

One word makes the difference.

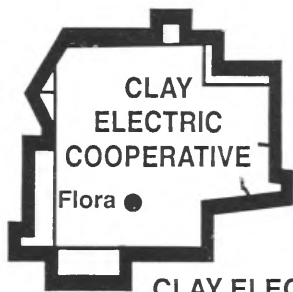
It brightens the room
when you walk into it, and lightens
the load when you have a problem that's
bigger than you are. It describes that human
tendency to help a neighbor or a stranger. It makes
life a lot easier in the countryside, and it continues to
work – creating jobs, providing drinkable water, 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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held September 19, 1994.

All trustees were present. Also present were the cooperative attorney and Alan Wattles, office manager.

Approved the minutes of the regular meeting held August 15, 1994.

Approved 15 new members for service.

Canceled 13 members no longer receiving service.

Expelled three members in bad standing.

Approved the financial, maintenance and outage report for the month of August 1994.

Heard a report from trustee

Cammon regarding recent Soyland board meetings.

Heard a report from trustee Cammon regarding recent AIEC meetings.

Heard a report from the cooperative attorney regarding legislative matters.

Heard a report from negotiating committee regarding IBEW.

Resolved that the union contract be approved as presented by the negotiating committee.

Approved work orders for the months of May, June and July totaling \$58,762.09 and authorized the manager to present the same to REA.

Discussed strategic planning

meeting for members of the board.

Approved a refund of capital credits to the estates of deceased members: Max Creamer, Byron S. Beck, Beula Mason, Willie Wiehle and Vernon Woomer.

Approved a refund of deposits to four members pursuant to Cooperative policy.

Approved contracts for Rate 1 to three members.

Resolved that the Cooperative participate in AIEC's Continuing Education Development "Package" Program for 1994-95.

Accepted disbursement list for the month of August 1994.

Adjournment.

Minutes of board of trustees meeting held October 17, 1994.

All trustees were present with the exception of Loren Dunigan. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held September 19, 1994.

Approved 14 new members for service.

Canceled 15 members no longer receiving service.

Expelled four members in bad standing.

Approved the financial, maintenance and outage report for the month of September 1994.

Heard a report from trustee Cammon regarding recent Soyland meeting.

Reviewed REA form no. 268 and authorized the president and manager to forward it to REA.

Approved work orders for the month of September 1994 totaling \$35,651.19 and authorized the manager to submit the same to REA.

Approved policy bulletin no. 200-1 as presented at the meeting.

Approved one contract for rate schedule 1.

Approved refund of capital credits to the estate of N.L. and Zola Bateman.

Accepted the disbursement list for the month of September 1994.

Approved payment of 1995 membership dues to Clay County Farm Bureau.

Discussed upcoming annual meeting of NRECA.

Directed the manager to make arrangements for Strategic Planning meeting for directors.

Adjournment.

ATTENTION

CLAY ELECTRIC COOPERATIVE has joined forces with CRC, INC. out of Austin, Minn., to provide an after office hours answering service. CLAY ELECTRIC now has a toll free 800 number for outages only for our members. The new number to use for outages is 1-800-582-9012
Please watch the REN center section for future services available from CLAY ELECTRIC and CRC.

Electricity less polluting than other energy forms

"America should use more electric power — not less — because it is more efficient, cheaper and reduces emissions compared to other technologies," says Mark Mills, an energy consultant and physicist. Mills, a former consultant to the White House Office of Science and Technology, the Environmental Protection Agency and the Department of Energy, said a revolution in economic growth symbolized by the lighting of America over the last century has not stopped.

New technologies have traditionally increased the demand for energy, as they substitute machine labor for human (or animal) labor. As a nation, we are increasingly substituting sophisticated environment-friendly electric technologies for less efficient equipment such as internal combustion engines that throw away 90 percent of the fuel they consume.

An electric technology is any device that uses electricity as its primary energy source. Computers, microwave ovens, cordless electric lawn mowers, lasers, robots, fax machines and many other electric technologies are fueling America's economic expansion and improving the quality of life. Advances in electric technologies account for 30 to 40 percent of all technological innovation and one-third of all patents in the U.S.

The fax machine is one of the prime pieces of evidence of this welcome substitution. Mills conservatively estimates that faxing a document coast to coast is 95 percent more energy efficient than overnight delivery and reduces emissions of carbon dioxide. For years, environmentalists have made the electric utility industry's coal-burning plants a target for carbon dioxide emissions. But they have it all wrong, argues Mills. The more electricity we use, the cleaner we get.

The emission of carbon dioxide per dollar of gross national product has fallen over the last two decades, in large part because of growing reliance on electricity instead of fossil fuels. Mills feels electricity is a prime candidate for Environmental Hero and has coined a term for electricity's new image — Ecowatts.

He contends that whenever electric technology substitutes for fuel-based alternatives, increased efficiency and environmental benefits result. He

cites industrial applications such as electric steel-making, dry cleaning and ink drying. All are Ecowatts applications.

Electric technologies lower operating, production and workplace hazards and wastes. The result is more competitively priced products, increased consumer demand and market share, and higher employment.

The U.S. enjoys one of the most efficient electric energy systems in the world. Electricity is unique in its ability to deliver concentrated, precisely controlled energy and information efficiently to any given point. The energy combined with American innovation will give America a strong competitive edge as we revitalize our economy for the 21st century and beyond.

Switching makes cents

Switching to electricity cuts carbon dioxide emissions and saves energy.

Activity	2 lbs. CO ₂ removed for every...	Savings
Home heating	2 hours of heating	35%
(use electric heat pump instead of gas- or oil-fired furnace)		
Making steel	1 lb. steel	50%
(use electric arc instead of blast furnace)		
Mowing a lawn	1 hour used	30%
(use electric mower instead of gasoline-powered)		
Cooking	2 lbs. meatloaf	90%
(use microwave instead of gas oven)		
Drying paint	1 new car	90%
(use ultraviolet dryer instead of gas heat)		
Printing magazines	40 magazines	60%
(use ultraviolet dryer instead of gas heat to dry ink)		
Making glass bottles	12 bottles	65%
(use electric furnace instead of fuel furnace)		
Travel	2 passenger miles	75%
(use high-speed maglev train instead of jet)		
Send document		
2,500 miles	20 pages	95%
(fax instead of courier service)		

Source: *Midwest News*, March 1994.

Youth to Washington Tour contest

Once again Clay Electric will be sponsoring students for a trip to Washington, D.C. The tour this year will be June 16-23. Doug Hockman will be contacting the schools in the Clay Electric area, and will have information about the contest. Clay Electric will also sponsor students to Springfield for Youth Day, which will be held on April 5.

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:

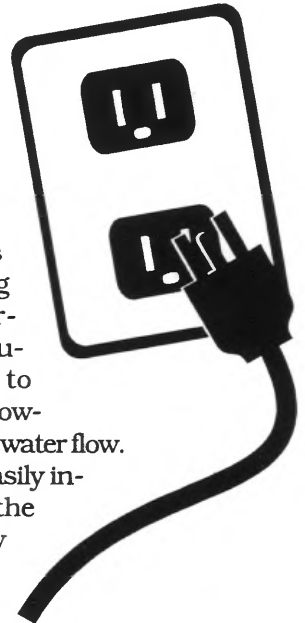
- Get the right size water heater. Keeping more hot water on hand than you need can waste energy.
- For every 10 degrees you can lower the tem-

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.

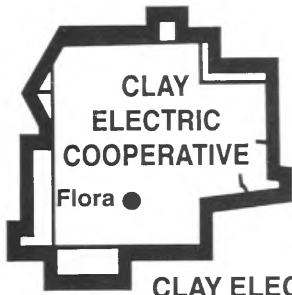
Simply leaving a CO-saturated space may not immediately result in a return to normal blood oxygen levels. Carbon monoxide can take twice as long to leave a

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.



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held November 21, 1994.

All trustees were present with the exception of Lewis Pettit. Also present were the cooperative attorney and general manager.

Approved the minutes of the regular meeting held October 17, 1994.

Approved 23 new members for service.

Canceled 16 members no longer receiving service.

Expelled five members in bad standing.

Approved the financial, maintenance and outage report for the month of October 1994.

Heard a report from the man-

ager regarding recent Soyland board meetings.

Heard a report from trustee Cammon regarding recent AIEC meetings.

Heard a report from the cooperative attorney regarding legislative matters.

Accepted proposal from Leymone Hardcastle & Co. for Cooperative's year end audit.

Approved work orders for October 1994 totaling \$15,049.11.

Approved Power Requirements Study and authorized the manager to seek approval of the study from the RUS.

Approved contracts for Rate 1 to two members and Rate 15

to one member.

Approved refunds of capital credits to the estates of deceased members Charles O. Creek and Mildred Reuter.

Accepted the disbursement list for the month of October 1994.

Was informed that the Cooperative had received Safety Accreditation.

Was informed about the employees and directors Christmas party.

Authorized the Christmas gifts for employees and directors.

Authorized the manager to investigate leasing antenna space on Cooperative's tower.

Adjournment.

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



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

We need to know the names and location of cooperative members who depend on life-support equipment. We keep a registry of members on life-support equipment, and it is important that this information be current and accu-

rate. 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 let our office know.

Clay Electric Cooperative
P.O. Box 517
Flora, IL 62839

Phone: 618-662-2171

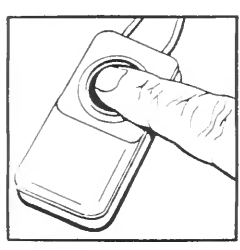
Like a security blanket...

Our rural electric cooperative's personal security service.

With our personal security service - you can feel safe and secure, knowing help is only a push button away.

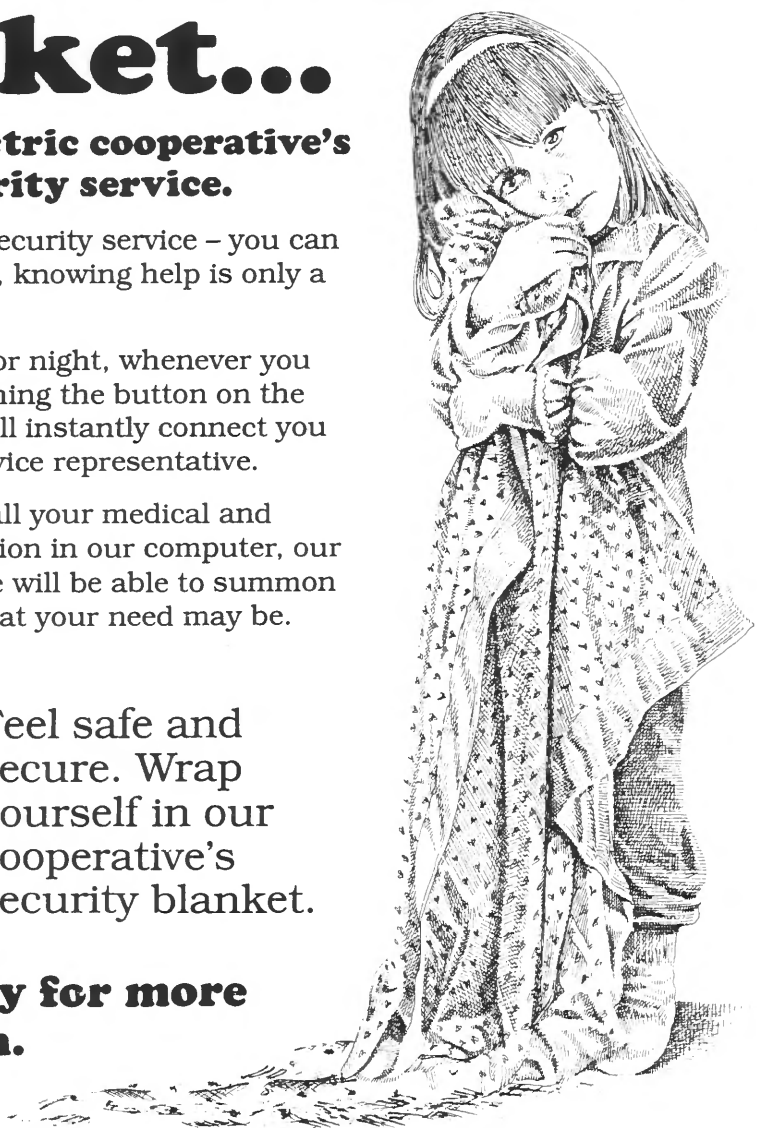
Anytime of the day or night, whenever you need help, just pushing the button on the portable pendant will instantly connect you to a cooperative service representative.

And since we have all your medical and emergency information in our computer, our co-op representative will be able to summon help - no matter what your need may be.



Feel safe and secure. Wrap yourself in our cooperative's security blanket.

Call us today for more information.



Clay Electric Co-operative, Inc.

618/662-2171 P.O. Box 517

Flora, IL 62839

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.

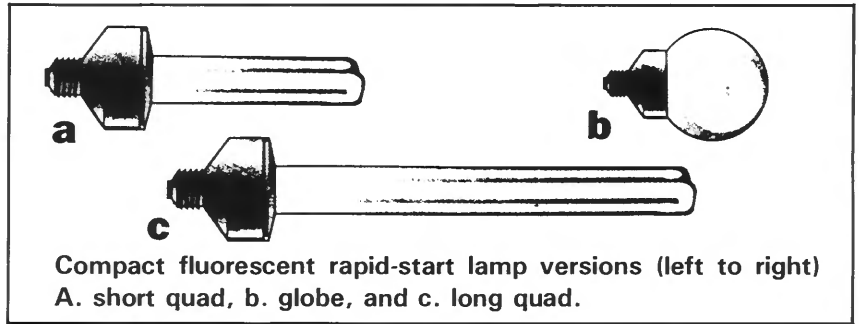


Electric Cooperatives of Illinois

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.



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

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.

• 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.

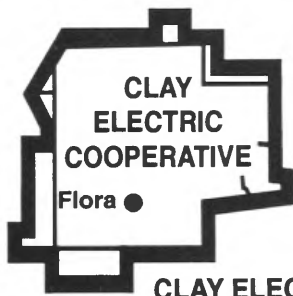
- Keep all lamps and lighting fixtures clean.
- You can save on lighting energy through decorating. Light colors for walls, rugs, draperies, and upholstery reflect light and therefore reduce the amount of artificial light required.

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.



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held December 19, 1994.

All trustees were present along with the cooperative attorney and the general manager.

The minutes of the regular meeting of the board held November 21, 1994, were approved.

Approved 24 applicants for service.

Terminated 23 former members, in good standing, no longer receiving service.

Expelled two former members in bad standing.

Accepted, with regret, the

resignation of trustee Byers.

Approved the financial, maintenance and outage reports for the month of November 1994.

Heard a report from trustee Cammon regarding recent AIEC meeting.

Approved work orders for the month of November 1994 in the amount of \$59,221.55.

Approved, pursuant to Cooperative policy, a refund of deposits to 13 members.

Approved a contract, under Rate Schedule 1, to one new member.

Approved, pursuant to Coop-

erative policy, a refund of Capital Credits to the estate of deceased member W.E. Brooks.

Accepted the disbursement list for the month of November 1994.

Authorized line of credit from CFC and reviewed loan requirements as presented at this meeting.

Discussed final arrangements for the strategic planning meeting for the members of the board.

Adjournment.

More utilities generating with wood

The wood-burning bug is catching on with electric utilities, igniting hopes that tree farms may rejuvenate economically depressed rural areas.

So many utilities have shown interest in using wood as a supplement for their coal-burning power plants that the Electric Power Research Institute (EPRI) has recently published a how-to booklet on the subject, says Jane Turnbull, a project manager in EPRI's renewable energy program. More than 50 power plants have offered to become guinea pigs in EPRI's research, she says. "A lot of them are catching the bug."

And for good reason. Wood is a relatively clean energy source that helps to cut down on a power plant's sulfur and nitrogen oxide emissions. And fuel-tree farms could be a new source of agricultural income. Trees could be grown on land that can't be used for any other kind of crop, says Turnbull. More than 10,000 acres of fast-growing hybrid poplar trees have been planted in the Pacific Northwest, the Midwest and the Southeast, says John Ferrell, a wood-research expert for the Department of Energy. Up until now, the so-called "super-trees," which can grow up to 10 feet tall in two years, have been

used mainly for fiber production.

In Minnesota, a group that includes investor-owned utilities, farmers and the Department of Agriculture has joined together to plant 1,000 acres of hybrid poplars that they hope to sell to utility companies.

"I eventually see power companies having contracts with farmers," says Ferrell. Acres of hybrid trees right next to power plants, along with improved efficiency in wood-burning power plants could make the cost as cheap as coal.

from August, 1994,
Rural Electrification
Magazine

Low voltage or brownout

There are many causes for a low-voltage or brownout situation. The most common is a loose neutral wire on the member's side of the meter. Low-voltage on only one circuit in the home will almost certainly be caused by a loose neutral connection in that circuit and not necessarily at the breaker panel. A major reason for low voltage from the utility side of the meter is lightning-caused damage to various pieces of our equipment.

A brownout condition is easy to recognize. The lights will suddenly grow dim and stay that way. A natural first inclination is to wait a few minutes for the lights to brighten up and assume that all will be well.

Not so. While the lighting apparatus will not be harmed (see list below), any motor in any appliance could be if it is allowed to run during this situation. They will not be getting enough power to operate normally. Our advice is to immediately unplug or shut off any automatic, motor-operated appliance, then call the office at 618-662-2171 to report the occurrence and to determine if the cause is outside or inside the home. If it is on our side of the meter, we'll fix the problem. If it is inside, call an electrician. Do not attempt to use any motor-driven appliance until the lights come back to full brilliance

and remain so for at least five minutes.

What if you're not home when this condition occurs? Automatic protection is available in the form of a plug-in device called a motor controller, into which an appliance is plugged. The controller protects the motor against low-voltage brownouts, high-voltage surges and has a "soft-start" feature that limits the amount of electricity the motor uses under varying conditions. The protector continually monitors the voltage on the circuit and, if a low-voltage situation occurs, it will shut off the power to the appliance. The protector will not let the motor operate until five minutes after it senses that the voltage has returned to an acceptable level.

Two companies manufacture these devices:

Condyne Technology Inc.
477 Commerce Way #103
Longwood, FL 32750
Ph. 800-231-9284

Zemos Technology Inc.
43260 Christy St.
Fremont, CA 94538
Ph. 510-657-0278

If you're concerned about high-voltage surges coming into your home on the power lines and damaging the delicate electronics in your appliances and

home entertainment equipment, Clay Electric will install a whole-house surge suppressor for only \$165. That way, you'll have two-way protection. Call the office today.

Statement of nondiscrimination

Clay Electric Co-operative, Inc. is the recipient of Federal financial assistance from the Rural Utilities Service an agency of the U.S. Department of Agriculture, and is subject to the provisions of Title VI of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Age Discrimination Act of 1975, as amended, and the rules and regulations of the U.S. Department of Agriculture which provide that no person in the United States on the basis of race, color, or national origin or handicap shall be excluded from participation in, admission or access to, denied the benefits of, or otherwise be subjected to discrimination under any of this organization's programs or activities.

The person responsible for coordinating this organization's nondiscrimination compliance efforts is James E. Campbell, Manager. Any individual, or specific class of individuals, who feels that this organization has subjected them to discrimination may obtain further information about the statutes and regulations listed above from and/or file a written complaint with this organization: or the Secretary, U.S. Department of Agriculture, Washington, D.C. 20250; or the Administrator, Rural Utilities Service, Washington, D.C. 20250. Complaints must be filed within 180 days after the alleged discrimination. Confidentiality will be maintained to the extend possible.

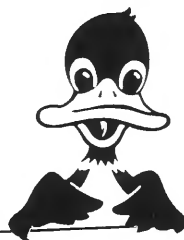
Low voltage:

will not damage

Lights
Stoves
Toasters
Water heaters
Electric Resistance
Heaters

may damage motors in

Air conditioners	Furnaces
Computers	Garage door openers
Compactors	Hair dryers
Dehumidifiers	Heat pumps
Dishwashers	Pumps
Disposers	Refrigerators
Dryers	TVs
Freezers	VCRs
	Washers



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.

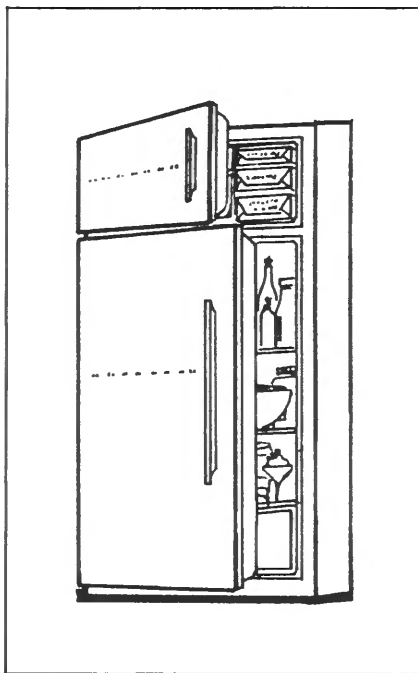
Energy efficiency can vary considerably among appliances of similar size and features, though individual models may seem alike. To help consumers evaluate energy use by an appliance, the federal government has developed a labeling program that covers the following appliances:

- 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

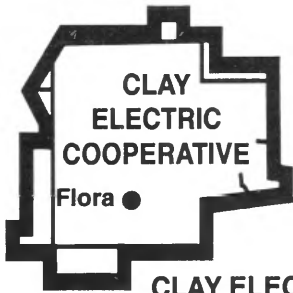
products in that category. This allows you to compare the energy efficiency of one specific appliance with other similar ones.

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.



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held January 16, 1995.

All trustees were present, as was the general manager.

Heard a report from the Executive Committee recommending the appointment of Kevin Logan as trustee to fill the unexpired term of Franklin C. Byers. After discussion Mr. Logan was so appointed, effective immediately.

Approved the minutes of the regular meeting held December 19, 1994.

Accepted 18 new members for service; terminated 22 members no longer receiving service; expelled three members in bad standing.

Approved the financial, maintenance and out-gate report for the month of December 1994.

Reviewed the 1995 budget and tabled it for further consideration at the February meeting.

Heard a report from the manager regarding recent Soyland board meeting.

Approved work orders for November 1994 totaling \$12,380 and authorized the manager to present the same to RUS.

Approved contract under rate schedule 1 for one member.

Approved a refund of capital credits, pursu-

ant to Cooperative policy, to the estates of deceased members Daisy Martin and David Woodward.

Accepted the disbursement list for December 1994.

Discussed final arrangements for upcoming NRECA annual meeting.

Appointed trustee Henson as the voting delegate and trustee Poehler as the alternate for the NRECA meeting.

Appointed trustee Poehler as the voting delegate and trustee Henson as the alternate for the CFC annual meeting.

Instructed the staff to secure bids of gasoline for the cooperative vehicles for consideration at the February meeting.

Approved a refund of deposits, pursuant to Cooperative policy, to four members.

Authorized the manager to expend \$50 for incidental expenses for Clay Co. Water, Inc.

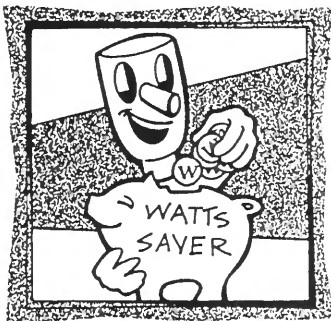
Approved an employee contract for one year at same rate as previous contract.

Resolved that Loren Dunigan be appointed as alternate director to serve on the Soyland board for Clay Electric to fill the unexpired term of Franklin C. Byers.

Adjournment.

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're away from home 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.

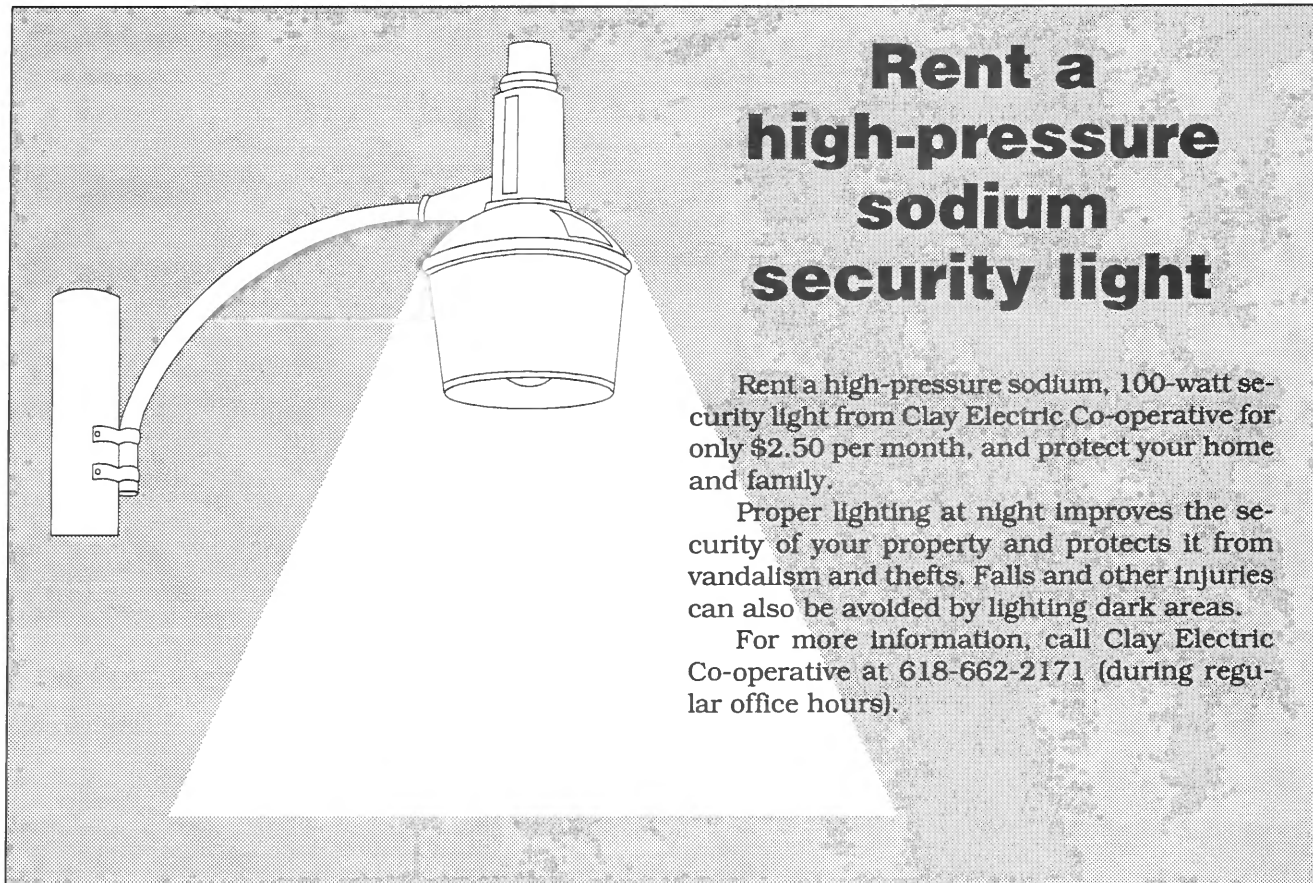
There's lots more you can do, of course. Simply contact us, and we'll be glad to help you increase your list of ways to water your watts and get your money's worth of home energy use.

Rent a high-pressure sodium security light

Rent a high-pressure sodium, 100-watt security light from Clay Electric Co-operative for only \$2.50 per month, and protect your home and family.

Proper lighting at night improves the security of your property and protects it from vandalism and thefts. Falls and other injuries can also be avoided by lighting dark areas.

For more information, call Clay Electric Co-operative at 618-662-2171 (during regular office hours).



Properly used dishwasher actually saves energy

Studies show the dishwasher can actually be an energy saver.

Dishwashers, like clothes washers, use energy for water heating and to actually run the dishwasher. So it was assumed by many people that washing dishes by hand was more economical. It might surprise you to know that an efficient automatic dishwasher, when used properly, can consume less hot water than washing dishes by hand. The savings on water heating can more than make up for the power consumed by the running of the dishwasher.

The amount of energy used in washing dishes is largely determined by the dishwashing style. For instance, it's easy to see that a dishwasher would be more efficient than the "running water rinse technique," which wastefully allows water to run during washing and rinsing.

On the other hand, the dishpan-wash/dishpan-rinse technique is very efficient in terms of energy and water.

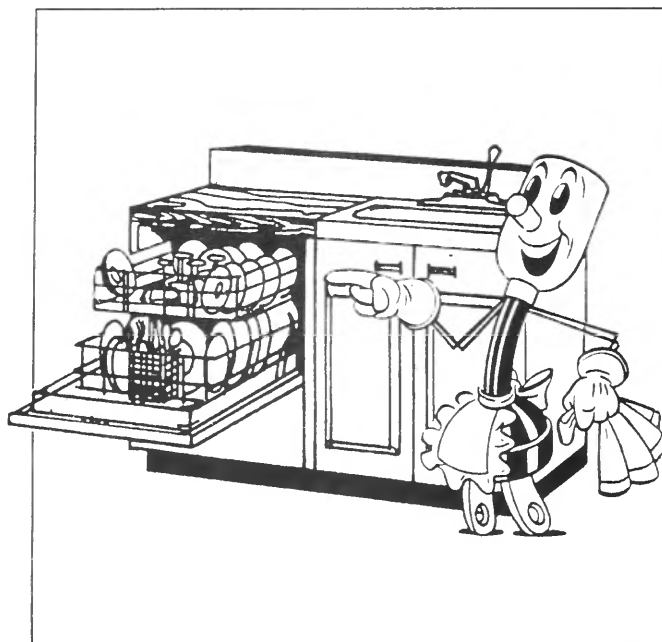
To run your dishwasher most efficiently:

- Run it only with full loads
- Do not use the prewash or scrub cycles unless absolutely necessary.
- Do not waste hot water rinsing dishes before loading them into the dishwasher. A properly op-

erating dishwasher should clean even very dirty dishes.

- Use the "energy miser" or air-dry feature.

So, now you see that wise use of your time-saving, labor-saving dishwasher can yield benefits beyond convenience.





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

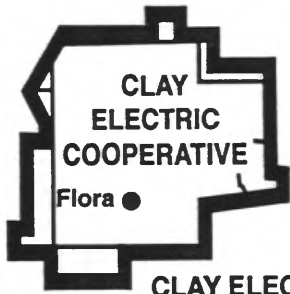
● Consider all the ideas mentioned for building a house.

● 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.



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held February 20, 1995.

All trustees were present, also present were the Cooperative attorney and the general manager.

Approved the minutes of the regular meeting held January 16, 1995.

Accepted 16 new members for service.

Canceled 15 members no longer receiving service.

Expelled two members in bad standing.

Approved the financial, maintenance and outage report for the month of December 1994.

Approved the 1995 budget in

the form presented at the meeting.

Heard a report from trustee Cammon regarding recent AIEC board meeting and Soyland board meeting.

Approved the list of work orders for the month of December 1994 in the amount of \$13,102.44 and authorized the manager to present the same to RUS.

Approved one contract for rate schedule 15.

Approved a refund of capital credits to the estate of deceased member Dale Gammon.

Accepted the disbursement list for January 1995.

Heard a report from the man-

ager regarding certification to CFC.

Approved the purchase of a slide-in dump bed.

Directed the manager and attorney to formulate a letter to the City of Flora.

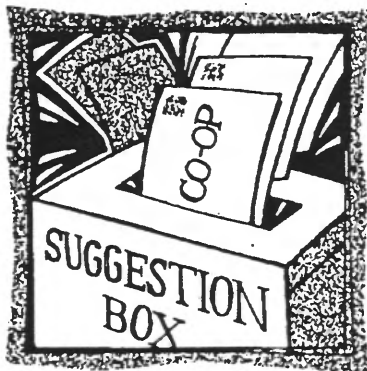
Accepted fuel bid submitted by Jahraus Oil.

Authorized the manager to request that CFC include Clay Electric in its feasibility study for cost control.

Discussed final arrangements for NRECA Annual Meeting.

Were advised of upcoming Soyland Annual Meeting and Legislative Conference.

Adjournment.



As your locally owned and managed cooperative electric utility, we work hard

If you're not satisfied, we're not satisfied

to meet your needs as members 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 members 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!

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 sim-

ply 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.

New billing card coming soon

Nobody likes surprises, and we want to warn you now: We're in the process of changing our billing cards, and this is the one we'll be using starting May 15. We hope you'll be looking for it!



CLAY ELECTRIC COOPERATIVE, INC.
P.O. BOX 517
FLORA, ILLINOIS 62839
TELEPHONE: (618) 662-2171

CLAY ELECTRIC COOPERATIVE, INC.
P.O. BOX 517
FLORA, ILLINOIS 62839

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First Class Mail
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FORWARDING & ADDRESS CORRECTION REQUESTED

FROM READING	TO READING	KWH MULTIPLIER	KWH USED	Amount	c	r
46828	47136	1	308	49	52	99
State Utility Tax						

YOUR ELECTRIC SERVICE COST PER DAY BASED ON 30 DAYS	Gross Amt. Due	Net Amt. Due
Account Number 12312300	\$ 55.56	\$ 50.54

RETURN THIS PORTION WITH PAYMENT
STATEMENTS DUE AND PAYABLE UPON RECEIPT

WHOLESALE POWER COST ADJ PER KWH	Mo.	Day	Yr.	Net Bill
.0075788	04	01	95	50.54
Rate 0001	Mo.	Day	Yr.	Gross Bill
0001	04	24	95	55.56
Coop Code 000000	Meter Number S12312377	Account Number 12312300		

Carr-rt ** R0001

John Doe
R.R. 1
Flora, IL
62839

Keep For Your Records



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 oper-

ating 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.



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held March 20, 1995.

All trustees were present. Also present were the Cooperative attorney, the general manager and the Cooperative auditor.

Approved the minutes of the regular meeting held February 20, 1995.

Accepted five new members for service.

Canceled three members no longer receiving service.

Expelled two members in bad standing.

Heard a report from the Cooperative auditor regarding 1994 audit.

Heard a report from the Cooperative manager, attorney and auditor concerning various options available to improve the Cooperative finances for 1995, following discussion tabled any affirmative action at this time.

Approved the financial, maintenance and outage report for the month of January 1995.

Heard a report from trustee Cammon regard-

ing recent AIEC board meeting.

Heard a report from the manager regarding recent Soyland board meeting.

Heard a report from board president Henson regarding recent NRECA annual meeting.

Approved the list of work orders for the month of January 1995 in the amount of \$46,715.25 and authorized the manager to present the same to RUS.

Discussed annual meeting plans and resolved that the annual meeting of members of Clay Electric Cooperative, Inc. be held September 7, 1995, at 7 p.m. at Charley Brown Park in Flora.

Approved one contract for rate schedule 1.

Approved a refund of capital credits to the estate of deceased member Leon Cassidy.

Accepted the disbursement list for the month of February 1995.

Resolved that a special meeting of the board of trustees be held March 30, 1995.

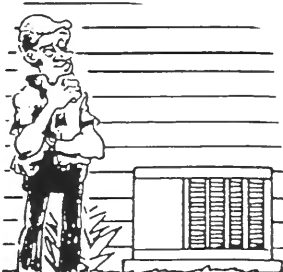
Adjournment.

Improve air conditioning cost and comfort

Correctly sizing an air conditioning unit is important. Too large a system will do a poor job of dehumidification and will cost more to purchase and to operate. Too small a system will not cool your home adequately.

Systems are sized to meet peak heating and cooling needs, and units are sized by the "ton," which represents 12,000 Btu's of cooling per hour. Factors such as geographical area, building orientation, insulation, windows and doors are considered in sizing the unit.

Air conditioner sizing should never be based merely on an estimate. Methods are available from professional organizations such as ASHRAE (the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.) and ACCA (the Air Conditioning Contractors of America). Computer



software is also available to assist homeowners in sizing their own air conditioning systems.

Air conditioners are rated by their seasonal energy efficiency ratio (SEER) and the sensible heat fraction (SHF). The higher the SEER rating the greater the efficiency. A minimum SEER of 10 is required by the National Appliance Efficiency Standard. The SHF expresses the unit's dehumidification ability. The lower the SHF, the better it dehumidified conditioned air. The suggested maximum SHF is 0.80. Units with a higher rating may not adequately dehumidify some homes.

Finally, join Clay Electric's Switch 'n' Save program. We'll install a FREE radio-controlled switch on the outside unit of your central air conditioner. This switch allows the compressor to be cycled during the hottest summer afternoons. It saves the co-op money and the savings are passed to you.

Phone the Member Service Department for more information.

Safety rules for tornado season

Shelter—Seek inside shelter if possible. If in the open, move away from a tornado's path at a right angle. If there is no time to escape, lie flat in the nearest depression, such as a ditch or ravine.

In office buildings—The basement or an interior hallway on a lower floor is safest. Upper stories are unsafe. If there is no time to descend, a closet or small room with stout walls, or an inside hallway will give some protection against flying debris. Otherwise, under heavy furniture must do.

In homes with basements—Seek refuge near the basement wall in the most sheltered and deepest below ground part of the basement. Additional protection is afforded by taking cover under heavy furniture or a work bench. Other basement possibilities are the smallest room with stout walls, or under a stairway.

In homes without basements—Take cover in the smallest room with stout walls, or under heavy furniture, or a tipped-over upholstered couch or chair in the center part of the house. The first floor is safer than the second (or third). If there is time, open windows partly on the side away from the direction of the storm's approach—but stay away from windows when the storm strikes.

Mobile homes—Mobile homes are particularly



vulnerable to overturning and destruction during strong winds, and should be abandoned in favor of a preselected shelter, or even a ditch in the open. Damage can be minimized by securing the trailer with cable anchored in concrete footing.

Factories, auditoriums, and other large buildings—These buildings with wide, free-span roofs, should have preselected, marked shelter areas in their basements, smaller rooms, or nearby.

Don't lock out your cooperative

Many members need to keep their property secure from unwanted intruders, so they have locks on their gates. But Clay Electric Cooperative needs access to our electric lines and metering equipment in order to maintain and operate the system.

For instance, cooperative personnel may need access to read the meter. Or, personnel may need access to lines in an outage or for other maintenance work.

Locked gates pose no problem when a "cooperative lock" is installed between your padlock and a link in the chain.

Only authorized cooperative personnel have keys to these locks. Employees are diligent in locking the gate when they leave so your property remains secure.



If you are one of the few who have a chained gate without a cooperative lock, we urge you to call and authorize installation of a cooperative lock. There is no charge or inconvenience to you.

Cooperative access to the electric lines on your property is important for quality service, especially in emergencies. Call the member service department for more details at (618) 662-2171.

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.

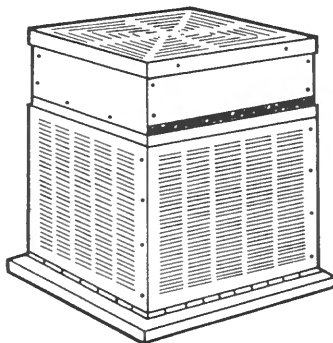
- Ask your dealer to help you determine how much cooling capacity you need for the space you have to cool and for the climate in which you live.

- 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.

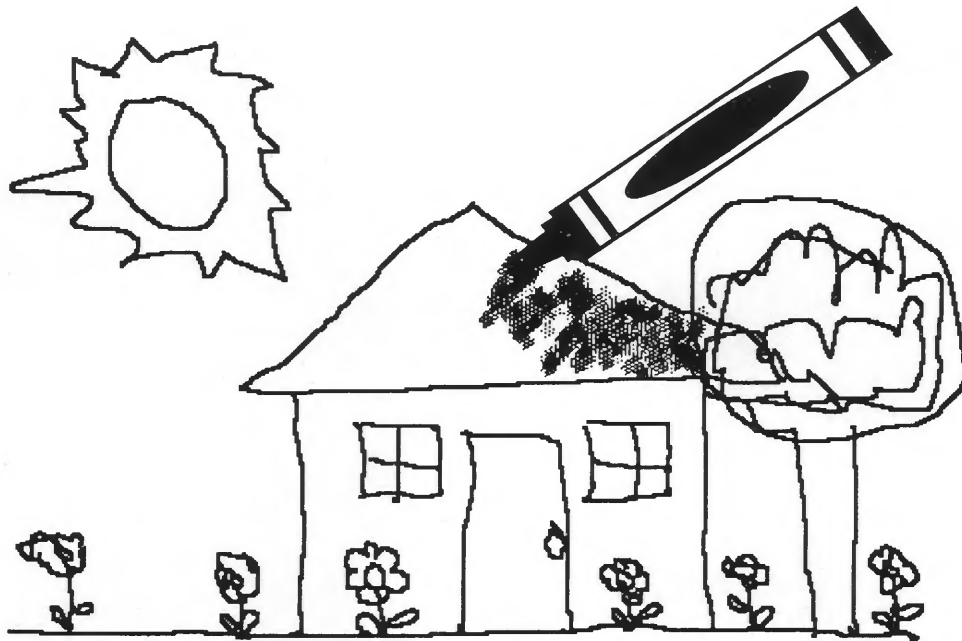
- Clean or replace air-conditioning filters at least once a month. When the filter is dirty, the fan has to run longer to remove the same amount of air, and this takes more electricity.

- 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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS



High school students from across Illinois were introduced to their state legislators in Springfield during "Illinois Electric and Telephone Cooperative Youth Day" May 10. Six area students representing Clay Electric Cooperative met with Senator William L. "Bill" O'Daniel at the State Capitol. The 270 students from across Illinois were also guests at the attorney general's office, where many of the visitors met Attorney General Jim Ryan. During the day, the young people toured the Capitol, Old State Capitol and Lincoln's Tomb. Representing Clay Electric were, from left, Rachel Morris, Clay City; Shane Dulaney, Clay City; Lyle Allen, Louisville; Stephanie McCollum, Louisville; Sen. O'Daniel; Melissa Burt, Flora; Samantha Pierce, Flora, and Doug Hockman, Clay co-op chaperone. The day's activities were sponsored by the electric and telephone cooperatives of Illinois. Dulaney and McCollum were chosen to represent Clay Electric on a week-long all-expenses paid trip to Washington, D.C., June 16-23.

Minutes of board of trustees meeting held April 17, 1995.

All trustees were present. Also present were the cooperative attorney, the general manager and the office manager.

Approved the minutes of the regular meeting held March 20, 1995.

Accepted 11 new members for service.

Canceled 14 members no longer receiving service.

Expelled three members in bad standing.

Approved the financial, maintenance and outage report for the month of March 1995.

Approved the list of work orders for the month of February 1995 in the amount of \$6,569.92 and authorized the manager to present the same to RUS.

Approved one contract for rate schedule 15 and two contracts for rate schedule 1.

Approved a refund of capital credits to the estate of deceased members Asher Smith, Arlie Smith and Glen and Angie

Songer.

Accepted the quotation of Federated Insurance for the cooperative insurance package for this fiscal year.

Accepted the disbursement list for the month of March 1995.

Discussed plans for cooperative annual meeting.

Discussed ways to reduce expenses in order to improve the cooperative's margin, or bottom line.

Adjournment.

Our New
Enviro — Watch

protects your home when
 you can't by monitoring
 power outages and low
 temperatures!



This new monitor plugs into a telephone jack and an electrical outlet and will automatically call the Response Center's 800 number if your power goes off or if the temperature in your home drops too low. The Response Center's operator will immediately call one of your listed contacts to correct the situation for you.

- * INEXPENSIVE
- * EASY TO INSTALL
- * LOW MONTHLY MONITORING FEE
- * 24 HOUR PROFESSIONAL MONITORING BY THE RESPONSE CENTER

Call us today for more information.



Clay Electric Co-operative, Inc.

618/662-2171

P.O. Box 517

Flora, IL 62839

**HI-LO TEMPERATURE MONITOR, CARBON MONOXIDE DETECTOR
 AND WATER SENSOR ADD-ONS ARE ALSO AVAILABLE.**

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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held May 15, 1995.

All trustees were present. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held April 17, 1995.

Accepted 11 new members for service.

Canceled eight members no longer receiving service.

Expelled one member in bad standing.

Approved the financial, maintenance and outage report for the month of April 1995.

Heard a report from trustee Cammon regarding recent AIEC board meeting.

Heard a report from the manager regarding recent Soyland board meeting.

Heard a report from the manager and presi-

dent Henson regarding recent Legislative Conference.

Approved the list of work orders for the month of March 1995 in the amount of \$4,495.14 and authorized the manager to present the same to RUS.

Approved one contract for rate schedule 1.

Approved a refund of capital credits to the estate of deceased members Floyd and Lillian Krutsinger and Mildred Welsh.

Approved Large Power Rate Schedule no. 18 as presented at this meeting.

Accepted the disbursement list for the month of April 1995.

Authorized the cooperative attorney to assist the negotiating committee in union negotiations.

Adjournment.

Recycling makes a difference

Ever wonder what becomes of all the "stuff" that gets recycled and whether or not there really is a savings of natural resources or energy? Did you know that:

- It takes 70 percent less energy to make recycled paper than it does to make new paper. A ton of recycled paper uses 7,000 gallons less water, puts 60 pounds less pollution into the air, and produces three cubic yards less waste. It also takes fewer trees — 17 fewer trees per ton of paper.

- In one year in the United States, the recycling of steel saves enough energy to heat and light 18 million homes. Every ton of recycled steel saves 2,500 pounds of iron ore, 1,000 pounds of coal, and 40 pounds of limestone.

- It takes 75,000 trees every week to produce the Sunday edition of the New York Times.

- It takes 95 percent less energy to make aluminum by recycling it than it does to produce new aluminum from the mineral bauxite.

- If Americans recycled just one-tenth of their newspapers, we would save about 25 million trees a year.

- Each gallon of gas used by a car contributes about 19 pounds of carbon dioxide to the atmosphere. For a single car driven 1,000 miles per month, that adds up to 120 tons of carbon dioxide per year.

Clay Electric Cooperative Annual Meeting of Members

Thursday, September 7, 1995
Charlie Brown Park, Flora

Registration and Meal 6 p.m.
Meeting 7 p.m.

Special Grand Prize —
Trip for two
Branson, Mo.

(watch your Illinois Rural Electric News for details)

Blinking digital clocks and trimming trees 48

Coming home to a digital clock flashing "12:00" is an annoyance at best. It's a tell-tale sign that your power has been interrupted, even if for only less than a second.

It may be small consolation, but it's highly likely that the power "outage" lasted only as long as it takes a tree limb to touch a power line while swaying in the breeze.

Most systems that distribute electricity use protection devices on their lines. When these devices, called reclosers, sense a disturbance, they actually open or by some other means break the circuit and very briefly interrupt the flow of electricity through that section of line.

This disturbs your digital clocks or timers, true, but it also protects the equipment and in many cases, prevents a prolonged outage. The protection device recloses, reconnecting the circuit. If the disturbance that tripped the device in the first place is still present, it will interrupt service again briefly and try to reclose again. Most

protection devices will go through this process three times before the line goes dead.

The disturbance to the line is often caused by tree branches. This explains why most electric utilities have an aggressive tree-trimming program in place. But, back to the flashing clocks.

There are some solutions to the problem. You can buy digital clocks and appliances with backups for the digital display. These days, many clocks, timers on computers, video tape recorders and kitchen appliances are designed to take a battery that will take over during power interruptions. Call your co-op for other suggestions.

Think about your landscaping plans and don't plant trees near the line, or recognize that branches may be trimmed when or before they grow near lines. You may want to report trees that need to be trimmed away from power lines, but by all means, don't try doing so yourself. Call your co-op.

Is your home wiring safe?

Electricity has become such a part of our lives that people take it for granted.

This can be costly and dangerous thinking.

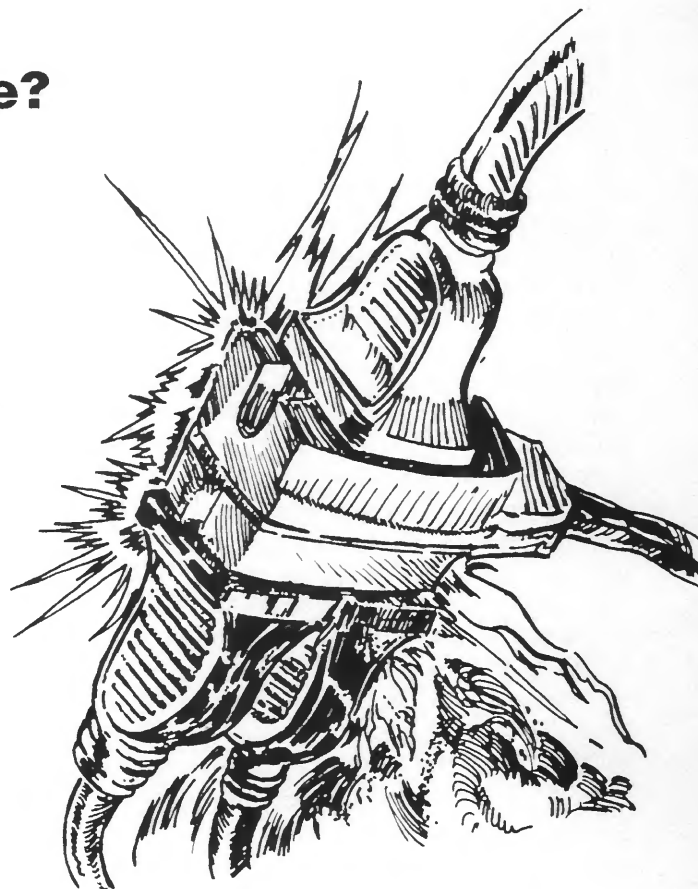
The wiring in your home requires maintenance and regular inspection. Wiring wears out just like anything else.

Each time any new electrical load is added to your home, you should review the part of your electrical system which will handle the new load.

If your home's electric wiring hasn't been professionally inspected within the past several years, contact a qualified electrician.

Indoor checklist

- I check electrical cords for frays and nicks.
- I make sure plugs and prongs aren't loose or worn.
- I don't place cords where they could be tripped over or receive excessive wear (like under rugs).
- I never use an electric tool or appliance if my hands or feet are wet or if I'm standing in water or on damp ground.
- I know the location of my fuse box or circuit breaker panel.
- I equip my home with an approved fire extinguisher for electrical fires and check it periodically.
- I never attempt to do home wiring improvements myself.
- I insert specially designed plastic caps in low wall outlets when not in use to protect small children.



- I teach my children these safety rules of in-home electrical safety.
- I look for Underwriter's Laboratory label on every appliance I buy.
- I don't risk overloading wall outlets with adapters.
- I turn off and repair any appliance that sputters, stalls, or gives the slightest shock.

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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS



Two tour capital

The two students who represented Clay Electric Co-operative took in a full week of experiences around the nation's capital, during the 1995 "Youth to Washington" tour. During the tour, they met Congressman Glenn Poshard of Carterville. From left are Shane Dulaney of Clay City, Congressman Poshard and Stephanie McCollum of Louisville. The annual trip is sponsored by the electric and telephone cooperatives of Illinois.

How long is a kilowatt-hour?

Quantities designated by familiar measures such as cup or pound are easily appreciated because they can be seen.

Not surprisingly, few people can appreciate the quantity described by the measure called a kilowatt-hour. The commodity is invisible.

In order to visualize a kilowatt-hour (kwh), the following relates the amount of work done by a person.

In a home, a person would have to beat a batter mixture at an incredible speed, steadily, for 10 hours, to generate energy equal to one kwh.

Using an old-fashioned treadle sewing machine, a person would have to pedal at top speed for 13 hours to generate energy equal to one kwh.

A person working steadily with a hand pump for one hour can pump 4,000 gallons of water out

of a 25-foot well, will pump 10,000 gallons.

A person shoveling a foot of snow off a driveway 10 feet wide does about 23 foot-pounds of work per shovelful (assuming one cubic foot of snow equals six pounds per shovelful). The person would have to clear a driveway two miles long to generate energy equal to one kwh.

Imagine a 150-pound person climbing a 1,000-foot flight of stairs. He would have to climb the stairs nearly 18 times to generate enough energy equal to one kwh.

Using these comparisons, it becomes obvious that the price of electricity is an excellent bargain.

A USA Today survey found that 34 percent of all Americans feel electricity was the greatest invention of all times; the next closest was the wheel at 11 percent.

Minutes of board of trustees meeting held June 19, 1995.

All trustees were present except Howard Poehler and Loren Dunigan. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held May 15, 1995.

Accepted 17 new members for service.

Canceled 10 members no longer receiving service.

Expelled two members in bad standing.

Approved the financial, maintenance and outage report for the month of May 1995.

Heard a report from trustee Cammon regarding recent AIEC board meeting.

Heard a report from the manager regarding recent Soyland board meeting.

Appointed the following persons as voting delegates at upcoming AIEC Annual Meeting: H. Clifford Cammon as voting delegate, Frank Czyzewski as first alternate and Edwin Henson

as second alternate to NRECA.

Approved the list of work orders for the month of April 1995 in the amount of \$20,584.51 and authorized the manager to present the same to RUS.

Approved a tower rental contract.

Approved a refund of capital credits to the estate of deceased members Edith English and Wilma Fulfer.

Appointed members of nominating committees for the districts as follows: District I, District III and District IX.

Accepted the disbursement list for the month of April 1995.

Approved the sponsorship of 4-H trophies.

Discussed plans for the Annual Meeting of Members of Clay Electric Cooperative, Inc., September 7, 1995.

Approved payment of 1995 dues to AIEC.

Authorized committee meeting.

Adjournment.

**Annual Meeting of Members
of Clay Electric Cooperative, Inc.
will be held
Thursday, September 7, 1995**

Charley Brown Park

Old Highway 50 West — Flora, IL 62839

Meal and Registration 6 p.m.

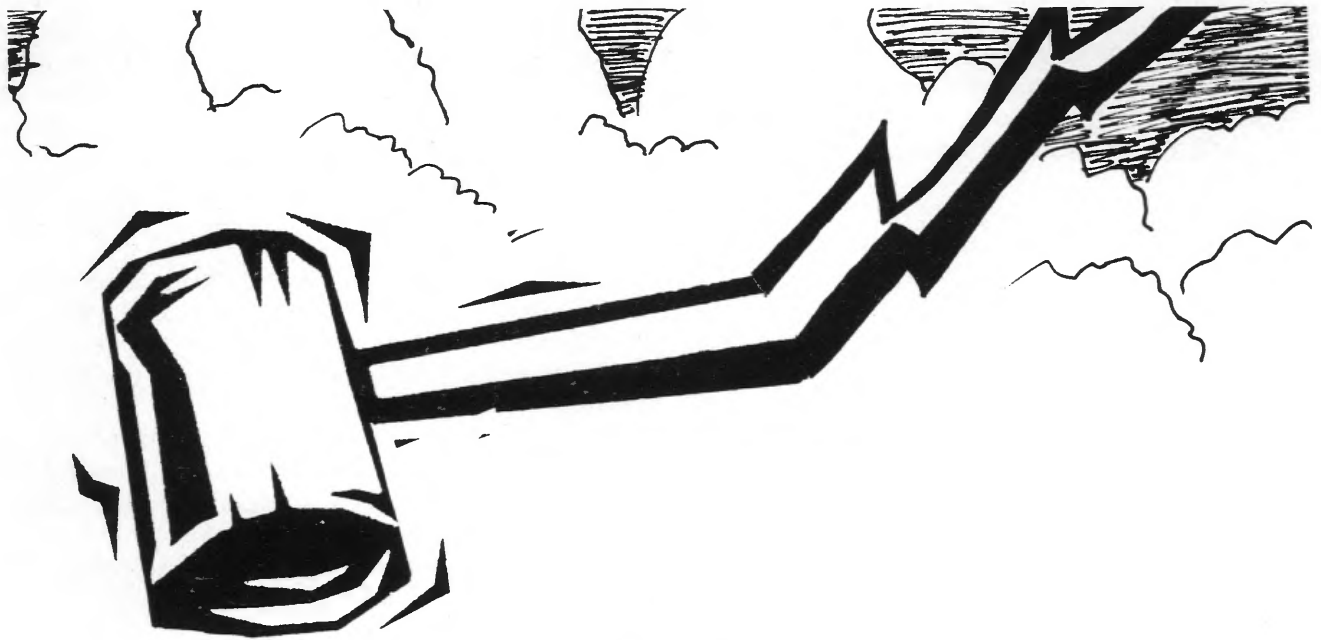
Meeting at 7 p.m.

**Entertainment provided by "Edgewood Opry"
Drawing for prizes after meeting and entertainment**

**Grand Prize — Trip for two to Branson, Mo.
Including two nights lodging — Two shows**

**Clay Electric will be closed
Monday, September 4,
for Labor Day**

After hours outage reporting call 1-800-582-9012.



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.

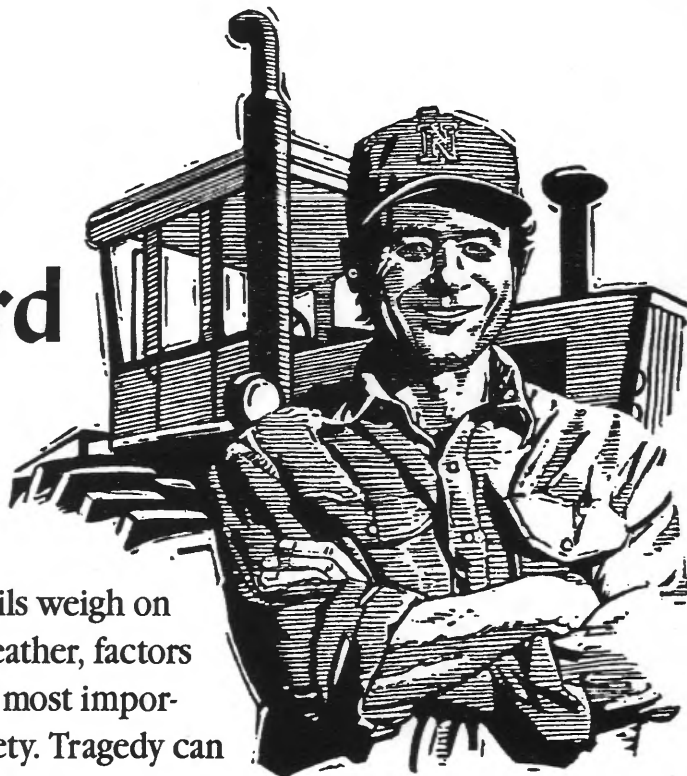
Cohn said the plasma machine could be used to dispose of nuclear wastes, but the product would be radioactive glass blocks that, in turn, would have to be safely stored. The advantage, he said, is the glass blocks would be stable and would not leach radioactive molecules.

"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

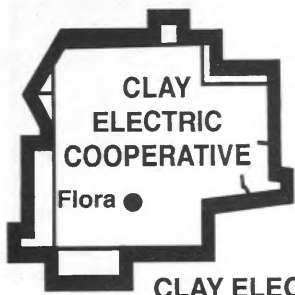


This time of year, details weigh on your mind . . . money, weather, factors vital to your livelihood. The most important concern, though, is safety. Tragedy can occur in that flash of an instant when you let your guard down – taking a short cut, overlooking basic safety rules. To ensure future harvests,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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Co-op Month celebrates 'Expanding People's Horizons'

Clay Electric Co-operative 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."

The nation's cooperatives are a varied lot. There are big ones and small ones, and they're located everywhere: in cities and towns and suburbs throughout America.

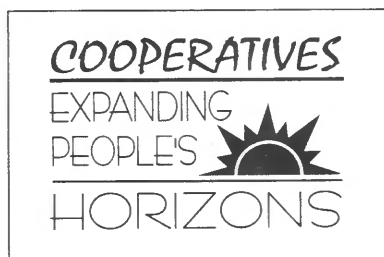
They have one goal, and that is to provide goods and services as economically and efficiently as possible. As locally owned and controlled businesses, co-ops are unique because of their commitment not only to the people they serve, but also to their communities.

"During the past few years customer service has become one of the hot business buzzwords," says Glenn English, executive vice president and general manager of the National Rural Electric Cooperative Association (NRECA). "It's all the rage because companies are responding to people who have figured out that they don't have to take what they get. We have more choices today. Our horizons have expanded. Instead of taking what we get, we expect to get what we need and what we want."

Such service is not new for electric co-ops, he added, because service is what they were all about all along. "Customer service is our sole reason for ex-

istence," he says.

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. There are co-ops that serve other needs, too.

Electric co-ops got started when investor-owned utilities wouldn't string wires into the countryside, and credit unions—which are also cooperatives—were first set up to offer financial services to people banks didn't want to serve.

NRECA's English says, "Those of us involved with consumer-owned electric co-ops learned a long time ago about expanding our horizons. In the 1930s, after decades of having to settle for no electric service because no one saw profits in rural America, rural people figured out they didn't have to take what they got.

"They banded together," he continued, "to form their own utilities so that today, we're 25 million people strong, and keeping power and opportunity flow-

ing to virtually every acre of the country."

Cooperatives also exist for housing, insurance, farm marketing and farm supply, telephone service, health and day care, and news services.

Clay Electric Co-operative was founded in 1940 and provides electric service to 2,956 members in seven counties.

An electric cooperative is a unique kind of electric utility because it is locally owned and controlled. Each person has a voice and a vote in the co-op's activities and can be elected to the co-op board. Members of the co-op's board live in the co-op's service area and pay the same rates as other members. There are no absentee owners.

The co-op way of conducting business is a true example of all that's good about 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.

Since electric co-ops are community ventures, whatever benefits the community obviously benefits the co-op and its member-owners, 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 descriptions that can be applied to co-ops.

Start winterizing your home now

Even though we may have a few more relatively warm fall days ahead of us, now is the best time to start planning for the cold winds of November and the subsequent northern Illinois winter weather. Since many of us haven't used our furnaces since, oh, perhaps last April, this may be the best place to start.

Heating systems and humidifiers

If you have a humidifier attached to your furnace, it should be cleaned and chlorinated. Replace filters, making sure the water is turned on and the drain is clear. Make sure the humidifier is not leaking into the furnace.

Check all furnace filters to make sure they are clean. If not, either clean them or replace them. In some systems, filters should be replaced on a monthly basis during the regular heating period. Check your owner's manual for recommended replacement time and other maintenance requirements.

If you have a wood-burning stove, check all duct work for possible leaks. Do not vent a wood-burning stove or fireplace in the same flue as a gas, oil burner, or space heater. Check

fireplaces for obstructions or creosote buildup — clean at least once a year. Leave the damper slightly open at all times if you have a gas log or gas starter.

Plumbing and water heaters

Locate your main water shut-off valves and know how to use them.

Turn off any water lines going to outside faucets and drain the pipes to prevent winter freeze up.

Insulate water lines in your basement or outer walls exposed to cold drafts; however, do not use heat tapes in hard-to-reach areas.

Install a temperature pressure relief valve and metal overflow line on your electric water heater. Consider insulating your heater to prevent unwanted heat loss.

Snow Birds

If you plan on taking an extended vacation over a period of months, consider draining your entire water system and shutting the water off to your home until you return.

Unplug any large appliances not in use: range, washer, dryer, refrigerator (if empty and defrosted, leave door ajar), television, etc.



Set your thermostat at a minimum of 45 degrees to prevent freeze-up.

Ask a friend or neighbor to periodically check your home in case of some unforeseen emergency.

Call the Clay Electric Co-operative office for more winterizing tips.

By reviewing your winterization needs now, you'll be ready later — when you really need to be — as Old Man Winter is knocking on your door.

Board meeting report

Minutes of board of trustees meeting held July 17, 1995.

All trustees were present. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held June 19, 1995.

Accepted 15 new members for service.

Canceled 7 members no longer receiving service.

Expelled four members in bad standing.

Approved the financial, maintenance and outage report for the month of June 1995.

Heard a report from the negotiating committee.

Heard a report from the manager regarding recent Soyland board meeting.

Approved the list of work orders for the month of May 1995 in the amount of \$36,287.49 and authorized the manager to present the same to RUS.

Approved a refund of capital credits to the estate of deceased members Harvey and Margaret Tackitt.

Authorized a donation to CFC. Accepted the disbursement list for the month of June 1995.

Advised of upcoming NRECA meeting.

Discussed miscellaneous items concerning the cooperative.

Adjournment.

After hours outage reporting call 1-800-8582-9012

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.

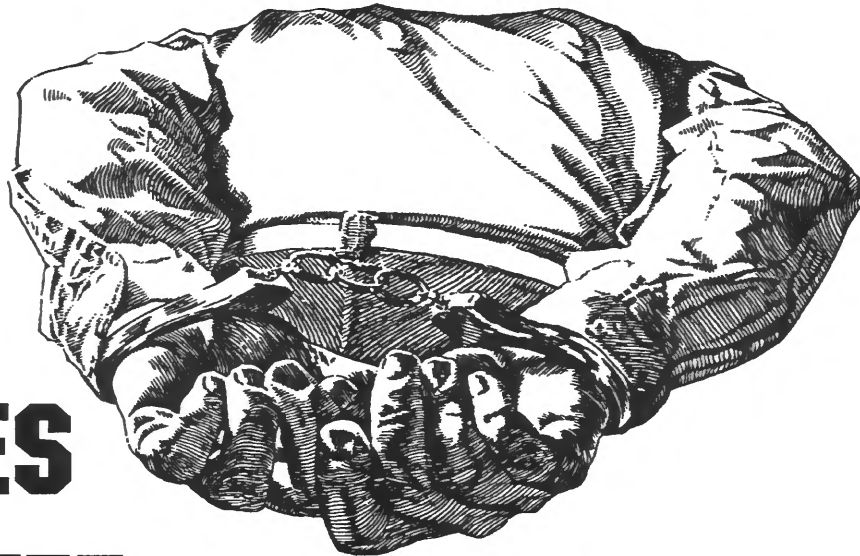
- If you have oil heat, have your furnace serviced at least once each year and make sure the firing rate is correct. Some furnaces maybe over-fired.

- 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!

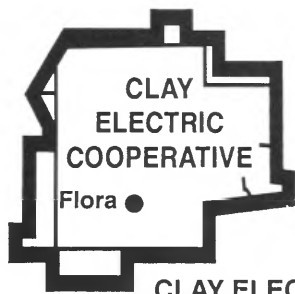
Tampering with an electric meter is illegal. And, it can be quite dangerous because of the possible exposure to high voltage.

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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

The area men who were elected to the Clay Electric Co-operative board of directors are congratulated by James E. Campbell, right, manager. From left are Howard Poehler of Louisville, Edwin Henson of Xenia, Kevin Logan of Edgewood, and Campbell. Henson and Poehler were re-elected, while Logan was elected to his first term. The meeting was held Thursday, September 7, at Charley Brown Park in Flora.



Henson, Poehler, Logan elected

Two area men were reelected to the board of directors of Clay Electric Co-operative, and a third was elected to his first term at the member-owned utility's 51st annual meeting Thursday, September 7, at Charley Brown Park in Flora. Reelected were Howard Poehler of Louisville and Edwin Henson of Xenia. Kevin Logan of Edgewood had been appointed to the board to fill out the Unexpired term of Franklin Byers of Farina, who resigned earlier. Logan was elected to his first term.

James E. Campbell, manager, told his audience that Clay Electric is holding preliminary discussions with three adjoining co-ops to discuss the possibility of either a complete merger, or a plan to share various services. "The main thrust of these discussions," he said, "is to see if we can't operate more efficiently, without reducing the quality of service to our members."

"The process will take some time, and we'll keep you advised of what all the various study committees recommend, and their recommendations will be put to you for a vote, before we do anything," he continued.

Campbell also referred to media reports about the possibility that Soyland Power Cooperative, Clay Electric's sole power supplier, is discussing

the sale of its share of the nuclear Clinton Power Station.

"It is true that such discussions are taking place," Campbell said, "and I want to remind you that they are just primary discussions, too. What we hope to do is to find a way to cut costs and, hopefully, to reduce our rates."

Henson, president of the Clay Electric board of directors, told members in his annual report that 1994 had been a rough year financially for the co-op, primarily because of the loss of two very large loads. "Even so," he said, "the outside plant continued to receive proper maintenance and new lines and new services were built on a timely basis.

"We've signed a contract with Cooperative Response Center for outage calls after hours and on Saturdays, Sundays and holidays," Henson added, "and it has the capability of answering 18 calls at the same time, compared to the old answering system being able to handle only one call at a time. The new service has constant communication with the line crews in their trucks and provides the location of affected members. Our members can access this service through a toll-free number, which is 1-800-582-9012."

The co-op had put a new meter reading program in effect, Henson said. "The neighborhood meter reading program has worked very well so far, and has dropped our line loss from more than 10 percent to less than 9 percent. A savings of 1 percent in line loss saves us about \$26,000 a year, and the meter reading program has also given us additional information that enables us to match sales on each feeder out of a substation, to help us balance our load better. It will also help us pinpoint line loss better," he explained.

Henson said the co-op had continued its maintenance efforts during the past year in the Xenia and Flora substation areas. Maintenance included changing out bad poles, trimming brush and trees, treating brush chemically, inspecting and servicing oil circuit reclosers and voltage regulators.

"The primary purpose of our maintenance program is to improve electric service reliability to the members and enhance the ability of the cooperative to continue to provide adequate power and energy to all members. We're always looking for better ways to cut costs and improve service," he concluded.

Loren W. Dunigan of Clay City, secretary-treasurer, reported that the co-op's total assets decreased last year to \$8,652,821, down slightly from the previous year's \$8,708,650. Revenue in 1994 was \$4,030,244, also down from that of the previous year's \$4,266,329.

Following the business meeting, the board met to reorganize for the coming year. Henson was re-elected president, Poehler vice president, and Dunigan, secretary-treasurer.

Prizes awarded at 1995 Annual Meeting

Trip for two/Branson, Mo.	Robert Kuentler	Steam iron	Ray Iffert
Ceiling fan/light	Kent Warren	Surge protector	Daniel Painter
Mixer	Robert Henson	4 ft. fluorescent shop light	Christina Krutsinger
Iced tea maker	James Rogers	Curling iron	Cecil Wilkins
Retractable work light	Vernon Wendling	Power outlet strip	Roger Parish
Blender	Helen Bergman	Life saving kit (donated by WaterFurnace)	Jerry Burroughs
Coffee maker	Ralph Marti	Life saving kit (donated by WaterFurnace)	Herman Bangert
Hair dryer	Herschel Porter	Life saving kit (donated by WaterFurnace)	Imogene Shaffer
Motion detector light	Dionne Creamer		
Halogen work light	Jack Hastings		
Extension cord	Eddie Lamb		

Board meeting report

Minutes of board of trustees meeting held August 21, 1995.

All trustees were present. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held July 17, 1995.

Accepted 14 new members for service.

Canceled 10 members no longer receiving service.

Approved employee raises as recommended by negotiating committee.

Heard a report from trustee Cammon regarding recent Soyland meetings.

Heard a report from the manager regarding recent Soyland meetings.



Approved the list of work orders for the month of June 1995 in the amount of \$12,897.56 and authorized the manager to present the same to RUS.

Approved a refund of capital credits to the estate of deceased members Walter Weaver.

Authorized a refund of deposits to four members.

Accepted the disbursement list for the month of July 1995.

Approved write-offs of uncollectible accounts.

Rejected all bids concerning the sale of surplus trencher/backhoe and directed the manager to re-advertise for sealed bids.

Adjournment.

**To report outages after hours,
weekends and holidays
call 1-800-582-9012.**

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

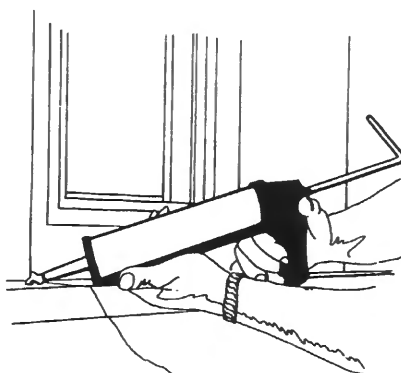
●Test your windows and doors for air-tightness. A cold windy day is a good time to check for leaks. You will be able to find many leaks by feeling with your hand around windows and doors, or you can make a simple "draft detector" by clipping a piece of tissue paper or light plastic to a coat hanger. 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.

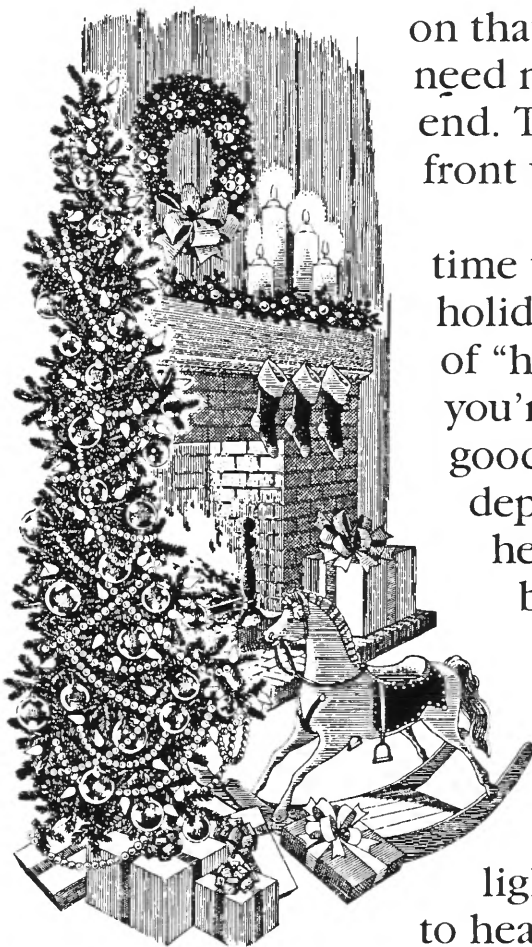
Find out about R-values before you buy your insulation materials. Then buy the thickness of insulation that will give you the R-value you should have.

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.”

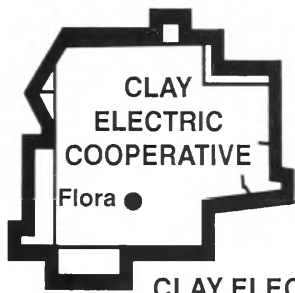
When it’s
time to decorate for the
holidays, there is no shortage
of “helpers” who make sure
you’re doing it right. Thank
goodness you have a
dependable partner who
helps make the season
bright. For more than
100 years, electricity
has added so much
to the atmosphere of
the holiday season —
colorful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



Clay Electric News

CLAY ELECTRIC CO-OPERATIVE, INC.

618-662-2171

FLORA, ILLINOIS

Board meeting report

Minutes of board of trustees meeting held September 28, 1995.

All trustees were present. Also present were the cooperative attorney and the general manager.

Approved the minutes of the regular meeting held August 21, 1995, and the reorganizational meeting held September 7, 1995.

Accepted 14 new members for service.

Canceled 13 members no longer receiving service.

Expelled 6 members in bad standing.

Approved the financial, maintenance and outage report for the month of August 1995.

Heard a brief presentation from the manager regarding Soyland activities.

Heard a report from trustee Cammon concerning recent Soyland board meeting and annual meeting.

Discussed the recent annual meeting of Clay

Electric.

Approved the list of work orders for the month of July 1995 in the amount of \$5,412.20 and authorized the manager to present the same to RUS.

Approved a refund of capital credits to the estate of deceased members Chester and Flo Wattles and to Edna McCann.

Approved one power contract for rate schedule 1 and one contract for rate schedule 15.

Accepted the disbursement list for the month of August 1995.

Authorized renewal of membership in Farm Bureau.

Authorized line of credit from CFC and reviewed loan requirements as presented at this meeting.

Discussed plans to attend upcoming merger meeting.

Adjournment.

May we say thanks to our members

•Who call 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 lines to serve your neighbors, providing adequate and reliable electric service to everybody on the system.

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

•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 use extreme care when cutting trees near your electric lines.

•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 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 and other hazards off the poles for the safety of our linemen.

To report outages after hours, weekends and holidays call 1-800-582-9012.

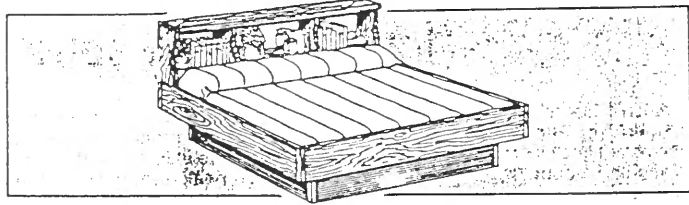
Simple pointers reduce energy use of water beds

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



Covering your water bed can reduce its energy consumption.

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.

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!

Office closing

Reminder: Clay Electric will be closed for Christmas Holiday, Monday, December 25, and New Years Day, Monday, January 1.

Merry Christmas and Happy New Year



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 you 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.