Central air conditioners and heat pumps
- Fluorescent lamp ballasts

Two agencies are involved in the appliance labeling program. The U.S. Department of Energy tests the energy efficiency of the above appliances. The Federal Trade Commission develops the energy labels that go on these appliances and monitors their use by manufacturers.

Appliance labels measure energy use in one of two ways.

The first — and most common — is in dollars. The dollar figures on an energy label represent the estimated annual cost of operating that specific appliance. The lower the dollar amount of



the label, the more efficient the product.

The second method is with an energy efficiency rating (EER). The EER measures the efficiency of one product in relation to other similar products. With EERs, the higher the rating, the more efficient the product.

Each label, whether it is in dollars or EERs, contains information about that appliance's energy use, as well as the least efficient and most efficient

products in that category. This allows you to compare the energy efficiency of one specific appliance with other similar ones.

For example, a refrigerator with \$68 on the label would cost \$32 per year less to operate than a refrigerator of similar size and capacity that had \$100 on the label. The following information can help you compare products with EER labels.

- The EERs for furnaces currently range from 78 to 95. A unit rated 78 would use 18 percent more fuel than a unit rated 95.

- The EERs for central air conditioners currently range from 10 to 15. A unit rated 10 would use 50 percent more energy than a similar unit rated 15.

- The EERs for heat pumps currently range from 6.8 to 8.9. A unit rated 6.8 would use 24 percent more energy for heating than a similar unit rated 8.9.

For an energy label in dollars, the lower the number the less it will cost you to operate. For an energy label in energy efficiency ratings, the higher the number, the less it will cost you to operate.

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

Customer, or facility, charge increases \$1

The Facility Charge is the portion of your electric bill that reflects basic costs of providing services which are unrelated to the amount of electricity measured in kilowatt-hours that you use each month. The cooperative must provide a

meter, service drop, distribution transformer, distribution and transmission lines, substation and other equipment that connects your home to a reliable and adequate supply of energy. Other costs covered by the facility charge are the expenses of our computer service, payroll for billing department, cost of printing bills and other expenses the cooperative incurs in determining the amount of electricity used during the month.

The Cooperative has not increased the facility charge since January 1982, even though the costs of meters and transformers and other expenses have increased drastically.

Anyone being billed under Schedule "A," single-phase service, will have the Facility Charge increased by \$1 from \$6.50 to \$7.50 per month. To continue to operate and maintain lines that are dependable, this increase has become necessary.

Why do you receive this magazine?

This magazine is paid for by advertisers and by subscribing cooperatives. Each issue, delivered to your mailbox, costs your cooperative about the same as a first-class stamp.

Your electric cooperative relies on this magazine not only to relay information about your business to you, but also to encourage you to use electricity efficiently and safely.

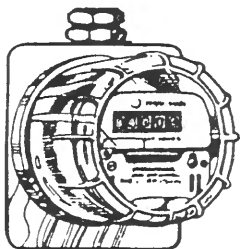
Promoting electrical safety can help save the lives of cooperative members and save money for ratepayers by moderating insurance premiums and court claims.

Promoting energy efficiency can benefit electric cooperative members in a number of ways, in-

cluding these:

- Helping shave electricity use during peak periods of the day or season, (lowering peak demand helps hold the line on everyone's rates)
- Helping members make informed decisions in purchasing new, efficient technology, such as geothermal heating and cooling systems.
- Helping pay for this publication (and much more) just by improving system efficiency over time.

Our Cooperative members are spread out over many square miles. This magazine allows McDonough Power Cooperative to reach the most consumers at the least possible cost.



Accurate meter readings are helpful

Exact meter readings taken at the same time each month, will ensure a more accurate energy bill. This assists the billing department with any problems which may arise with your consumption.

Outages can frustrate computer users

If you own a personal computer, you have probably experienced the frustration of having your power supply suddenly flicker or go off completely with a resulting loss of data.

Rapid changes in the amount of electricity going into your computer can result in damaged circuitry, loss of important data and plenty of aggravation.

What can you do to protect your computer equipment from power fluctuations and outages?

There is equipment available for home (or office) use that is designed to eliminate or filter out surges of electricity or provide a backup supply of power should your power go off.

Protector or suppressor devices provide protection from brief but intense voltage increases (often called spikes or surges). It's this type of equipment that may save your computer's life should a lightning bolt hit nearby and enter your home's wiring system.

According to a computer sales, service and applications company, a surge protector's "response time" to incoming power surges is a critical factor to consider when choosing a unit. The faster the response time, the better the unit is at preventing the power surge from entering your computer and causing damage. Also consider the amount of power the unit can dissipate when a surge occurs. Cheaper units that can't handle higher surge levels may not provide the protection you need. Some quality units can handle as much as 2,000 amps for one millisecond. Surge protectors can vary in price from \$40 to more than

\$120.

But it's the loss of data, not equipment damage, that most often causes concern among computer operators.

If you can't shut down your home computer during periods when power interruptions are likely (such as during intense lightning storms), then an uninterruptible power supply (UPS) system may be for you. A UPS system operates with a battery backup that supplies instant power to your computer should the outside voltage suddenly drop. Because the backup system takes over quickly, your computer doesn't notice. The batteries normally supply enough power to continue operating 15 to 20 minutes, but each system's reserve time will vary. Battery backup systems can cost \$400 to \$2,000.

If the expense of a battery backup system is too much for your budget, consider copying your data frequently. Then, if the power does go off you lose only the portion of your data that has not been copied. If the data you're putting into your home computer is extremely important, make copies of it on a separate disk and place it in a proper storage facility.

If you're thinking about purchasing a surge protector or battery backup system for your home computer, make sure the equipment you choose meets the precise needs of your computer.

If power surges and outages concern you, surge protectors and battery backup systems may be just the thing your computer needs for important protection.

Spring is just around the corner

Put away the winter gear, and step out into the spring season. Whether you're working or playing, however, please apply caution about how you use electricity outdoors.

If your work requires a ladder, use a wooden or fiberglass one.

When using power tools outdoors, use only extension cords approved for outdoor use.

Teach the kids not to fly kites and model airplanes near power lines; caution them not to climb trees that could have limbs growing into power lines.

Contact us for more tips on how you can step into spring safely and sensibly. A little caution and common sense are all it takes to enjoy your fun in the sun.

Office closing

McDonough Power Cooperative will close April 14 in observance of Good Friday. The office will reopen April 17 at 8 a.m.

DIRECTORS

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All Co-op Electric Outages 837-1400



A home coming

I know it doesn't look like much now. Just a scrubby piece of ground with weeds all over. But someday, the kids' swingset is going over there, and by the time Joel is old enough, this tree branch should support him just fine.

I've thought a long time about this house, and I'm not looking forward to all the work ahead. There are still a lot of hard decisions to make. I'm glad I already made a big one. ***I picked electricity as my home energy source.***

I won't have to deal with a flame going all the time, or fumes in the house. Heating and cooling, it will all be electric. Constant comfort throughout the house. No hot or cold spots. Clean and dependable. My electric cooperative has some ways for me to save money, too. That's a comforting thought.



Electricity. A source of comfort.



Electric Cooperatives of Illinois

Getting the job done . . . TOGETHER

Building or buying a home

Energy-wasting mistakes can be avoided if you consider climate, local building codes, and energy-efficient construction when you build or buy a home. Does the home take advantage of the sun's natural light and warmth? Has it been designed not to overheat? Does it include energy-efficient windows, furnace, heat pumps, and appliances? The following energy conservation ideas should help you keep down home utility bills.

When building a home

● Insulate walls and roof to the highest specifications recommended for your area.

● Insulate floors, too, especially those over crawl spaces, cold basements, and garages.

● If the base of the house is exposed, as in the case of a mobile home, build a "skirt" around it.

● Ventilate the attic using vent panels under the eaves and gable end or ridge vents rather than motor-driven fans.

● Use double-pane insulating glass throughout the house. Consider windows with low-emissivity (low-E) coatings and gas fills when retrofit or replacement is necessary. They also improve comfort, cut condensation, and reduce the fading effect of ultraviolet light on home furnishings. Installing a low-E coated double glass unit with gas fill, instead of standard double glazing, will improve the insulating value of the glass area by 40 to 50 percent. A low-E coating is a virtually invisible metal or metallic oxide layer on the glass that reflects heat back into the home during cold weather and back to the outdoors during warm weather.

● Window frames and their

quality of construction and installation are as important as the glass unit when making a purchasing decision. Wood and vinyl frames offer the best insulating value today.

● Consider solar heat gain from the windows. Many glazings are available today to control the amount of incoming solar radiation. Depending on your climate location and the window orientation, you can choose a window that best suits the space without limiting the amount of window area significantly.

● Install windows you can open so you can use natural or fan-forced ventilation in moderate weather.

● Place your refrigerator in the coolest part of the kitchen, well away from the range and oven.

● Install the water heater as close as possible to areas of major use to minimize heat loss through the pipes; insulate the pipes.

● If you live in a warm climate, remember that light-colored roofing and building materials can help keep houses cooler.

When buying a home

● Consider all the ideas mentioned for building a house.

● Ask for a description of the insulation and data on the efficiency of space heating, air-conditioning, and water heating plants, or have an independent engineer advise you about the efficiency of the equipment. Ask to see the utility bills from the previous year, but remember to adjust them for current utility rates. You may want to compare the bills of houses under consideration.

● Consider the need for additional insulation or replacement of equipment. Even some new houses don't have insulation in the exterior walls; be sure to check. If improvements are necessary, you may want to seek an adjustment in the purchase price to cover all, or a reasonable share, of the costs.

Many Illinois electric cooperatives offer home energy audits. A number of the cooperatives also participate in the "Certified Comfort Home" program.

Consider having a qualified energy evaluation of your home's construction and condition for an indication of likely utility bills and for recommended cost-effective energy improvements.

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

Almost everyone, especially those of us who grew up in the rural area, knows that REA is associated with electricity and we'll always think that way. But there is no longer REA as such; it has been replaced by RUS, better known as Rural Utilities Service.

The new name RUS will be involved with more than rural electrification and telephone. It will also now include rural water and wastewater. For us old timers who grew up associating REA as the Co-op, it will take a while to change our thinking and our vocabulary. Many people still refer to the Cooperatives as "REA" even though that really was the name of the federal agency from which the Cooperatives borrowed money.

What's wrong with meter estimating?

Many times people are tempted to estimate the amount of electricity they use for the month rather than take the time to get an accurate reading. We have some good advice for you: Do not estimate your usage. Take the time to read your meter. When you read your meter on a regular basis, this is an excellent way to be sure that your wiring and equipment are operating properly.

Estimating readings not only causes problems here in the office, but in due time will mean a problem for you. When members guess their usage over a period of months and then the meter is accurately read, they are surprised to find out that several hundred kilowatt-hours are registered on the meter that have not been reported.

As one of the last actions of the 103rd Congress, the massive reorganization of the Agriculture Department was approved. This reorganization spelled the end of the 59-year-old REA and the birth of RUS.

REA Administrator Wally Beyer was confirmed as the head of the new agency. He is a former manager of Verendrye Electric Coop. in North Dakota who joined REA as administrator in late 1993.

This reorganization capped off a 13-month effort by the Clinton Administration to revamp the 130-year-old USDA. It is predicted this and other changes will cut USDA's payroll by 11,000 and save \$3.6 billion over the next five years.

With the political changes in Washington, no one can predict what will happen to the Agriculture Department budget or the RUS budget. It probably is a reasonable prediction that if budget cuts are in fact made government wide, then the RUS budget will also experience cuts. There have always been strong supporters and strong opponents of the program in the past and the same can be expected in the future. All we ask is equitable treatment for our members in whatever action is taken to reduce government spending and the deficit.

The first thing that the member does it to inform us that something is wrong with our meter. This is actually a remote possibility. We are immediately asked to investigate this problem. The first thing that we usually ask is, "When did you first notice the increase in your usage?" The member does not know because he has not been reading the meter, and then the real problem comes out. The member becomes very unhappy because he now has a huge bill to pay. We find it difficult to sympathize because the member did not accept responsibility to read the meter accurately. Please make it a habit to read your meter properly and on the same day each month so we can both avoid this type of problem.

Reminder

McDonough Power Cooperative's monthly facility charge will increase from \$6.50 to \$7.50 effective May 1, 1995.

Office closing

McDonough Power Cooperative will be closed May 29 in observance of Memorial Day. We will reopen Tuesday, May 30, at 8 a.m.

Those powerful power lines

Power lines carry electricity, a commodity that powers our appliances and tools, heats and cools our homes, provides convenience and lights our way. But electricity can burn, injure and even kill unless you respect it and exercise safety and extreme caution.

Similar to lightning, the flow of electric current is constantly seeking a path to the ground. Should you cause an object or part of your body to come in contact with a power line, you are immediately providing the path that the electric current is seeking.

Take care not to become the fatal link between electricity and the ground it seeks.

Metal ladders are excellent conductors of electricity. Use extreme caution when using them around power wires, service drops and equipment.

Antennas are cumbersome and hard to control. They can easily fall or be blown against nearby power lines. Before installing or repairing a radio or TV antenna, call McDonough Power Cooperative for advice.

Many types of farm equipment are of such height and length that they can easily come into contact with overhead power lines. Always be

aware of potential hazards.

⚠ Grain augers can be an excellent conductor. Maybe the most dangerous piece of equipment, when raised in a fully expanded position, grain augers can contact power lines, causing you to become a fatal accident statistic.

⚠ Kites and model airplanes flown near power lines invite accidents. Always keep them clear of power lines. Instruct children never to climb in trees that have power lines running through their branches.

⚠ Consider any overhead power lines dangerous. Keep objects at least 10 feet away from power lines.

⚠ In areas where farm equipment will be operating, inspect for possible interference with overhead lines.

⚠ Don't attempt to raise or move electric lines. Call your cooperative office (309)833-2101 and we will make arrangements to do that kind of work.

⚠ Report any potential power line hazard to McDonough Power Cooperative.

⚠ If power lines are buried, contact us for a location before digging.

Cut noise and pollution

Few things can shorten your afternoon nap during a summer weekend as quickly as your neighbor's gas lawn mower roaring to life. But besides the noise, think about how these gas mowers are polluting the air.

You'd have to drive a car for almost two straight days to get the same amount of air pollution that a gas-powered lawn mower makes in just one hour. Each year, all the gas mowers in the country make as much pollution as 3.5 million automobiles do, according to the Edison Electric Institute and the National Rural Electric Cooperative Association, two national electric utility trade associations. The cordless electric lawn mowers now being introduced offer you a quieter healthier alternative to cutting your lawn. The cordless electric mower makes only half the noise of a gas mower. And, overall, the electric mowers help keep our air cleaner than gas mowers do, even when you factor in the power-plant emissions that arise

when we produce the electricity to charge the electric mowers.

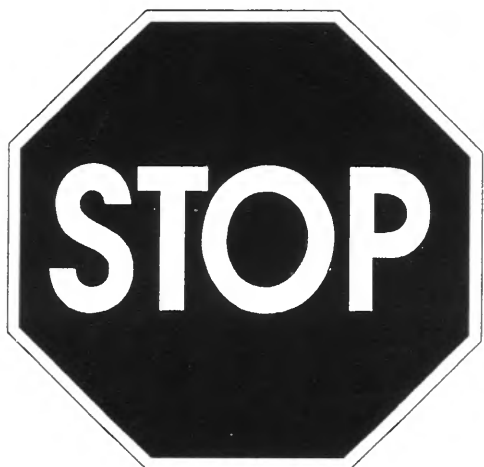
The familiar electric lawn mowers have always been a great alternative to gas mowers for small yards. No starter ropes to pull, no gasoline fill-ups, oil changes, or expensive maintenance needs. But these electric mowers need a long, awkward cord. The cordless electric mowers use battery power. You get up to 75 minutes of cutting time on a full charge. That's enough to cut a one-quarter-acre lawn, or roughly 10,000 square feet. Completely recharging the mower takes about 20 hours. Although you can get a 75 percent charge within three hours.

You can plug the charging unit in when you're finished cutting the grass, and you'll be ready to go next weekend. What's it cost to charge your mower? The annual cost is about \$3. That's less than what it costs you every year to use your toaster.

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All Co-op Electric Outages 837-1400



Whether you're out in the farm field or outside your home, get your jobs done the safe way. Moving the grain auger, cutting tree branches, raising a ladder or tv antenna. . . anytime you use tall equipment, make sure there are no electric lines above your work area.

**Don't start until
you Stop!**



Electric Cooperatives of Illinois

Electricity. A source of comfort.

Always underfoot.



The Number 1 heating and cooling concept in Illinois can be found right in the soil around your home.

It's System GT – the geothermal system.

The constant temperature in the earth surrounding your house lets you heat and cool at the lowest operating

cost of any system – with the bonus of abundant hot water.

Your electric cooperative will show you how a system especially designed for your house can keep you in total comfort 365 days a year. The clean, safe and efficient option is beneath your feet.



Electric Cooperatives of Illinois

Electricity. A source of comfort.

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Nominating Committee set for June 29

Members of the 1995 Nominating Committee have been appointed by the McDonough Power Cooperative board of directors. The Committee will meet at the Macomb Dining Co. June 29 at 7 p.m. to nominate candidates for election to the board of directors at the 1995 annual meeting of members to be held August 21 at the Fellheimer Auditorium in Macomb.

District 1 (composed of the West Half of Scotland Township and East Half of Chalmers Township in McDonough County): Gene Frakes, 1224 E. Rebecca Lane, Macomb, IL 61455 and Keith Waller, 1418 Joseph St., Macomb, IL 61455.

District 2 (composed of all Lamoine, Bethel and Industry townships in McDonough County and parts of Brooklyn, Littleton and Oakland townships in Schuyler County): Myrlen Daniels, 13765 N. 300th Rd., Industry, IL 61440.

District 3 (composed of all Hire, Tennessee, Colchester and the West Half of Chalmers townships in McDonough County and parts of Fountain Green and Hancock townships in Hancock County): Richard Smith, 700 N. 1200th Rd., Blandinsville, IL 61420 and Eugene Luster 16720 E. 350th St., Blandinsville, IL 61420.

District 4 (composed of all Blandinsville, Sciota and Emmett townships in McDonough County): Rob Keithley, 6635 N. 1500th Rd., Macomb, IL 61455.

District 5 (composed of the East Half of Scotland and all of New Salem, Eldorado and Mound townships in McDonough County and part of Harris Farmers and Vermont townships in Fulton County): Steven Pigg, 20320 N. 1700th Rd., Bushnell, IL 61422.

District 6 (composed of all Macomb, Walnut Grove, Bushnell and Prairie City townships in McDonough County and part of Lee in Fulton County): Jeffrey Hatch, 13405 Ill. Hwy. 9, Good Hope, IL 61438.

District 7 (composed of all of Raritan, Point Pleasant, Swan Creek, Greenbush and Media townships in McDonough County): Stewart Mayhew, RR 1, Roseville, IL 61473 and John Huston, RR 2, Roseville, IL 61473.

District 8 (composed of all of Biggsville, Tompkins, Ellison, Roseville, Lenox, Monmouth and Spring Grove township in Warren County): Ted Munson, RR 1, Monmouth, IL 61462.

District 9 (composed of Kelly, Coldbrook, Floyd and Berwick townships in Warren County and parts of Galesburg, Cedar and Indian Point townships in Knox County): Steven Youngquist, RR 1, Cameron, IL 61423.

The bylaws of the cooperative provide that nominations to the board of directors may be made by: (1) The Nominating Committee, (2) A petition signed by 15 or more active members, the petition must be received at the principal office of the cooperative at least 30 days before the annual meeting or (3) nominations can be made from the floor at the annual meeting.

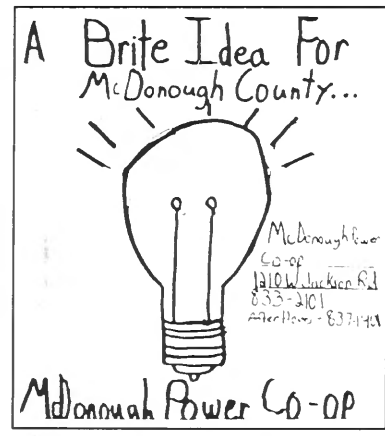
The terms of directors from Districts 1, 3 and 7 expire this year. Directors presently serving on your board of directors are: District 1, Wade Blansett; District 2, Jerry Riggins; District 3, William Pollock; District 4, Stan Prox; District 5, Steven L. Lynn; District 6, Kenneth Moore; District 7, Harold Anderson; District 8, Howard Butler, and District 9, Thomas Curtis.

Section 5. Nominations. It shall be the duty of the board to appoint, not less than forty days nor more than one hundred twenty days before the date of a meeting of the members at which board members are to be elected, a committee on nominations consisting of two members from each district in which a director is to be elected and one member from each of the other districts served by the cooperative. No member of the board may serve on such committee. The committee shall prepare and post at the principal office of the cooperative, at least thirty days before the meeting, a list of nominations for directors, which shall include at least one or more candidates for each board position to be filled by the election. The secretary shall be responsible for mailing with the notice of the meeting or separately, but at least seven days before the date of the meeting, a statement of the number of board members to be elected and the names and addresses of the candidates nominated

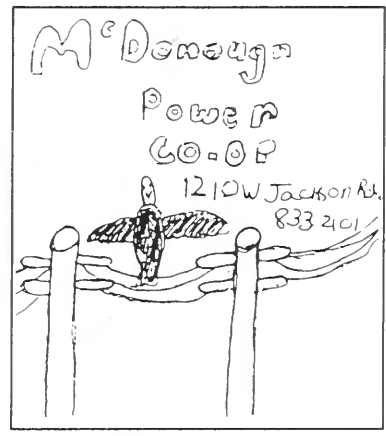
McDonough Power sponsors kids contest

McDonough Power Cooperative was pleased to sponsor a local ad contest through the Macomb Journal. Students from the McDonough County area could participate. The Co-op sponsored

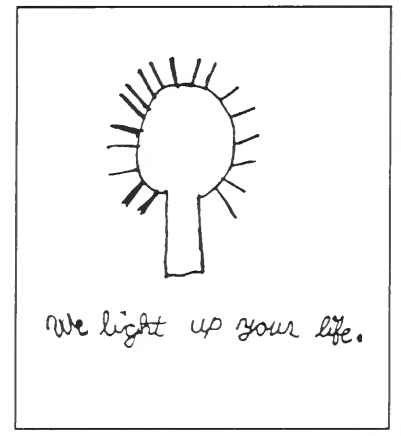
(winner) Jeron Thomson and John Lawrence, Macomb schools, and Brandi Klinedinst, Bushnell-Prairie City schools.



Jeron Thomson



John Lawrence



Brandi Klinedinst

Tracking tornadoes through six states

Tornadoes may form in many parts of the world, but the United States has more than anywhere else — especially in "Tornado Alley." "It's a fascinating physical phenomenon to understand," said Morris Weisman of the National Center for Atmospheric Research in Boulder, Colo.

"There's a whole range of reasons to chase tornadoes," said Weisman, one of 20 scientists leading more than 100 students on a series of storm chases this spring in an effort to pick out new details of what happens in these violent storms.

Among the participants is Howard Bluestein, a University of Oklahoma professor who has been chasing tornadoes for 18 years.

Most tornadoes occur in the spring when the changing weather brings warm and cool fronts and wet and dry fronts into conflict, generating unstable and stormy air that builds during the warmth of the day to create the common late-afternoon thun-

derstorm and twister outbreak.

More than 3,700 Americans have been killed by tornadoes since 1953, though fatalities are down in recent years with improved forecasts and warnings from the National Weather Service.

This year's chase, the second stage of a two-year effort, runs from April 1 to June 15 and covers hundreds of miles across Oklahoma, Texas, Kansas, Nebraska, Iowa and into Colorado.

Participants will scatter arrays of small instruments ahead of the twisters, probe the storms with airborne and portable ground radars, launch instruments on balloons and follow the storms on satellite images.

The prime target is the "supercell," a long-lived, severe thunderstorm than can generate tornadoes. While fewer than half of supercells produce tornadoes, when they do sprout a twister they are among the most violent storms on Earth.

(Continued from 12b)

by the committee on nominations. Any fifteen or more members acting together may make other nominations by petition and the secretary shall post such nominations at the same place where the list of nomination made by the committee is posted. Nominations made by petitions, in order to be valid, must be received at the principal office of the cooperative at least thirty days before the

meeting. Any nomination by petition which meets the requirements of the bylaws, shall be set forth in the annual meeting notice as nominations made by petition and any such nominations shall appear on the official ballot. Nothing contained herein shall, however, prevent additional nominations to be made from the floor at the meeting of members.

Controlling cooling costs

Overcooling is expensive and wastes energy.
Don't use or buy more cooling equipment
capacity than you actually need.

Air-conditioning equipment

- Keep your cooling system well tuned with periodic maintenance by a professional serviceman. Ask the serviceman how the energy efficiency of the system may be increased.

- If you need central air conditioning, select a unit with the lowest suitable capacity and highest efficiency. A larger unit than you need not only costs more to buy and run but probably won't remove enough moisture from the air. A more efficient unit will cost less to operate.

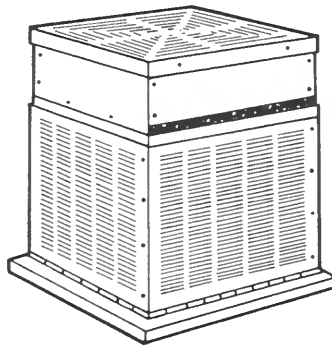
- Ask your dealer to help you determine how much cooling capacity you need for the space you have to cool and for the climate in which you live.

- Make sure the ducts in your air-conditioning system are properly sealed and insulated, especially those that pass through the attic or other uncooled spaces.

- Plant trees or shrubs to shade air-conditioning units. You can increase efficiency by up to 10 percent.

- If you don't need central air conditioning, consider using individual units in rooms that need cooling from time to time. Select the lowest capacity and highest efficiency for the rooms you need to cool. As a rule, these will cost less to buy than a central system.

- Install a whole-house ventilating fan in your attic or in an



upstairs window to cool the house when it's cool outside, even if you have central air conditioning.

- It will pay to use the fan rather than air conditioning when the outside temperature is below 78 degrees F and outside humidity is not uncomfortably high. When windows in the house are open, the fan pulls cool air through the house and exhausts warm air through the attic. Two smaller window fans also will help cool the house when the air cools down outdoors.

When you use air-conditioning

- Set your thermostat as high as possible. 78 degrees F is often recommended as a reasonably comfortable and energy-efficient indoor temperature.

- The higher the setting, the less difference there is between indoor and outdoor temperature, and less outdoor hot air will flow into the building.

- If the 78 degrees setting raises your home temperature 6 degrees (from 72 degrees F to 78

degrees F for example), you should save between 12 and 47 percent in cooling costs, depending on the climate where you live.

- Don't set your thermostat at a colder setting than normal when you turn on your air conditioner. It will NOT cool faster. It WILL cool to a lower temperature than you need and use more energy.

- Set the fan speed on high except in very humid weather. When it's humid, set the fan speed at low; you'll get less cooling, but more moisture will be removed from the air.

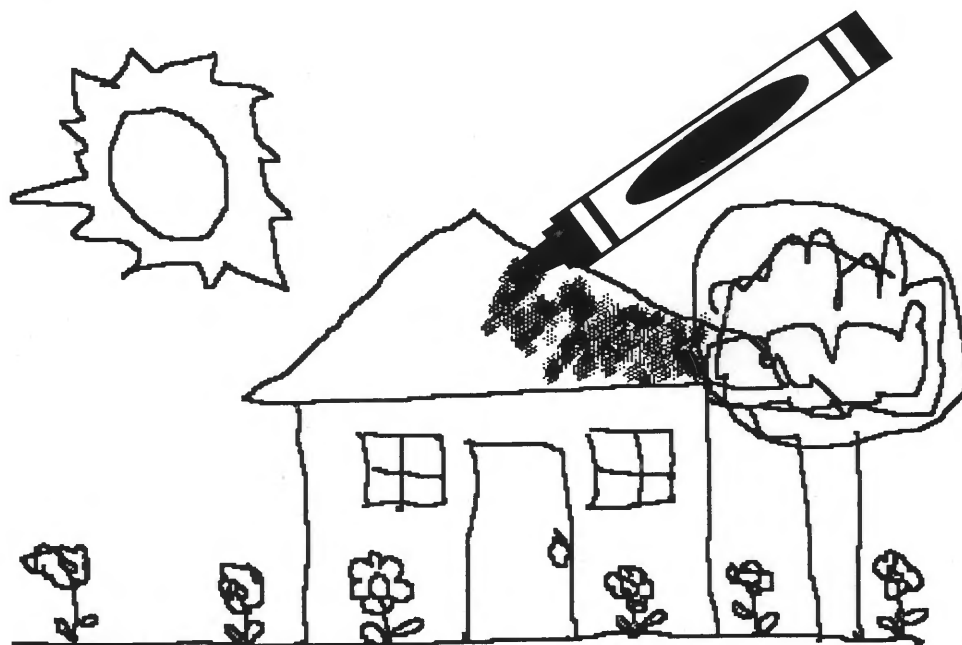
- Clean or replace air-conditioning filters at least once a month. When the filter is dirty, the fan has to run longer to remove the same amount of air, and this takes more electricity.

- Turn off your window air conditioners when you leave a room for several hours. You'll use less energy cooling the room down later than if you had left the unit running.

- Consider using a fan with your window air conditioner to spread the cooled air farther without greatly increasing your power use. But be sure the air conditioner is strong enough to help cool the additional space.

- Don't place lamps or TV sets near your air-conditioning thermostat. Heat from these appliances is sensed by the thermostat and could cause the air conditioner to run longer than necessary.

A different color



You may think of your electric cooperative in just one way . . . your power provider. If you haven't checked lately, you may find that it is *more than that now*. We can help you find a better electric rate for your life style, or teach electrical safety to your child. We may improve your heating and cooling system, if you ask. We may help you communicate better, and we work with groups to help bring in businesses and jobs.

Look into your power provider. It may be a co-op of a different color now.



Electric Cooperatives of Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455



Derry Development Complex

Derry & Son thriving after 42 years

In 1952 Bob Derry began his career working with his father, Oral Derry in the business of Derry & Son. Small jobs, such as sidewalks, patios, driveways and foundations, were constructed when concrete was mixed by hand. That's much different than now with the use of Ready Mix trucks.

Oral Derry preferred land and livestock, so the business was taken over by Bob a few years later.

In the early 60s, Bob purchased 170 acres of land now known as Rolling Meadows and Southern Hills Apartments subdivisions. There are approximately 100 residences in Rolling Meadows with 64 apartments and seven homes in Southern Hills.

Derry & Son crews did the excavating, street paving, water and sewer work in both additions. They built all the apartment buildings and homes in Southern Hills. Most of the foundations and a number of homes in Rolling Meadows were built

by Derry & Son.

Bob started his Ready Mix plant mainly for his own use. He later dissolved his construction business and continued the Ready Mix business which is on going today.

Roger Kelley, a 24-year employee, is foreman of the plant. Bob's son, Steve Derry, is maintenance supervisor for Southern Hills along with working at the plant. Carolyn Fouts, 25-year employee, is the secretary for Derry & Son and also manager of Southern Hills rental property.

The Derry & Son Ready Mix serves McDonough County proper as well as surrounding towns.

The Rolling Meadows and Southern Hills housing areas are very appealing to their residents because they are truly in "the meadows and hills" with beautiful foliage, rolling terrain and trees.

McDonough Power is indeed very pleased to serve power to these two housing developments.

How to cope with a summer outage

Summer storms, winter storms, or storms in general — they all have one thing in common, power outages. You don't like them and we certainly don't like them either.

Outages are unpredictable. They can plunge an area into total darkness, or only cause the lights to go dim and stay that way. This dimming effect is the worst type of outage. It indicates low-voltage power coming into your home. This low voltage is extremely hard on electric motors. When this condition occurs, disconnect or shut off any appliance or motor.

Unless a tornado is the cause, summer outages tend to be local and short-lived. Most important is to ensure that your electronic appliances will not be damaged by a voltage surge when power is restored. Be sure to unplug computers, VCRs, telephones, especially the cordless type and any answering machines.

You can make your next extended outage a little more bearable if you keep the following on hand and easily accessible:

- Something to provide illumination — candles, lanterns, flashlights

Are you a fan of fans?

You can enjoy energy savings when those hot, scorching days arrive by using fans along with your air conditioning.

- Portable fan — place it facing away from your window air conditioner to help spread the cool air. Put the fan on the floor for best results because cool air sinks.

- Window and exhaust fan — in open areas, they are very effective and can be used for exhausting moist air from bathrooms or kitchen.

- Ceiling fan — by moving air, the effect of evaporation makes you feel more comfortable at warmer temperatures.

- Whole house fan — they exhaust warm stale air either by placing one in your attic or in a central hallway.

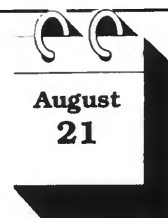
There are more ways to save on cooling costs. Just contact us for helpful tips on keeping your cool during the hot months.



- Food that can be grilled
- Battery-powered radio
- Wind-up alarm clock
- Plastic jugs for potable water

If a long-term outage occurs, frozen food can be prolonged with dry ice. Check the telephone directory for local suppliers.

By following these suggestions, the summer outages can be easier to cope with. Think ahead and plan for any emergency. Remember to stay calm. Your electricity will be restored as quickly as possible.



Attend your annual meeting

On the outside looking in....

Some electric utility customers are bound to feel that way about the company's operation. But that's not the "cooperative way" of doing business. An electric cooperative is something special. The owners are you, the people it serves. It's important that you participate in its operation.

That's why your attendance at the Annual Meeting on August 21 at Fellheimer Auditorium at Macomb High School is so important. It's a vital part of your role as a McDonough Power Cooperative member. **MARK AUGUST 21 ON YOUR CALENDAR.**

'Peak 90'

McDonough Power Cooperative suggests that, when the temperature is predicted to be 90 or above, its consumers use major appliances or equipment before 12 noon or after 8 p.m. This helps control our peak demand and allows us to pass that savings on to you.

Effective June 15 - September 15, 1995

DIRECTORS

Bill Pollock, President • Howard Butler, Vice President • Jerry Riggins, Secretary • Stan Prox, Treasurer
Harold Anderson • Wade R. Blansett • Thomas Curtis • Steve Lynn • Kenneth Moore • John D. McMillan, Attorney

All Co-op Electric Outages 837-1400

Repetitive strain injury: Easier to prevent than cure

That nagging twinge or pain you experience in your hands or shoulders may be arthritis, but it could also mean you have some bad habits that are going to result in a serious injury.

That's what happens with repetitive strain injury (RSI). "It's not just typists, it's artists, hairdressers, blacksmiths, and people in dozens of other professions," said Stephanie Barnes, founder of the Association for Repetitive Motion Syndromes based in Santa Rosa, Calif.

Some 70 million people, including school children, spend part of their day at a keyboard. With the promotion of the information superhighway, they could spend even more time hunched over keyboards — fingers flying — staring at glowing screens.

RSI has long been associated with blue-collar jobs that required excessive force, awkward posture and repetitive actions — like driving the same screw hour after hour in an assembly line or holding your arms over your head installing sheetrock. According to Dr. Emil Pascarelli, director of ambulatory care at St. Luke's/Roosevelt Hospital in New York City, doctors now know that RSI is not a single disease, but a cluster of syndromes. Among computer users, the problem often starts in the muscles or tendons in the sheaths surrounding the tendons. Keyboards tend to force the upper body into unnatural positions — hands bent, elbows bowed outward, wrists cocked — straining the tendons and muscles and reducing circulation.

These stresses can create tiny tears in the muscles and tendons, which become inflamed. Often these tissues are not given ample time to heal properly and scarring can occur. Blood vessels can become constricted in the arms and hands, which reduces blood flow. This allows toxins to settle in the tissue rather than being washed away. In the late stages of RSI, the tendons and muscles can deteriorate and nerves become so hypersensitized that the slightest strain — even opening a stubborn twist-off cap — may set off a fresh round of pain.

Tension and stress can also play a role in RSI. People working under pressure tighten up; muscles cramp, shoulders hunch, necks get knotted —

further straining tendons and muscles. RSI sufferers have to also deal with the skepticism and resentment of co-workers and employers resulting from their reduced productivity from repetitive strain injury.

RSI is relatively easy to prevent but hard to cure. Most people can avoid the ailment by taking a few precautions — doing warm-up exercises, maintaining good posture (but not sitting too rigidly), keeping their arms loose, holding their hands properly, stretching occasionally and taking frequent rest breaks.

However, those who develop full-blown cases of RSI will be susceptible to reinjury for the rest of their lives.

—Rural Electric News Service

Avoiding RSI

People who use their hands for a living should pay attention to pain, numbness and other unusual sensations. These symptoms could signal the onset of RSI. If these symptoms persist consult a doctor who specializes in such injuries. Here are some tips for preventing RSI or, if it's too late for that, for keeping the symptoms in check.

- Take frequent rest breaks and rotate from one task to another.
- Maintain good posture without sitting too rigidly. Your weight should be evenly distributed and your body relaxed.
- When typing keep hands relaxed and fingers gently curved.
- Keep wrists in a position that is not twisted or strained at the keyboard. This is also true when holding a steering wheel, a tennis racket or a pencil.
- Keep hands warm to promote circulation.
- Exercise to improve circulation and overall conditioning.
- Open heavy doors with your shoulder, not your hands.
- Give your hands a break: invest in electric can openers and electric staplers, food processors, book stands, etc.

—Rural Electric News Service

Glued to the tube?



You might be relaxing now, but before this summer is through, it will be **WISE TO WEATHERIZE**. Turn off the tube and get a tube of caulk. By simply sealing loose-fitting windows and other household gaps, you'll likely trim your energy bill. Did you know a space of 1/12th of an inch around an exterior door is like having a 4 x 5-inch hole in your wall?

For advice on weatherstripping, insulation, heating/cooling systems and other energy-saving steps, contact your electric cooperative. Why feel a breeze in the house when fixing it can be a breeze?



Electric Cooperatives of Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

The by-laws of the Cooperative state that the Cooperative is obligated to pay by credits to a capital account for each patron all such amounts in excess of operating costs and expenses.

Capital credits have been refunded to members through 1973. The patronage refund factor

for the year of 1994 is .0445951 percent. This percentage times the amount of revenue paid to the Cooperative for electricity during the year of 1994 is the assignable amount to each member's capital account. No actual refund for 1994 will be made at this time.

The board of directors approved a motion at the April 1995 meeting to refund capital credits for the years 1974 and 1975. All members paying bills for electricity during 1974 and 1975 will receive refund checks for the amounts assigned to their capital accounts for these years. The Cooperative plans to mail these refund checks in August 1995.

If you wish to know the amount assigned to your capital account, please contact the Cooperative office.

Nominating Committee report

Pursuant to the bylaws, the members of the nominating committee met at the Macomb Dining Company, Macomb, June 29, 1995, at 7 p.m. to nominate candidates for election as directors at the McDonough Power Cooperative's next annual meeting of members to be held at 7 p.m., Monday, August 21, 1995.

The following members were present:

Gene Frakes	Keith Waller
Myrlen Daniels	Richard Smith
Eugene Luster	Rob Keithley
Steven Pigg	Jeffrey Hatch
Stewart Mayhew	John Huston
Ted Munson	Steven Youngquist

The committee selected the following nomi-

nees to be candidates for directors to serve for a three year term and be elected at the annual meeting.

District 1	Michael D. Cox
District 3	William J. Pollock
District 7	Mark Anderson

Any 15 or more members acting together may make other nominations by petition. Additional nominations for directors may be made from the floor at the meeting.

Steven Pigg

Dated: June 29, 1995, Chairman

Save on your air conditioning bill this summer

The folks at McDonough Power Cooperative have some cool ideas to help you save energy and money during the hot months of summer. To make the most of your air conditioner, don't forget to:

- Use a dehumidifier to take moisture out of the air. You'll use less air conditioning.

- Cut back your use of hot water and heavy cooking on hot days. They add heat and humidity

to your home.

- Keep heat-producing items, like TVs and lamps, away from the thermostat.

- Tune up your air conditioner for maximum efficiency. Clean or replace filters once a month.

And there's more, the folks at McDonough Power Cooperative invite you to call them for more advice to save money and keep cool.

McDonough Power Cooperative's Annual Meeting
7 p.m. Monday, August 21, 1995
Fellheimer Auditorium, Macomb High School

(Please note the meeting begins 1/2 hour earlier than in past)

●Election of directors — report of officers and manager

- \$5 will be credited to September bill for registering
- \$25 Name-A-Minute Drawing

- Drawings for \$10 credit on September bill
- Drawing for an electric barbecue grill and other prizes

Fellheimer Auditorium, in Macomb High School, is located at 1525 South Johnson St., Macomb

Your official notice will list the names of the members nominated for your cooperative board of directors. These nominees were selected by the Nominating Committee, which met June 29, 1995. Additional nominations may be made by petition or from the floor at your annual meeting.

A name a minute will be drawn during the official meeting. For those who are present and

name is drawn, a \$25 credit toward your September energy bill will be given.

There will be two drawings, 10 names each time, or a total of 20 names drawn from those registered to receive \$10 credit on their September energy bill. Each member who registers will receive a \$5 credit on their September energy bill.

A drawing will also be held for an electric barbecue grill, other electrical appliances and tools.

You must be present to win for all prize drawings.



Wagon Wheel Opry



Bollin Sisters

Special entertainment by
The Wagon Wheel Opry and The Bollin Sisters, Keokuk, Iowa

Mark August 21, 1995, on your calendar.

DIRECTORS

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 Harold Anderson • Wade R. Blansett • Thomas Curtis • Steve Lynn • Kenneth Moore • John D. McMillan, Attorney

All Co-op Electric Outages 837-1400

On the road

Cars and light trucks burn about 6.5 million barrels of petroleum on U.S. roads every day. Much of that fuel has to be imported. Energy-wise driving and good car maintenance can save the average family about \$100 dollars a year in gasoline and diesel costs. They also help reduce auto emissions and the nation's reliance on undependable sources of foreign oil.

Maintaining your car

● Check tires regularly. Under-inflated tires not only can run hot, shortening their lives, they also use about 0.4 percent more gasoline for each pound of tire pressure under the recommended psi. Most modern tires are meant to be inflated to 30-36 psi without sacrificing ride comfort or impact resistance. Nearly 4 million gallons of gasoline could be saved each day if all tires were kept inflated to the manufacturer's recommended pressure.

● Buy the gasoline octane and oil grade recommended in your owner's manual. Octane is not a measure of the "power" of the fuel. It is a measure of how resistant a fuel is to premature ignition. Fuel with more octane or "resistance" than your car requires is not more efficient, only more expensive.

● If you change the oil yourself, take the used oil to your service station for recycling or to an oil recycling center.

● Have your car tuned as needed. Regular tune-ups extend engine life and improve performance, paying for themselves in gasoline savings and car reliability. A poorly tuned car uses 3-9 percent more gasoline than a well-tuned one.

● Replace the engine filters as

recommended in your new car manual. Clogged filters waste gasoline.

● Remove unnecessary weight from the car. The lighter the car, the less gas it uses. An extra 100 pounds decreases fuel economy about 1 percent for average-sized cars, 1¼ percent for small cars.

● Don't let the motor idle for more than a minute; instead turn off the engine. It takes less gasoline to restart the car than it takes to let it idle. Generally, there is no need to press the accelerator down to restart the engine.

● Don't fill the gas tank to the brim. Stop when the pump automatically shuts off. Spilled gasoline only wastes your money, adds to air pollution, and may damage your car's paint.

● Record your gasoline use, and try to get more miles per gallon out of your car.

Vacation tips

● Consider vacationing near your home this year and discovering nearby attractions. A campground or hotel close to where you live can often provide as complete and happy a change from routine as one that is hundreds of miles away. Children and pets will enjoy the shorter ride.

● Plan your route to avoid traffic congestion during rush hours. Check local traffic broadcasts for alternative to tie-ups that can stretch out your driving time and waste your gasoline with frequent idling.

● Rediscover the pleasures of walking, hiking, and bicycling. They're the most energy-conserving means of transportation and the healthiest for most people.

● Observe the posted speed limits. The average car uses 17 percent less gasoline at 55 mph than at 65 mph. If highway speed limits were observed across the nation, approximately 4 million gallons of gasoline would be saved each day.

● Minimize daily cold starts, and limit warmups to 30 seconds.

● Avoid stop-and-go traffic. Check the traffic well ahead of you to avoid wasteful accelerations and decelerations. Take your foot off the accelerator as soon as you see a red light or slowed traffic ahead.


● Accelerate smoothly and moderately. Reach your desired speed, and then keep just enough pressure on the accelerator to maintain steady speed. On the highway, cruise control can help you do this.


(Source: U.S. DOE)



Tree-mendous advice

Trees mix well with kids and cookouts and summer afternoons.

They DON'T mix with power lines.  Trees can interfere with electric service. More dangerously, they pose a threat when youngsters climb in branches near power lines.

Your electric cooperative routinely inspects its miles of line each year to make sure they are clear of brush and branches.  Trimming is necessary, but our crews try to keep the trees attractive as they work.

You can help, too. The best time to avoid the problem is when you plant. Make sure your growing tree will stay clear of power lines. Proper pruning of young trees controls their branch growth.

Plant wisely.  You'll enjoy the pleasure of trees and the reliable convenience of electricity.



Electric Cooperatives of Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

As your locally owned and managed cooperative electric utility, we work hard to meet your needs as consumer-owners and the needs of our community too!

Our business is to provide electric service as reliably and economically as possible. But the bottom line — the foundation of our day-to-day work — is the satisfaction from co-op member-owners as well as our colleagues and business associates.

That's the cooperative way of conducting business. Quality electric service, enhancing the quality of life, and meeting our members' and neighbors' needs — it's a formula we're proud of and that works for the nation's 1,000 electric cooperatives.

So please share your ideas and thoughts with us because if you're not satisfied, neither are we!

Directors retiring from board

Harold "Andy" Anderson and Wade R. "Bob" Blansett both have chosen not to run for re-election in 1995.

Andy was first elected to the cooperative's board of directors in 1979. He served as treasurer and as McDonough Power's representative on the board of the Association of Illinois Electric Cooperatives. He was chairman of the committee responsible for the formation of IEC Memorial Scholarship Fund. Andy and his wife, Twila, live on a farm along Route 67 just north of the McDonough and Warren County line. They have two children and three grandchildren.

Bob joined the cooperative board in 1980. He



Anderson

served as president for two years. Bob, a retired plumber and businessman, along with his wife, Donna, live at 10 Lake Michael Drive (in Hidden Hills) in Macomb. Bob was the developer of Hidden Hills subdivision. Bob and Donna are active in the First Christian Church of Macomb and like to travel and visit their six children and their four grandchildren.



Blansett

We express our appreciation to Andy and Bob for their years of distinguished and dedicated service to the rural electrification program as directors of McDonough Power Cooperative.

Here comes Labor Day!!

Labor Day means summer's over and it's time for one last fling before getting the kids back to school.

As your locally owned and operated electric cooperative, we extend our holiday best wishes to all the employees, directors and trustees and consumer-owners from coast to coast.

One thousand electric co-ops make up the co-op network in 46 states and all are dedicated to providing service as efficiently and economically as possible the co-op way.

Working hard, meeting challenges and helping

our communities grow and prosper all across America are the key ingredients that make electric co-ops succeed in whatever they do.

Office closing

McDonough Power Cooperative will be closed September 4 in observance of Labor Day. We will reopen Tuesday, September 5, at 8 a.m.

What stays on when you go out

There must be something wrong with our meter. We were on vacation most of the month. We couldn't have used this much."

We hear variations of this comment many times every month of the year. Is there something mysterious going on here?

Not really. The homes of today are increasingly equipped with appliances that consume energy without any active intervention by the occupants. Until we go on vacation, these appliances are considered the benefits of our economy. When we get back from vacation we find they have turned into liabilities simply because they have continued operating automatically while we were gone.

Old refrigerators and freezers are the main culprits in this mystery. And, old doesn't mean ancient. The older any refrigeration unit is the less efficient it is and can account for as much as

25 percent of the monthly electric bill. Add an old freezer or two and the percentage is even higher. A hotter house (assuming the homeowner remembered to shut-off the air conditioning) will cause these appliances to run longer to do their job.

Add to the list dehumidifiers, instant-on TVs, cable TV boxes, clocks, waterbed heaters, water heaters, anything battery powered with charger, sump pump, water pump, swimming pool pump — they all add to the usage and the bill.

Plus, when we return from vacation, we turn everything back on to bring the house into equilibrium and then begin washing, drying, ironing, bathing, cooling, etc., etc. So the electricity we saved by being away is now used after we get back — and maybe more.

So, enjoy your vacation. But remember, we use electricity whether anyone is at home or not.

Youth to Washington winners

In the spring, Christina Harzman of Macomb High School and Jared Dunseth of Northwestern High School were chosen as representatives of McDonough Power Cooperative to participate in the "Youth to Washington" Tour sponsored by the cooperative.

They teamed up with 70 other high school students throughout the state June 16-23 for an eight-day trip. Leaving by bus from Springfield, they toured many historic sites throughout Washington, D.C., including the U.S. Capitol, and met with their respective legislators.

Finalists were chosen based on their written personal profile and a personal interview.

Christina is a member of the Crystal Clovers 4-H Club, McDonough County 4-H Federation, St. Paul Church Group, YMCA swim team, and a volunteer at McDonough District Hospital. She is very active at Macomb High School and the community.

She plans to pursue a bachelor of science degree and follow with a career in environmental science or education. Christina is the daughter of Len and Barbara Harzman of Macomb.

Jared is also a member of 4-H, participated in Habitat for Humanity and the American Cancer drive.

While at Northwestern High he has been a



Christina Harzman, Jared Dunseth and manager Dick Dunsworth

member of the JETS team, FFA, science club, SADD and the track team.

Jared hopes to study at the University of Illinois College of Agriculture. He is the son of Max and Sue Dunseth of Sciota.

McDonough Power was very pleased to have these young adults represent their cooperative in Washington, D.C.

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All Co-op Electric Outages 837-1400



Scientists' lightning bolt zaps like a sledgehammer

What is 18,000 degrees, can turn toxic and municipal waste into harmless blocks of glass and is inexpensive by today's disposal techniques? A man-made lightning bolt.

Researchers at the Massachusetts Institute of Technology (MIT) say the process could transform much of the nation's garbage and poisonous wastes into paving material.

Artificial lightning bolts arcing across a nitrogen-filled furnace chamber create a superheated plasma that "will melt just about anything" and neutralize molecules of highly toxic chemicals, said Daniel R. Cohn, a researcher at the plasma physics laboratory at MIT.

Cohn told a national meeting of the American Physical Society that the electrical charge in the powerful heat of the furnace "is like a sledgehammer that can take virtually any material and turn it into a neutral substance. It is like a continuous bolt of lightning."

Toxic chemicals, such as solvents, he said, "are blown apart by the high temperatures

and the atoms recombine into simpler and less toxic and more manageable molecules".

Gas waste from the process is about a tenth of that from conventional incinerators, he said.

Since the process occurs in a nitrogen-filled furnace and in the absence of oxygen, said Cohn, the plasma furnace does not create new toxic chemicals, such as dioxins, as do some current techniques of waste processing.

Also, he said, the plasma machine does not create toxic ash, a problem with most conventional incinerators. Instead, the MIT process reduces the wastes into a lava-like glass that is benign and chemically neutral.

"It could be used to pave roads or for railroad beds," Cohn said.

Since the MIT process operates at such high temperatures, Cohn said, it could melt virtually anything, even soil. He said the technique could be used to dispose of municipal garbage, which often contains hazardous materials, and to clean up toxic chemical dumps.

He said the plasma furnace will process hazardous wastes at the cost of \$200 to \$300 a ton. The cost of current techniques can be as much as \$800 a ton and those processes are less efficient, said Cohn.

MIT researchers reported at the physicists meeting that they have built an experimental model of the plasma waste machine and have operated it continuously for hours. The group is preparing further tests.

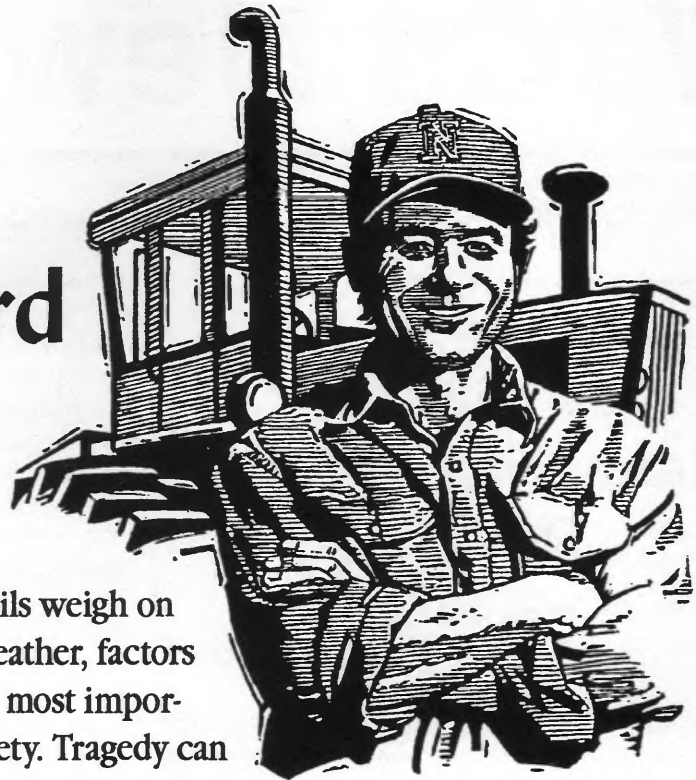
Cohn said the plasma machine could be used to dispose of nuclear wastes, but the product would be radioactive glass blocks that, in turn, would have to be safely stored. The advantage, he said, is the glass blocks would be stable and would not leach radioactive molecules.

"This would be stable for a very, very long time," he said.

The major cost of operating the plasma furnace, said Cohn, is electrical power. The machine would draw up to one megawatt — one million watts — of power per hour.

—Rural Electric News Service

Don't let your guard down



This time of year, details weigh on your mind . . . money, weather, factors vital to your livelihood. The most important concern, though, is safety. Tragedy can occur in that flash of an instant when you let your guard down – taking a short cut, overlooking basic safety rules. To ensure future harvests, always work the safe way.

- ☛ Watch out for overhead power lines.
- ☛ Wear appropriate protective equipment.
- ☛ Make sure helpers are familiar with equipment they are using.
- ☛ Shut off power before fixing or unclogging machines.
- ☛ Keep extended machinery away from power pole guy wires.
- ☛ Keep shields in place.



Electric Cooperatives of Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Across the Manager's Desk



By Dickson L. Dunsworth

McDonough Power Cooperative is one of 47,000 cooperatives throughout the United States that will participate in the annual Cooperative Month observance during October. This year's theme is "Cooperatives — Expanding People's Horizons."

About 120 million people in every state of the union receive goods and services from cooperatives, and 25 million of that number are consumer-owners of 1,000 electric cooperatives. Cooperatives also exist for financial service, housing, insurance, farm

marketing and farm supply, telephone service, health and day care, and news services.

McDonough Power Cooperative was incorporated in 1938 and provides electric service to 4,700 members in five counties.

An electric cooperative is a unique kind of electric utility because it is locally owned and controlled. Each person has a voice and vote in the co-op's activities and can be elected to the co-op board. The cooperative way of conducting business is a true example of grassroots involvement and democracy in action. Additionally, many electric systems have long track records of helping start and expand commercial, industrial and community facility projects, producing hundreds of thousands of new jobs.

Obviously, whatever benefits the co-op and its consumer-owners benefits everyone in the community too. And the same holds true for any other kind of co-op. The theme, "Cooperatives — Expanding People's Horizons," is one of the best explanations anyone can give in describing co-ops.

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Contact McDonough Power Cooperative for more information.

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Equipment and programming sold separately. ©NRTC 1995



Office closings

McDonough Power Cooperative will be closed November 10 in observance of Veteran's Day. We will reopen Monday, November 13, at 8 a.m.

McDonough Power Cooperative will be closed November 23 and 24 in observance of Thanksgiving. We will reopen Monday, November 27, at 8 a.m.



Mark Anderson (left) of Roseville and Michael D. Cox (second from left) of Macomb are the newest members of the board of McDonough Power Cooperative. They were elected during the cooperative's annual meeting August 21. With Anderson and Cox are William J. Pollock (second from right) of Colchester, who was reelected to the board, and Dickson L. Dunsworth, manager.

Bill Pollock reelected; Mike Cox, Mark Anderson are new directors

Two directors of McDonough Power Cooperative closed out long-time tenures on the cooperative's board during the member-owned utility's 58th annual meeting Monday, August 21, in Macomb. Harold L. (Andy) Anderson of Roseville and Wade R. (Bob) Blansett of Macomb did not seek reelection. Anderson was elected to the board in 1979. He served the cooperative as treasurer and as its representative on the board of the Association of Illinois Electric Cooperatives. Blansett was elected to board in 1980. He was president of the cooperative for two years.

Two members of the cooperative were elected to replace the retiring directors: Michael D. Cox of Macomb and Mark Anderson of Roseville. A third member, William J. Pollock of Colchester, was reelected to the board. All three were selected by the cooperative's nominating committee.

Cooperative officials reported that McDonough Power had a good year in 1994 despite increased expenses. President Pollock said, "Wholesale power continues to claim an increasing share of our operating revenue," as he cited an average purchased power cost of 7.29 cents per kilowatt-hour (kwh), with average revenue per kwh of 10.6 cents.

"McDonough Power, along with Soyland Power Cooperative, our power supplier, is striving to reduce our wholesale power costs. We, along with Soyland, have been looking at many options. Your cooperative operates very lean, especially in the members-per-employee ratio. Every effort is made to control costs," Pollock added.

He said the current year has not been an easy year so far in which to control costs, however. "The May storms and the devastating tornado that hit on Mother's Day cost the cooperative approximately

\$100,000," Pollock added.

He had especially good news for those members who received power from the cooperative in 1974 and 1975. "Everyone who paid a power bill in 1974 and 1975 should have received a refund check in the mail in the last week or so. For the year 1974, we refunded \$60,279.50, and for 1975 it was \$96,761.02. We issued 5,109 checks. With an investor-owned utility, only the stockholders would have benefitted," Pollock said.

Manager Dickson L. Dunsworth said McDonough Power "continues to be committed to you, the member, to deliver electricity as efficiently and effectively as possible. Your cooperative strives to be more than a power supplier."

Dunsworth cited examples of electric cooperatives meeting increased needs of rural residents. "Many of the electric cooperatives have taken on new tasks that extend their purpose beyond delivering only electricity. Rural water and sewage treatment, satellite TV, other types of communications, and rural economic development are some of these new tasks. The basic mission is and has always been to improve the lives of our members. This cooperative, your cooperative, is interested in helping any way to make this possible. We're not a far-away utility company. We are a part of the community. We offer our assistance in investigating rural water and are open to other suggestions for other projects or improvements," he added.

Treasurer Stan Prox of Macomb reported that total revenue for 1994 was \$6,817,026, up about \$217,000 from 1993. Wholesale power costs in 1994 were \$5,193,048, up more than \$248,000 from 1993. Net margins for 1994 were \$296,220, up more than \$20,000 from 1993.

DIRECTORS

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Mark Anderson • Michael Cox • Thomas Curtis • Steve Lynn • Kenneth Moore • John D. McMillan, Attorney

All Co-op Electric Outages 837-1400

Heating efficiently

Heating and cooling our homes account for about half of our residential energy costs. Don't waste any of the precious heated air during the fall and winter.

With heating equipment:

- Keep your heating equipment well tuned with periodic maintenance by a professional serviceman. Ask the serviceman how the energy efficiency of the heating system can be increased.

- If you plan to buy a new furnace, select an energy-efficient unit. Your contractor has energy factsheets for each model; ask for them and compare energy usage.

- Consider the advantages of a clock thermostat for your heating system. The clock thermostat will turn the heat down for you automatically when you depart or go to bed and turn it up again when you return or awaken. While you can easily turn your thermostat back at night and up again in the morning yourself, the convenience of a clock thermostat may be worth the \$40 to \$90 cost to you.

- Insulate accessible heating ducts in unheated areas.

- Keep your fireplace damper closed unless you have a fire going. An open damper in a 48-inch square fireplace can let up to 8 percent of your heat out the chimney.

When you use your fireplace:

- Improve your fireplace for supplemental heating. If you are using your conventional fireplace while your central heating system is on, consider these measures to lessen the loss of heated air from the house.

- The warmth from a fire on the hearth generally doesn't radiate through the house; the heat gain is confined to the room with the fireplace. A considerable amount of heated air from other parts of the house can flow into the fireplace, go wastefully up the chimney, and be replaced by cold outside air. The thermostat

will sense the lowering of temperature and respond by turning on the furnace to make up the heat lost.

- Lower the thermostat setting to between 50 degrees F and 55 degree F. Some warmed air will still be lost, but the furnace won't have to use as much fuel to heat the rest of the house to these temperatures as it would to raise the heat to 65 degrees F. (Note: See Caution. Occupant comfort may require a higher setting.)

- Close all doors and warm air ducts entering the room with the fireplace, and open a window near the fireplace about one-half to one inch. Air needed by the fire will be provided through the open window, and the amount of heated air drawn from the rest of the house will be reduced. If the fireplace has an outside supply of air, opening a window is not needed.

- If you have a simple open masonry fireplace, consider installing a glass screen, a convective grate, a combination convective grate with glass screen, a radiant grate, or a fireplace insert. Some of these devices will cut down on the loss of warm air through the fireplace chimney. These accessories may improve heat recovery from the fire.

When the heat is on:

- Set your thermostat to about 65 degrees F during the day and 60 degrees F at night. You can save on your fuel costs for every degree you reduce the average temperature in your home. **Caution:** Some older people may require higher indoor temperatures — above 65 degrees F at all times — to avoid accidental hypothermia, a possibly fatal drop in body tempera-

ture. People with circulatory problems or those taking certain types of drugs (e.g., phenothiazines, commonly used to treat anxiety and nausea) may also be vulnerable. In such instances, follow a physician's counsel on both winter and summer thermostat settings in your home.

- Keep your windows near your thermostat tightly closed. Unnecessary drafts will keep your furnace working after the rest of the room has reached a comfortable temperature.

- Clean or replace the filter in your forced-air heating system each month.

- Check the duct work for air leaks about once a year if you have a forced-air heating system. To do this, feel around the duct joints for escaping air when the fan is on. Relatively small leaks can be repaired simply by covering holes or cracks with duct tape. More stubborn problems may require caulking as well as taping.

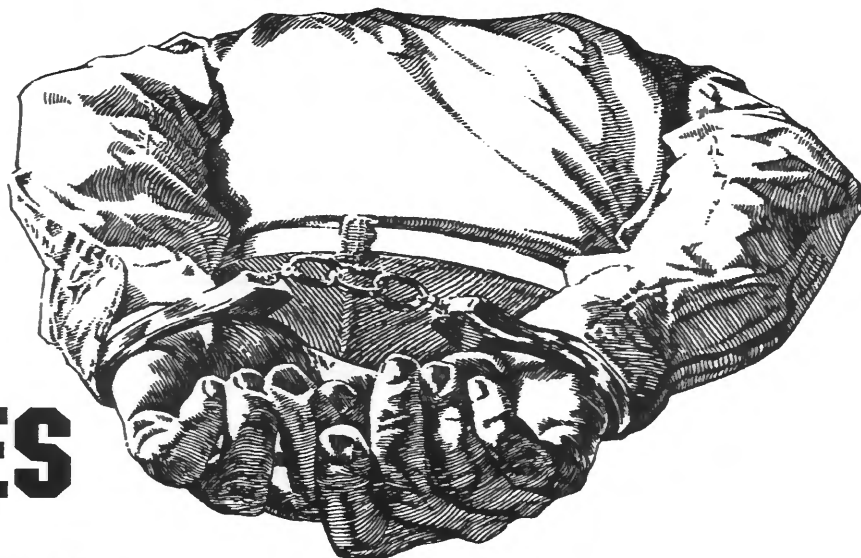
- If you have oil heat, have your furnace serviced at least once each year and make sure the firing rate is correct. Some furnaces maybe over-fired.

- Don't let cold air seep into your home through the attic access door. Check the door to make sure it is well insulated and weatherstripped, otherwise you'll be wasting fuel to heat that cool air.

- Dust or vacuum radiator surfaces frequently. Dust and grime impede the flow of heat. And if the radiators need painting, use flat paint, preferably black. It radiates heat better than glossy.

- Keep draperies and shades open in sunny windows; close them at night.

IT TAKES A THIEF...



to tamper with meters!

Tampering with an electric meter is illegal. And, it can be quite dangerous because of the possible exposure to high voltage.

When a person steals electricity, the thief is stealing from neighbors and fellow cooperative members who ultimately pay for the stolen power. Theft of electricity is also a violation of Illinois state law...with all the penalties that go with conviction.

Seals on meters are like locks on doors, discouraging unauthorized entry. If your meter needs attention, please contact your cooperative's office.



Electric Cooperatives of Illinois

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

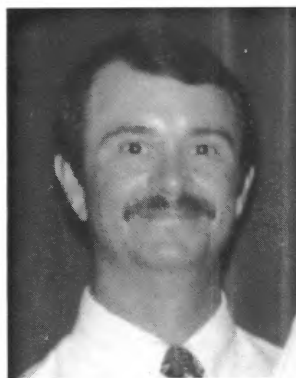
Meet your new directors

McDonough Power Cooperative welcomed two new directors to its board during the annual meeting in August. Mark Anderson of Roseville and Mike Cox of Macomb were elected to replace two retiring directors.

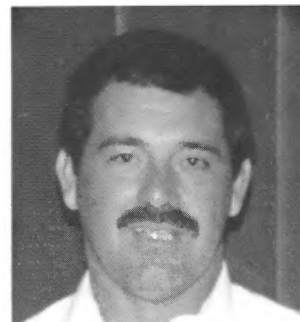
Anderson, a native of the Roseville area, grows corn, soybeans and wheat and raises hogs in McDonough and southern Warren counties. He and his wife, Gina, are the parents of one son, Collin, five months. She is coordinator of public relations for Burlington Medical Center.

The new director has been active in Scouting for 20 years, is a youth leader at Wesley United Methodist Church, volunteers for the McDonough County Habitat for Humanity, and is a Swan Creek volunteer fireman and first responder.

A native of Georgia, Cox has lived most of his life in the Macomb area. He is an electrician for Cox Construction of Macomb. He and his wife, Vicky, are the parents of three children: Chad, 24; Christina, 21; and Caitlin, 5. Vicky is employed by



Anderson



Cox

Citizen's National Bank.

Cox says working, raising Simmental cattle and hunting are his hobbies. He serves as a trustee of Calvary Baptist Church and is on the church school board.

Prevent workplace electrical fires

How fires happen: Most electrical fires can be traced to overheated circuits and overloaded equipment. When abused, insulation may melt or burn, exposing live wires. Electrical fires can also occur when equipment is driven beyond capacity, or accumulated oil and dirt overheat a motor, or sparks ignite scraps, dirt, dust or flammable liquids.

Your prevention plan:

- Use and maintain wiring, tools and equipment correctly. Keep everything free of oil and dust.
- Uncoil an extension cord fully before use. Find the amperage marked on it. Is it adequate?
- Don't use equipment that gives off mild shocks, unusual heat, or odd smells. If in doubt, have it checked and repaired or replaced.
- Sweep up scraps and sawdust, and store flammable liquids in approved containers.
- Don't use electrical equipment when flam-

mable gases, vapors, liquids, dusts, or fibers are present.

Be prepared: A fire safety checklist

Visualize your plan of response in a fire, so you can move quickly if one happens. Take into account:

- The nearest multi-purpose fire extinguisher and how to use it.
- The nearest emergency exit or fire escape.
- Your company's escape plan.
- Company procedures for notifying fire fighters and other emergency personnel.

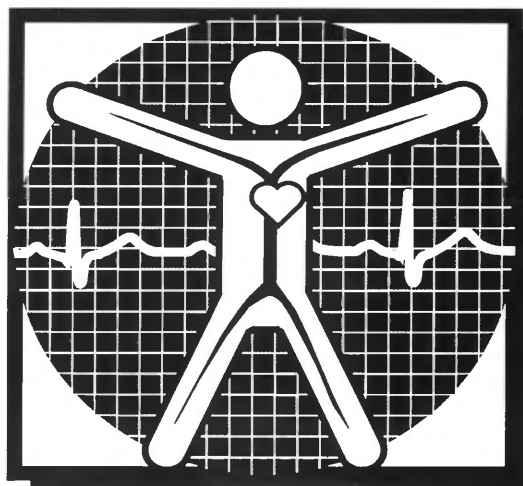
(Try to extinguish a fire yourself only if you are trained and it's small or non-threatening. When in doubt, get out and take others with you.)

Keep circuits and equipment from overheating and have a plan in case fire breaks out.

If you depend on life support equipment, we need to know

While McDonough Power Cooperative strives to maintain the best possible service with a minimum of outage time, occasional outages, either planned or uncontrolled, do occur.

Your cooperative needs to know the names and location of cooperative members who depend on life-support equipment, and it is important that this information be current and accurate. We will make every effort to give priority to restore service to members on life-support systems. If you or a member of your family



depend on life-support equipment, please fill out the form below and mail to us as quickly as possible.

Name _____

Phone No. _____

Address _____

McDonough Power Service No. _____

Types of support equipment _____ Days and time of use _____

Do you have an emergency stand-by generator to operate this equipment? Yes No

Mail this form to: McDonough Power Cooperative, 1210 W. Jackson, P.O. Box 352, Macomb, IL 61455.

Honest folks don't mess with meters!

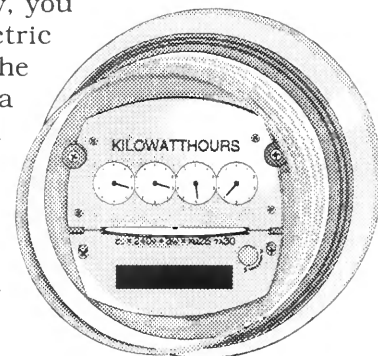
Unfortunately, however, everyone is not honest. Meter tampering is illegal. And, it can be quite dangerous because of the risk of exposure to high voltage.

When a person "steals" electricity, the thief is stealing from fellow utility consumers, neighbors and other customers who ultimately pay for the "stolen" electricity.

Seals on meters serve the same purpose as locks on doors — they prevent unauthorized entry. Even though meter seals and connections are

checked periodically, you can help your electric utility by spreading the word that breaking a meter seal is illegal and dangerous.

Please contact us for more advice on meter tampering. We appreciate your concern.



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All Co-op Electric Outages 837-1400

Protect your home from outside heat and cold

Millions of homes in the United States are not adequately protected from outside weather, according to U.S. Department of Energy estimates.

Here are some DOE tips to make sure that your home is comfortable during winter and summer with the most efficient use of energy.

Draft-proof windows, doors, and other air leaks

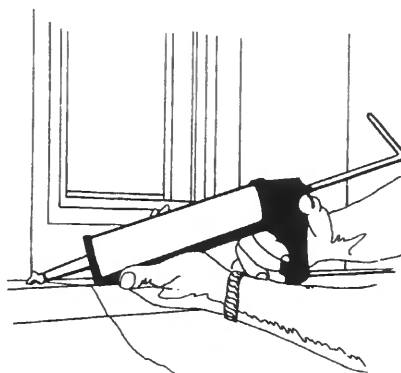
●Test your windows and doors for air-tightness. A cold windy day is a good time to check for leaks. You will be able to find many leaks by feeling with your hand around windows and doors, or you can make a simple "draft detector" by clipping a piece of tissue paper or light plastic to a coat hanger. Hold the coat hanger in front of a suspected crack; any movement of the paper will indicate air leakage, and you should caulk and/or weatherstrip the opening.

●Caulk and weatherstrip doors and windows that leak air. It's easy to do yourself. Caulking and weatherstripping materials cost between \$40 and \$50 for the average house (12 windows, 2 doors). Savings in annual energy costs could be up to 10 percent.

●Look for other air leaks through openings where plumbing or electrical wiring goes through walls, floors, and ceilings. Check for drafts from electrical outlets; around ceiling fixtures, and at openings to the attic. Seal cracks or holes; close fireplace dampers.

●If every gas-heated home were properly caulked and weatherstripped, enough natural gas would be saved each year to heat about 4 million homes.

●Consider installing storm windows to stop air leaks, stop drafts due to cold windows, re-



duce water condensation and frost formation, and save energy.

Alternatives range from a heavy-duty, clear plastic sheet on a frame (about \$10-\$15 each), to clear plastic film that can be taped tightly inside the window frames (a total of about \$10 for the average home).

Savings in reduced space heating costs for any of these types of protection can amount to as much as 15 percent a year. Adding storm doors in very cold or very hot climates could increase these savings.

Insulate

No matter how you heat or cool your home, you can reduce the load on the heating and cooling equipment by as much as 20 to 30 percent by investing a few hundred dollars in insulation. The benefits of insulation — lower utility costs — continue for years.

Find out if your home needs insulation. Your needs will depend on the climate in which you live and the amount of insulation, if any, you already have. For guidance, consult with a reputable insulation dealer in your community, your local building inspector, county agent or your electric cooperative.

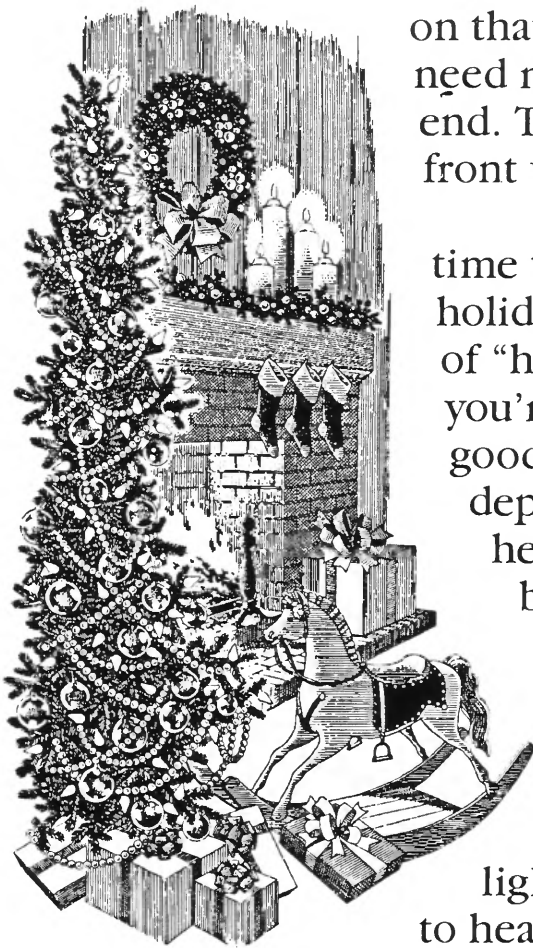
Find out about R-values before you buy your insulation materials. Then buy the thickness of insulation that will give you the R-value you should have.

R-values or numbers indicate the resistance of an insulation material to winter heat loss or summer heat gain. The higher the R-number, the more effective the insulating capability. The numbers should appear on packages of all insulation materials: mineral, glass fiber, or rock wool batts or blankets; foam or loose fill materials that are poured or blown into insulation spaces; or rigid board insulation.

If the insulation you buy doesn't have the R-value written on the package, ask the salesperson to write the R-value on your receipt for future reference.

Sources for R-value information include: Department of Energy; National Institute of Standards and Technology; U.S. Department of Commerce; American Society of Heating, Refrigeration and Air Conditioning Engineers; and insulation manufacturers.

Your partner... *when the Christmas lights are strung.*



“Too many on that side of the tree. You need more red ones at this end. The strand around the front window isn’t blinking.”

When it’s time to decorate for the holidays, there is no shortage of “helpers” who make sure you’re doing it right. Thank goodness you have a dependable partner who helps make the season bright. For more than 100 years, electricity has added so much to the atmosphere of the holiday season — colorful twinkling lights, the music we love to hear again, the warmth of a cozy living room.

*May the season bestow its
peace upon you.*



Electric Cooperatives of Illinois

Electricity... a source of comfort.

Watts New

McDonough Power Cooperative

Macomb, Illinois 61455

Holiday Greetings



Directors:

Bill Pollock, President
Howard Butler, Vice President
Jerry Riggins, Secretary
Stan Prox, Treasurer
Mark Anderson

Mike Cox
Thomas Curtis
Steve Lynn
Kenny Moore

Employees:

Dick Dunsworth, Manager
Doug Bear
Dawn Beck
Gary Budreau
Bill Downey
Frank Fay
Jill Guarin
Royce Headley
Babs Lawyer

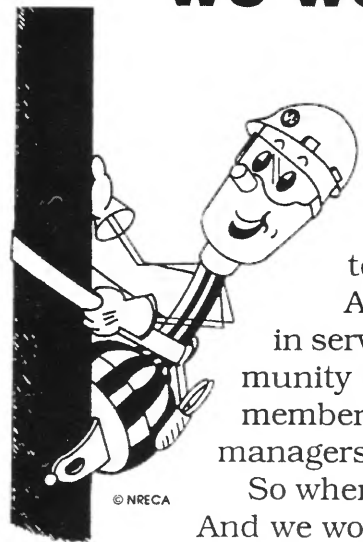
Mike Lucas
Pete Lucas
Elmer Nelson
Tim Norton
Ron Paulsen
Cynthia Rigg
Roger Robeson
Scott Traser
Jim Wilson

**Nothing beats
DIRECTV for
family
entertainment**

Contact Dawn or Pete
at
McDonough Power Cooperative
for more details.
309-833-2101



When something comes up, we won't let you down.



Wind, rain, summer or winter storms are just a few things that can cause damage and interrupt your electric service.

Our professional and experienced crews are trained to put things back in order as fast as possible.

As your locally owned electric cooperative, we take pride in serving our members. Our commitment to you and our community is to never let you down, no matter what. In fact, every member of the co-op staff — from linemen to receptionists and managers, full-time or part-time — is there to assist you.

So when trouble pops up, so do we. It's all part of being a co-op. And we wouldn't have it any other way!

Christmas trees can be reused

If you buy a cut tree, or cut your own, the dried-up Christmas tree you will be throwing out after the holidays will still be useful.

Winter birds will appreciate the cover of the tree in the cold of winter, especially if you decorate the tree with bird food ornaments. Pine cones smeared in peanut butter and then rolled in bird seed are a big hit with the feathered friends. Leftover strings of popcorn also will attract winter birds.



But don't just throw the tree in the yard — secure the trunk to the ground to prevent it from rolling away in the harsh winter winds. You may need to support the tree with wire or stakes.

Your dried-up Christmas tree can also be used for mulch. Chop the tree and use the broken limbs to cover perennial flower beds. Be sure to remove the branches in the spring as the plants begin to grow again.

Use your good judgment when preparing for the holidays. Be wise — and safe — this holiday season.

Holiday office closings

McDonough Power Cooperative will be closed December 25, in observance of Christmas Day. We will reopen Tuesday, December 26, at 8 a.m.

McDonough Power Cooperative will be closed January 1, in observance of New Year's Day. We will reopen Tuesday, January 2, at 8 a.m.

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Saving around the home

Refrigerator/freezer

- Don't keep your refrigerator or freezer too cold. Recommended temperatures: 38 degrees F to 40 degrees F for fresh food compartment of the refrigerator; 5 degrees F for the freezer section. (If you have a separate freezer for long-term storage, it should be kept at 0 degrees F, however.)

- Regularly defrost manual-defrost refrigerators and freezers. Frost buildup increases the operating time of the compressor and wastes energy and money. Never allow frost to build up more than one-quarter of an inch.

- Make sure your refrigerator door seals are airtight. Test them by closing the door over a piece of paper or a dollar bill so it is half in and half out of the refrigerator. If you can pull the paper or bill out easily, the latch may need adjustment or the seal may need replacing.

Laundry

You can save considerable amounts of energy in the laundry through conservation of hot water and by using your automatic washers and dryers less often and more efficiently.

- Wash most clothes in warm or cold water, rinse in cold. You'll save energy and money. Use hot water only if absolutely necessary.

Washing machines

- Fill washers (unless they have small-load attachments or variable water levels), but do not overload them.

- Don't use too much detergent. Follow the instructions on



the box. Oversudsing makes your machine work harder and use more energy.

- Presoak or use a soak cycle when washing heavily soiled garments. You'll avoid two washings and save energy.

Clothes dryers

- Fill clothes dryers but do not overload them.

- Keep the lint screen in the dryer clean. Remove lint after each load. Lint impedes the flow of air in the dryer, which makes your clothes take longer to dry and requires the machine to use more energy.

- Keep the outside exhaust of your clothes dryer clean. Check it regularly. A clogged exhaust lengthens the drying time and increases the amount of energy used.

- Dry your clothes in consecutive loads. Stop-and-start drying uses more energy because a lot goes into warming the dryer up to the desired temperature each time you begin.

Separate drying loads into heavy and lightweight items. Since the lighter ones take less

drying time, the dryer doesn't have to be on as long for these loads. Leave small, lightweight items until last.

You may be able to dry them, after you turn off the power, with heat retained by the machine from earlier loads.

- Save energy by using the old-fashioned clothesline. As a bonus, clothes dried outdoors often seem fresher and cleaner than those taken from a mechanical dryer.

Ironing

- Save energy needed for ironing by hanging clothes in the bathroom while you're bathing or showering. The steam often removes the wrinkles for you.

Bathroom

- Take showers rather than baths, but limit your showering time and check the water flow if you want to save energy. It takes about 30 gallons of water to fill the average tub. A shower with a flow of 3 gallons of water a minute uses only 15 gallons in 5 minutes. Assuming you use half hot and half cold water for bathing, you would save about 5 gallons of hot water every time you substitute a shower for a bath. Thus, if your substituted just one shower for one bath per day, you would save almost 2,000 gallons of hot water in a year.

- Consider installing a flow controller in the pipe at the showerhead. These inexpensive, easy-to-install devices restrict the flow of water to an adequate 3 to 4 gallons per minute. This can save a considerable amount of hot water and the energy used to produce it over a year's time.