

Jo-Carroll Hi-Lines⁴⁴

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

**Some
important
reminders
for our
membership**

The nominating committees for Districts 5, 7, and 8 will meet at the headquarters building on Wednesday, Jan. 15. These committees will choose at least two members as candidates for director from these districts. The actual balloting is conducted though the mail before the annual meeting.

The annual meeting will be held in Elizabeth, at the high school, on Saturday, March 8. Mark your calendars now: The meeting will begin at 1 p.m., but we provide lunch starting about noon.

The discussion and speculation about the deregulation of the electrical utilities in the United States continues. Much has been said and written about this issue, and Jo-Carroll continues to carefully study all of the implications. We urge our members to become educated about deregulation as well. Jo-Carroll's position on the subject is that our members shall continue to receive high quality electric service at a reasonable cost. It is hoped that whatever legislation is enacted will assure that this is the case.

The inspection of water heater controls will continue throughout the coming months. Approximately 500 of the 2,000 units in service have been checked in recent months. The controls are important to Jo-Carroll because they receive a radio signal that suspends the operation of the electrical elements during the peak times. The water heater tank still has plenty of hot water so the member is not inconvenienced, but electrical demand is reduced, and that saves all of the cooperative's members money.

On that subject, Jo-Carroll still has the free 80-gallon electric water heaters—perfect for new homes or as a replacement for your old worn-out gas or electric water heater.

Another Jo-Carroll program that enjoys good response is the Enviro-watch program. This device plugs into an electric outlet and a phone line in the home. If the power goes off or the temperature in the home goes below 42 degrees, the Enviro-watch will call Jo-Carroll's answering service, which will call a predetermined responder who can check on the problem. It's great for second homes, and is easy to install. Please call Carol Callahan at Jo-Carroll (800-858-5522) for more information.

**Don't lock
out your
cooperative**

Many members need to keep their property secure from unwanted intruders, so they have locks on their gates. Jo-Carroll 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 (800) 858-5522.



Co-op's lock

Member's lock

**Check your
propane costs—
we may help
you save money**

Furnace efficiency is a very important measure of how your heating system works. It's not a hot topic when people compare energy costs—everyone just asks "How much was your bill last month?" Or, recently at least, "How much are you paying for your propane gas?" However, if you are comparing fuels, such as electric and propane, furnace efficiency becomes a factor.

It is not something that is easy to measure, either. Most electric heat is 100 percent efficient, some can be even more, like a heat pump when it is compared to a standard set of data. The average propane furnace may be around 70 percent. Many propane heaters are 90 percent efficient when they are first installed, but within a few years of operation they will lose efficiency and be rated lower.

The measurement of efficiency is, simply put, the amount of fuel in as compared to the amount of heat out. Electric baseboard heaters are 100 percent because all of the fuel is used in the room, propane furnaces are less efficient because some of the heat goes up the flue pipe.

Efficiency is not cost, nor is it as interesting as cost to the homeowner. In order to compare the following chart uses the efficiency of the propane unit as compared to 100 percent efficient electric heat.

Propane Efficiency	Electric rate *	Equivalent propane cost (\$ per gal.)
60%	3¢	48¢
70%	3¢	56¢
80%	3¢	64¢
90%	3¢	72¢

Office hours

7:30 a.m. to
4 p.m.
Monday through
Friday

**Outages and
emergencies**

During hours call
1-800-858-5522,
after hours call
1-800-927-5254.

The chart shows that if you have a propane furnace of 60 percent efficiency, and you are paying 48¢ gallon, then you would have the same heating cost with electric heat on the Jo-Carroll rate. If you are paying more than 48¢ per gallon, then you could save money with Jo-Carroll's rate. The same is true of a 90-percent propane furnace, only the equivalent cost at this efficiency is 72¢ per gallon.

Jo-Carroll's dual fuel rate also offers the additional savings of a reduced rate for air conditioning during the summer. Incentives also are given for new dual fuel installations. Donald Langran

Jo-Carroll members who are interested should check their propane price and call Jo-Carroll for more information.

* The 3¢ per kwh dual fuel (interruptible) rate is used for this comparison, because Jo-Carroll does not promote uncontrolled electric heat, and does not offer a discounted price unless it can be interrupted.

Reader prize

Each month we print the name of a Jo-Carroll member who is eligible to win a monthly \$25 readership prize. If your name is printed in this month's edition, and not a part of any story, contact Jo-Carroll and claim your prize no later than the 10th of the month following publication

When your power is out . . . we're on the line!

Check your circuit breakers or fuses. If possible, determine if your neighbors have electricity. Then call Jo-Carroll Electric's Outage and Emergency Report Line. Please have your account number and location readily available so we may restore your service quickly.

Local calls — dial 858-2207

Outside Elizabeth — dial 1-800-927-5254



The Jo-Carroll Electric Cooperative board of directors has voted again this year to return capital credits totaling \$157,184.91 to members who received electric service from the cooperative in 1973.

Capital credit returns are a cornerstone of a nonprofit, member-owned electric cooperative in that the members have an opportunity to share equally in the success of the cooperative, based on patronage. If an electric cooperative has any excess after paying expenses in a given year, this money, or margins, is held in an escrow account until the time when the cooperative's board deems that the financial condition of the cooperative is strong enough to return the margins to the membership.

Richard Reusch, president of the Jo-Carroll board, said, "We are very please to be able to retire the patronage capital from 1973 at this time. The Jo-Carroll board is striving to keep the cooperative in a strong financial position while allowing the members to share in the success of their electric cooperative." The amount each of the members spent for electricity at Jo-Carroll in 1973 is used to determine how much each member will receive. Very careful records are kept with regard to patronage capital to assure that each member is treated equally based on the amount of electricity they used during those years.

Jo-Carroll has retired \$1,509,078.47 to date in patronage capital. The checks were sent to the members during the first part of December.

The capital credits return constitutes a major difference between cooperatives and investor-owned utilities. The stockholders in an investor-owned utility get the profit, and in a cooperative it is returned to the members of the cooperative in the form of capital credits.

An open fireplace can needlessly cost you extra dollars. In fact, when there's no fire, it can remove up to eight percent of the heat from your home every day. Yet, millions of fireplaces are left open all winter. So, the heat from your furnace or heat pump is going right up the chimney, cooling down your home and making your heating system work harder. But sending heat up your fireplace chimney is very easy to avoid. The simplest way is to keep your damper closed when there's no fire. And closable, glass fire screens help too. Make sure you're not using the fireplace for a cooling system this winter. Or eight percent of your heating dollars will disappear into thin air.



Capital credit return

How to cool your home with a fireplace.

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 regular maintenance. It 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 that will handle it.

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

Is your home wiring safe?

Indoor checklist

- Check electrical cords for frays and nicks.
- Make sure plugs and prongs aren't loose or worn.
- Don't place cords where they could be tripped over or receive excessive wear (like under rugs).
- Never use an electric tool or appliance if your hands or feet are wet or if you're standing in water or on damp ground.
- Know the location of your fuse box or circuit breaker panel.
- Equip your home with an approved fire extinguisher for electrical fires.
- Never attempt to do home wiring improvements yourself.
- Insert plastic caps in low wall outlets when not in use to protect children.
- Teach your children these safety rules of in-home electrical safety.
- Look for the Underwriter's Laboratory label on every appliance you buy.
- Don't risk overloading wall outlets with adapters.
- Turn off and repair any appliances that sputters, stalls, or gives the slightest shock.

Snowmobilers beware

Snowmobiling is a popular winter pastime. The first snows of the cold season bring snowmobiles out from under wraps as people head out for fun and transportation. It's important to remember, though, that the snow cover can conceal hazards for snowmobilers.

More than half of the serious snowmobile injuries involve collisions with automobiles, trains, other snowmobiles, and fixed objects such as trees, fences, utility poles, and guy wires. You may think you know the terrain, but guy wires or other supports for utility poles can be difficult to see against a background of bright snow, or during the dusk and dawn hours. We have attempted to put a bright orange cover on all of our guy wires. But from time to time these will come off, so use caution. If you see a guy wire without the orange cover, please call the office.

Beware of downed power lines, too. Your snowmobile could wreck if it crosses a downed line, and riders could be seriously burned or even killed if the line is energized. If you do see a downed power line, note the location and notify local authorities or your electric supplier. We offer this safety message with the hope that you use extreme caution, and keep your snowmobiling fun and safe during this snow season.



Call Jo-Carroll Today And Get A FREE Electric Water Heater!

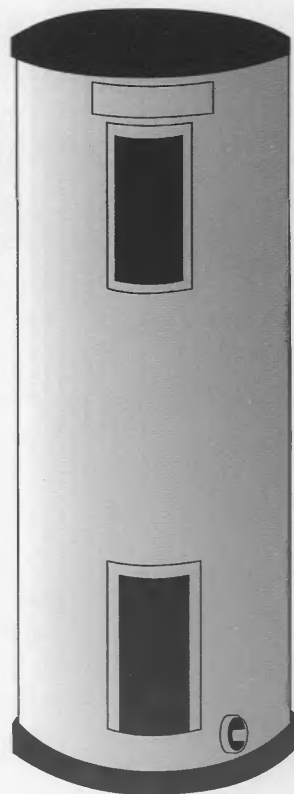
Would you like to replace your old gas water heater? Are you building a new home? Call us today and get set up with a FREE 52- or 80-gallon electric water heater and participate in our special load management program.

Jo-Carroll Electric Cooperative, Inc.

P.O. Box 390

Elizabeth, IL 61028-0390

1-800-858-5522



MANAGER'S REPORT by Connie M. Shireman



Shireman

Who really would benefit from retail electric competition?

"If it sounds too good to be true, it may not be true." That old saying applies to the huge electric bill savings promised by those promoting immediate electric utility retail competition and a federal mandate to make it happen.

To bolster its case, a business-backed think tank recently published an analysis of the potential effects of retail competition. After examining the claims of consumers' savings, NRECA suggests that residential and small-business customers shouldn't get their hopes too high and that legislators and regulators should take a closer look at how the big promises were concocted.

Who is making the promises?

The Citizens For A Sound Economy (CSE) analysis, *Customer Choice, Consumer Value: An Analysis of Retail Competition in America's Electric Industry*, appears to lean heavily on economic theory, but overlooks its proper use and ignores some electric utility realities.

CSE is a deregulation-at-all-costs think tank and policy group that is campaigning for radical electric utility industry deregulation. Its funding reportedly comes from companies in industries like chemicals, oil and natural gas, tobacco and telecommunications.

Naturally, that type of support finances studies that result in a particular point of view. Because of the shortcomings of the CSE analysis, it shouldn't be used as the sole economic justification for radically changing an industry that is the most reliable in the world and one of the least expensive among industrialized nations.

What's the catch?

The CSE conclusions are based on assumptions that are both inaccurate and misleading. The CSE report sidesteps proper economic methodology, which, if applied to its own statistics, would show that residential and small-business customers would save little or nothing at all, while large industrial consumers would get most of the benefits. Who gets the savings and how depends on a series of "what if" theoretical schemes and some heroic assumptions.

What does CSE promise? What is reality?

Customers have to buy more before they benefit.

CSE says: Retail competition will benefit consumers by \$107.6 billion annually.

Reality: To receive this amount of benefit, consumers would have to buy more electricity than they are buying now. The CSE study does not say that consumers' monthly electric bills will be lower. It says that consumers will buy substantially more electricity at a lower per-unit price and that's how the consumers will get the benefit. This level of consumer benefit could happen, but only if the consumer response to declining prices assumed by CSE is accurate. If the response is

(Continued on page 12b)

(Continued from page 12a)

lower than CSE's assumption, the benefit would be lower than the incredible figure CSE predicts. And that's exactly what NRECA's examination of the CSE analysis suggests will happen.

They think every consumer automatically will buy more electricity.

CSE says: Because of retail competition, all consumers will buy more electricity in direct proportion to decreases in price, causing total sales to go up to an even level year-around.

Reality: Is that accurate? No, because CSE bases those predictions on the false assumptions that (1) all types of consumers can and will respond equally to decreases in price, and (2) decreases in price alone will cause consumers to change the seasonal pattern of electricity use.

Electricity is bought in connection with the use of appliances and equipment to produce services like lighting and air conditioning. In the short-term, residential customers would have to run their air conditioners in April and October or leave the lights on all night to increase use above their usual pattern. In the long-run, they could install new or additional appliances. Many new appliances, however, are more efficient than those they replace, resulting in lower total electricity use. The same is true for electric motors used in business and industry.

The CSE analysis acknowledges that residential and commercial consumers will have a lower response to price decreases than industrial consumers. But to create an attention-grabbing headline, the CSE analysis averages the three response figures to produce an unrealistic increased consumption figure.

The CSE analysis also assumes that the historical pattern of high summer electric use and low spring and fall use will change to a steady level year-round because of price decreases. That would mean that consumers would be prompted to use the same amount of electricity each and every month just because the price is right. This is important to remember because CSE's big savings predictions depend on big increases in consumption.

Running every power plant at full capacity threatens reliability.

CSE says: Production from existing generating capacity can be increased 25 percent by eliminating seasonal variations in consumer use and by fully using reserve generation capacity.

Reality: Operating the existing generation facilities year-round at full capacity levels may theoretically be possible, but in reality it raises serious reliability and operational challenges. Generating units require regular maintenance that can take them out of service for days or months. Having reserve generation capacity available ensures the reliability of the entire system.

Wayne Szulkowski

Further, such an increase in generation would require an increase in fuel use. The CSE analysis assumes that such a large increase in fuel demand would not trigger an increase in fuel prices. That assumption contradicts the basic economic theory of price being affected by supply-and-demand forces. Nor does it consider the additional burden of transporting the fuel to the power plants.

Stranded costs. Should commitments be abandoned?

CSE says: Regarding stranded costs, the CSE analysis says it doesn't matter if electric industry borrowers repay their loans or if retail competition causes utility bankruptcies. The CSE analysis says to let the chips fall where they may, and let the invisible hand of market forces clean up the mess.

Reality: If consumers leaving a system don't pay their share of prior investments made on their behalf, the remaining customers may have to make up the difference through higher rates or the electric utilities may have to absorb the losses.

Much of the capital was invested on the approval of or at the

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7:30 a.m. to 4 p.m.
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24 hours a day

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direction of government representing the best interests of the public. The regulated electric utilities have been granted an exclusive territory in which they have to serve everyone, regardless of cost. But they also are granted a rate of return that enables them to recover their costs. This regulatory compact gives the lending, borrowing, and investing institutions a reasonable expectation that the capital can be recovered. Without stranded-cost recovery, consumers could be left holding the bag.

Who really benefits from retail competition?

CSE says: All consumers will benefit from retail competition.

Reality: Economic theory says that as price drops, consumer demand increases. Economists call this response "price elasticity." The CSE analysis predicts individual price elasticities for residential, commercial, and industrial customers. Residential is the lowest, industrial the highest. To produce a headline-grabbing prediction about cost savings, however, the CSE analysis averages the three elasticities to say all customers would respond equally to price changes and benefit equally from price decreases. That's simply not accurate.

Applying CSE's own statistics individually to each consumer class clearly shows that industrial consumers could see a big drop in electricity prices while residential and commercial customers would gain almost nothing. This same pattern has been documented in the deregulated natural gas industry, where residences have had bills decrease only slightly or even go up while prices to industrial consumers have fallen dramatically. The analysis also conveniently ignores the fact that different customer classes have different levels of buying clout. Which customer would be more attractive to an electricity provider—an aluminum smelter or a three-bedroom home? And based on their different amounts of electricity consumption, which would be better able to negotiate a lower rate?

Who has the power to choose?

According to the loudest rhetoric about retail competition, customers would be the center of attention, with all kinds of options swirling around to pick from. But what if only one electricity provider wanted to serve a specific area? Or what if none of the providers chose to serve a particular customer? Who, then, would have the power to choose?

Should we return to the days when the market power of electric utility monopolies dictated rates and service conditions? Back then, if they didn't want to serve a customer that was too far out of town, they didn't. In today's economy and national conscience, universal electric service is essential.

All electricity customers should share the benefits

Cooperative electric utilities believe that any benefits from retail competition should flow to all types of customers. They don't believe residential and small-business customers should have to pay higher rates to subsidize lower rates for industrial consumers. It's not a purely economic issue. It's a matter of fairness. So, before we begin fixing something that's already working, let's make sure real people get some real benefits.

Prepared by Dale Phariss, Senior Writer/Analyst, NREA Communication, in association with NRECA Strategic Analysis, September 1996.

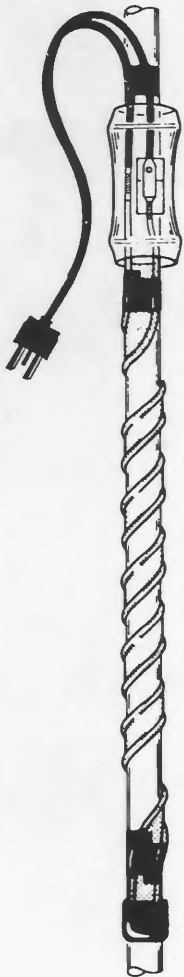
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Outside Elizabeth — dial 1-800-858-2521





Use heat tapes cautiously

Electric heat tapes are often used in winter to keep water pipes from freezing, and now is a good time to check your electric heat tapes and replace them if necessary. The United States Consumer Product Safety Commission (CPSC) urges homeowners to replace uncertified heat tapes that are more than three years old with certified ones that meet recognized voluntary standards.

An electric heat tape resembles an electric cord. It may be round or flat. Some varieties have an overall covering of light metal braid. There is an electrical plug on one end and sometimes a pod or box with a thermostat switch to control the power to the heating conductors in the tape.

Heat tapes usually are installed in crawl spaces or attics. Often, they are used on mobile homes to heat water supply pipes that come from underground up to a mobile home.

But, for all their potential uses, CPSC warns that heat tapes can be dangerous, and adds that electric heat tapes are involved in about 2,000 fires each year, resulting in about 10 deaths and 100 injuries. CPSC urges you to help reduce this risk of fire and death by using only **certified** heat tapes on your pipes. One way you can tell the difference is that all new certified heat tapes will have a three-prong plug; the older uncertified ones have a two-prong plug. Currently, there are three organizations that are certifying heat tapes to meet recognized national voluntary standards; Underwriters Laboratories Inc. (UL), the Canadian Standards Association (CSA), and the Factory Mutual Research Corporation (FMRC).

Using heat tapes that meet voluntary standards offers some protection, but heat tapes also must be installed and used properly and inspected annually to provide the most protection against freezing pipes, and to provide the highest level of safety to you and your family.

CPSC offers these safety tips for installing and maintaining electric heat tapes:

- Inspect heat tapes each year and replace them if you notice signs of deterioration. Look for discolored surfaces (especially at the plug), charring, cuts or breaks in the insulation, or bare wires.
- When installing heat tapes, carefully observe installation instructions. Different heat tapes have different installation requirements.
- Always plug the three-prong plug into a three-prong outlet to make sure the heat tape is grounded.
- Use a ground fault circuit interrupter (GFCI) wherever heat tapes are plugged in.
- Make sure the heat tapes that you use are intended for use on water pipes (other tapes heat roof, gutters, or garden soil).
- Do not wrap heat tape over itself unless specifically permitted in the manufacturer's instructions.
- Do not cover the heat tape with insulation unless advised by the manufacturer. Use nonflammable insulation such as fiberglass. Do not use foam or vinyl insulation. It could catch fire if the heat tape fails.
- Apply heat tapes directly on the pipe to be protected, never on top of the insulation covering the pipe.
- Keep the end cap sealed and off the ground to prevent water from getting in. Moisture can lead to a fire.
- If heat tape has a thermostat, check instructions to see if the thermostat should be placed against the pipe and covered with insulation or if it should be left hanging and uncovered.

Heat tapes perform a useful function, but like any electrical product, they need to be treated with care and respect. Don't create a fire hazard in the process of keeping your pipes from freezing. Replace uncertified heat tapes that are more than three years old; buy heat tapes that meet voluntary standards; and install and use heat tapes properly. Your life, and the lives of your family, depend on it.

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

Your annual meeting

Your member-owned, member-controlled electric cooperative will conduct two of the most important events in the cooperative's year during the next few weeks.

The first event, one that is very significant in that it firmly places democratic control of your rural electric system in the hands of its member-owners, is the director elections. The nominating committee met at the cooperative headquarters building on Jan. 15 for the purpose of nominating members of the cooperative to serve as a director for Districts 5, 7 and 8. The results are:

District 5 — Richard Reusch, 1300 E. Reusch Road, Elizabeth, IL 61028

Wayne Krohmer, 620 E. Reusch Road, Elizabeth, IL 61028

District 7 — Rodney Fritz, 13907 Fritz Road, Mt. Carroll, IL 61053

Brian Woessner, 13363 Loren Road, Mt. Carroll, IL 61053

District 8 — Vernon Law, 12572 Airport Road, Savanna, IL 61074

Larry Randecker, 13921 Scenic Palisades Road, Mt. Carroll, IL 61053

The election for directors from these districts will be conducted through the mail. Only members who reside in the districts in which elections are being held this year will receive ballots. Members in those districts should carefully review the material they will receive in the mail, and promptly return their completed ballots to Jo-Carroll Electric.

The second upcoming important event, perhaps the most important of the year, is the 58th Annual Meeting of Jo-Carroll Electric Cooperative members. This meeting is scheduled to be held March 8 at the River Ridge School Gymnasium in Elizabeth. As in the past we will feature reports of directors, officers and the manager of your cooperative. A guest speaker, musical entertainment, a box lunch and attendance prizes will be provided to all Jo-Carroll members who attend. More details about the annual meeting will be provided in the coming weeks. We urge all cooperative members to make plans now to attend.



Mark your
calendar!

March 8

Jo-Carroll Electric Cooperative
Annual Meeting

River Ridge High School Gym
Elizabeth, IL



Past due electric bills are expensive for everyone

In order for your cooperative to operate in an efficient and financially sound manner, we must maintain a prompt payment procedure administered fairly and equitably to all. Any variance from this procedure is costly to the cooperative, the late-paying members and ultimately to all members. The following questions and answers may help to explain this.

1. How long does a member have to pay his or her bill before a late payment charge is added?

The net amount of the bill is due on or before the 15th of the month following receipt of the bill. The gross amount which includes a late payment charge applies to payments received after the 15th of the month regardless of the postmarks. However, bill payments picked up from the post office or out of the night depositories at 7:30 a.m. on the first business day following the 15th of the month will not be assessed the late payment charge.

2. How much is the late charge and why is this charged?

The late payment charge is 5 percent more than the net amount. This amount is added to cover the expense of additional paperwork and the special handling involved in processing past due accounts. The fee is also necessary to provide an incentive to members to pay their bills promptly. Without the late payment charge, more members would defer payment of their electric bills until later in the month.

3. If the bill isn't paid on or before the 15th, what happens?

A reminder notice is prepared and mailed on or about the 16th of the month. This notice is a friendly reminder that you may have just misplaced or overlooked paying the bill.

A final notice is mailed on or about the 16th of the following month. This notice states that if the bill is not paid by the 22nd of the month, a collection trip may be made and a \$50 collection fee will be added to the bill. If the bill is not paid at time of collection, service may be disconnected.

4. If the member is unable to pay the bill, what should he or she do?

It is the member's responsibility to call or come to the office to make arrangements for settlement of the bill. This should be done as soon as he or she receives the bill. A simple promise to pay later is not sufficient. Definite arrangements must be made with an authorized cooperative representative in order to avoid disconnection. The member may ask for and receive information about aid for hardship cases available from federal, state or community programs. It is then up to the member to contact the proper agency.

5. What happens if no arrangements are made and the bill is still not paid?

On or about the 23rd of the month, JCEC will send an employee to the member's premises to collect payment or disconnect the service. At this point, the member can avoid disconnection by paying the past due portion of the bill and the \$50 collection fee. The collector/disconnect employee is authorized to accept payments but may refuse a personal check from a member who has a history of writing checks not honored by the bank.

6. Can arrangements for settlement of a past due bill be made with the collector/disconnect employee?

No. However, he may be able to establish radio contact with the office and receive permission to grant certain consideration in special circumstances. Otherwise, he must collect the past due amount and the \$50 collection fee or disconnect the service.

7. If the member states that he or she believes the past due bill was too high, will the collector/disconnect employee still disconnect the service?

Yes. This is not the time to discuss a high usage complaint. Such inquiries should be discussed with the office as soon as the consumer receives the bill in question. Your cooperative wants to know about a questionable bill so that we can work together to resolve the problem. But this should be done before the collector/disconnect employee is in the process of disconnecting the service!

8. If service is disconnected for nonpayment, what must the member do?

In this case, arrangements must be made with the cooperative and all past due bills plus collection fee must be paid in cash before service can be reconnected. The reconnection fee is \$50.00 for a reconnection which can be performed before 4 p.m., Monday through Friday (except holidays). The fee is \$100 for reconnections which run in to overtime (past 4 p.m.) on weekdays and on weekends and holidays. It is in the member's best interest to avoid this added expense and inconvenience by paying the bill before disconnection.

9. Why does JCEC charge a collection and reconnection fee?

The collection and reconnection fee is charged to defray the added cost of having to send an employee to collect payment, disconnect service, or reconnect service.

10. Can the cooperative require a member to post a security deposit?

Yes. Unpaid closing bills represent losses to, and added cost for, members of JCEC whose payments for service provide the revenue by which the cooperative meets its obligations. As a means of protecting the interest of all members of the cooperative, a security deposit may be required as a condition of service. Also, an increase in the amount of the security deposit may be required where there is a history of unpaid closing bills or a history of writing checks not honored by the bank. Jerome Zakrajsek

11. Do past due bills cause the cost of service to go up?

Yes. They hurt the financial condition of the cooperative in two ways. First, the collection and reconnection fees do not always cover fully the expenses caused by past due bills; therefore, any uncovered expense is paid by all JCEC consumers as part of the cost of operating the cooperative.

Second, if a past due bill remains unpaid, it becomes an operating expense which reduces yearly operating margins. When margins become dangerously low, rates must then be increased to keep the cooperative financially sound.

If you have any questions concerning bills or JCEC billing procedures, please call the office between 7:30 a.m. and 4 p.m. weekdays (except holidays). The number is 800-858-5522.

Properly used dishwasher actually saves energy

Studies show the dishwasher actually can 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 running the dishwasher.

The amount of energy used in washing dishes largely is 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 by rinsing dishes before loading them into the dishwasher.

A properly operating 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.

- Do not operate dishwasher between 5-7 p.m. on very cold winter days.

Office hours

7:30 a.m. to
4 p.m.

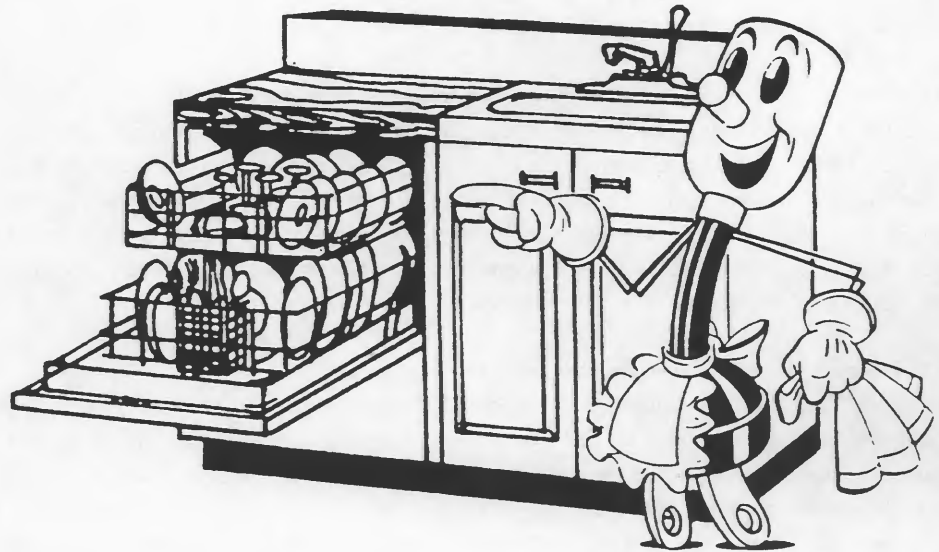
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1-800-858-5522,
after hours call
1-800-927-5254.

Reader prize

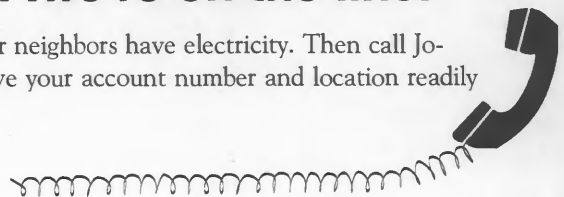
Each month we print the name of a Jo-Carroll member who is eligible to win a monthly \$25 readership prize. If your name is printed in this month's edition, and not a part of any story, contact Jo-Carroll and claim your prize no later than the 10th of the month following publication



When your power is out . . . we're on the line!

Check your circuit breakers or fuses. If possible, determine if your neighbors have electricity. Then call Jo-Carroll Electric's Outage and Emergency Report Line. Please have your account number and location readily available so we may restore your service quickly.

Local calls — dial 858-2207
Outside Elizabeth — dial 1-800-927-5254



Jo-Carroll Hi-Lines⁴⁴

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

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, Jo-Carroll Electric needs access to 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. **Walter Lester**

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 Jo-Carroll for more details at (800) 858-5522.

Our meter readers

Through rain and storms, heat, snow, sleet and below-freezing temperatures, our meter readers diligently record your meter readings each month.

We salute our meter readers:

Timothy Elliott
William Huedsch
Kenneth Muchow
Rita Curtis
Jeanette Wienen
Betty Cogan
Tom Schwartz
Gordon Smith
Roger Schlichting
Mark Swalve
Russell Deliberto
Randy Appleby
Lavern Grebner
Joan Schoenfeld
Paul Rath
Shirley Moothart
Richard Foecking



Members: —please!

Help our meter readers so they can accurately record your readings each month. Keep the area around your meter mowed and free of other debris. If bushes are growing near the meter, please trim them so our readers can find the meter. Also, don't tie your dogs near the meters. Our meter readers are trained to read meters—not run an obstacle course!

Enviro-Watch

Monitors building environment conditions

Automatically reports alarm condition

User status light and test mode

No field programming

Plug-in installation

Alarm Functions:

- Power outage
- Power return
- Freeze-up warning
- Option input 1
- Option input 2

Suggested Optional Devices:

- High temperature
- Water on the floor
- Smoke detector
- Gas leak detector
- CO (carbon monoxide sensor)

NOTE: Because there are only two optional input ports does not mean this unit is limited to two sensors. The sensors can be tied in series, Enviro-Watch is simply indicating two types of alarms.

Office hours

7:30 a.m. to
4 p.m.
Monday through
Friday

Outages and emergencies

During hours call
1-800-858-5522,
after hours call
1-800-927-5254.

Reader prize

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Our new Enviro-Watch Protects Your Home When You Can't

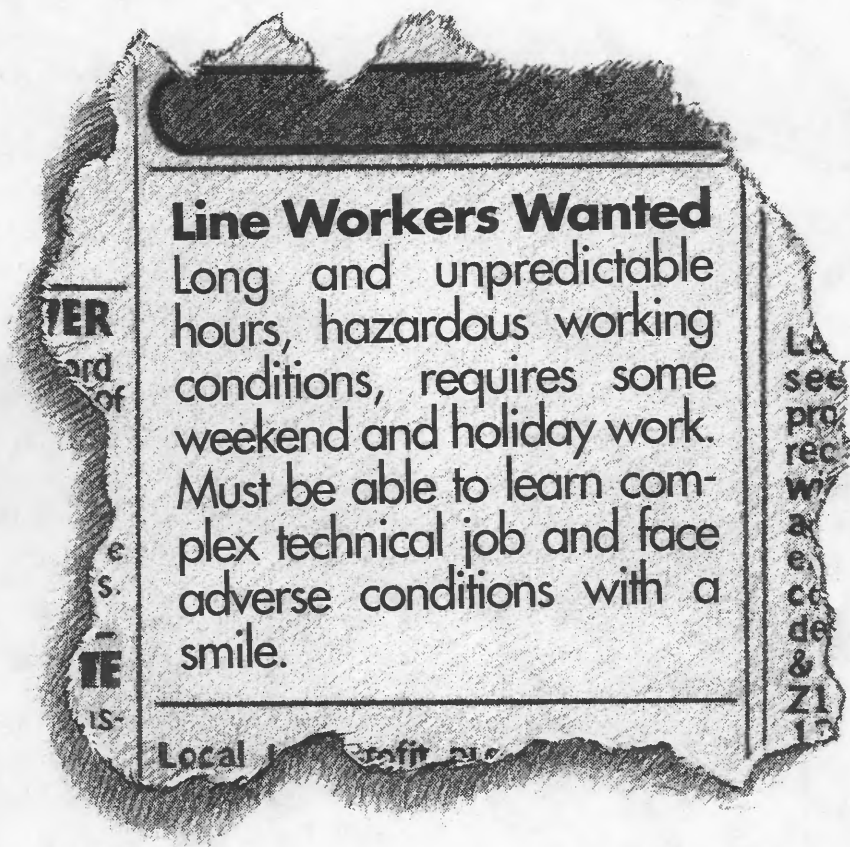
Monitors power outages and low temperature. This new plug-in monitor will automatically call the Response Center if your power goes off or if the temperature gets below 42 degrees. The Center's operator will immediately call one of your listed contacts to correct the situation for you.

The Enviro-Watch is inexpensive and easy to install—just plug it into a telephone jack and an electrical outlet. (A 240 volt hard-wired terminal is also available).

PLUS, the following add-on environmental monitors are also available: hi-low temperature, smoke detector, carbon monoxide detector and water sensors.

For more information contact:

Carol A. Callahan
Jo-Carroll Electric
793 U.S. 20 West
Elizabeth, IL 61028
(815) 858-2207
Toll-free: 800-858-5522



Fortunately, there are people who actually love a job like this.

You'd think a job description like this would scare people off, wouldn't you? But it doesn't. In fact, these very demanding jobs attract some very dedicated people. People who understand the importance of keeping electricity in your home or business. People who know that they'll be out in the middle of the night in a driving snowstorm. People who just seem to be born with a desire to do more than just have a job. We'd like to thank our line workers for their hard work and dedication. And if you agree, give them a thumbs up when you see them at work. Your appreciation is a big reason they take such pride in a very tough job.



Jo-Carroll Electric Cooperative, Inc.

Rooted in Our Communities

Look up and be safe!



This time of the year most people are outside enjoying the nice day...cleaning up, making home improvements, getting into the fields or just enjoying the nice weather.

Whatever takes you outdoors this spring, remember to look up and be safe! Electric lines, both overhead and underground, can be deadly!

Whether you're moving tall farm equipment, flying kites, cleaning gutters or planting trees, be aware of the electric lines in the area. Jo-Carroll Electric Cooperative, your member-owned utility, wants you to be safe and sound this spring. Electricity is a wonderful, often taken for granted servant. But remember not to take those electric lines for granted—they can be deadly!

Look around!

Watch the overhead power lines in the farmyard and near the fields! These lines carry deadly, high-voltage loads. Any contact between the lines and augers, combines, antennas or other equipment might be deadly.

Don't fly kites. . .

. . .near power lines. Spring is ideal kite-flying weather, but keep those kids and kites away from the utility lines. Electric lines and kites form a deadly combination! **Wayne Grant**

Call before you dig!

Putting in a brand new garden or planting trees this spring? Be sure that you don't plant or dig near underground power lines. You might be shocked to find buried cables by accident. If in doubt, call Jo-Carroll Electric Cooperative to find the location of underground lines in your area.

Look up around the home or farm!

When you are carrying metal ladders, long boards, pipes or poles, remember to be on the alert for any utility lines in the yard. When you're on the roof making repairs, cleaning gutters or working on an antenna, be alert for any power lines within reach.

During emergencies. . .

. . .stay clear of fallen electric lines. Call your electric cooperative immediately! Never assume that a fallen power line is dead!

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman



Connie Shireman, president of Jo-Carroll Electric Cooperative, is shown here with three area men who were re-elected to the cooperative's board of directors. From her left are Rodney Fritz of Mount Carroll, Vernon Law of Savanna, and Richard H. Reusch of Elizabeth. The election was conducted in mail balloting before the cooperative's 58th annual meeting held Saturday, March 8, at River Ridge High School, Elizabeth. The directors re-elected Reusch as chairman and Fritz as vice chairman.

Members told at annual meeting: major changes coming

Even as state and federal legislators are wrangling over deregulation of the electric utility industry, Jo-Carroll Electric Cooperative, Inc., is preparing a strategic plan to ensure that we will remain the first choice of our members for service, members learned at the 58th annual meeting Saturday, March 8. **John Gries**

Also at the meeting, held at River Ridge High School, Elizabeth, members learned that three directors were re-elected in mail balloting to three-year terms on the cooperative's board of directors. Re-elected were Richard H. Reusch of Elizabeth, Rodney A. Fritz of Mount Carroll, and Vernon Law of Savanna. After the meeting, the directors met and re-elected Reusch as chairman, Fritz as vice chairman, Leonard Ricke of East Dubuque as secretary and John W. Janssen of Chadwick as treasurer. Also serving on the board are David Hughes of Elizabeth, J. Don Crawford of Hanover, Tom Lundy of Savanna, and Bruce Strohacher of Apple River.

Connie Shireman, president, then explained to members that deregulation, or retail wheeling, will allow customers to select their source of electricity, while Jo-Carroll Electric Cooperative will continue to own and maintain the lines through which the power flows.



Clockwise from left: A young member with his plunder. Members register for the meeting. Delta provided musical entertainment. Members prepare to tear into their lunches. A tired youngster naps.

"You will have the choice of purchasing power from us or to buy from someone else," Shireman said.

While the co-op's charges for expenses, energy purchases, member service programs, etc., now are lumped together into one price, Shireman said deregulation will mean that customers will receive bills with charges that are "unbundled," or broken down, much like their telephone bills are now.

"Your local fee would be Jo-Carroll's distribution cost," she said. "Your long distance fee on your telephone bill would be similar to your energy charge."

Shireman said members also could expect to be wooed by other power suppliers. "Yes, your dinners will be interrupted by people calling you and trying to encourage you to change from one power supplier to another. Currently there are over 200 power marketers in the United States. So instead of just having MCI, Sprint, and AT&T call, you could have as many as 200 electric power marketers calling you," she said.

In order to better serve Jo-Carroll Electric Cooperative's members, and to make sure they will want to continue buying their power from the member-owned cooperative, Shireman said the board of directors and employees are developing a plan that emphasizes local service.

"Our board and employees have been very concerned over retail wheeling and what it will mean to our consumers. We are concerned that the large

power purchasers will purchase all of the cheaper energy in the Midwest and leave the higher cost electricity for the small users, such as you and I," she said. "We want to protect the interests of the smaller user like you and others that Jo-Carroll serves."

While other electricity providers are talking about mergers and layoffs, the employees and directors of Jo-Carroll Electric Cooperative believe that bigger is not always better.

"Jo-Carroll is committed to be here for our members. Our motto will be: "Keep our rates competitive and provide service, service, service," Shireman said. "We believe that our presence in the community will make a difference."

Shireman noted Jo-Carroll was formed in 1939 as a cooperative—locally owned and controlled as it continues to be.

"It was the grassroots efforts of some of our members here today that started us and it is this grassroots philosophy that we plan to adhere to. We will be here for you. We plan to work harder and better. We are you. You have a voice in your co-op by the people whom you elected as board members," she said.

"Since 1939, when the cooperative seed was planted, Jo-Carroll has been here for you. As a tree matures and grows, so has your cooperative. Though our branches must bend with

retail wheeling coming, the roots of this cooperative are deeply rooted in our community. Jo-Carroll will be here for you."

Shireman also gave a slide presentation depicting her visit a year ago to China, where she participated in a conference sponsored by the Chinese ministry of electric power, and honored load-management technician George Nardin for his 25 years of service to the cooperative.

Jo-Carroll Electric Cooperative serves more than 5,500 service locations on 1,069 miles of energized line in Carroll, Jo-Daviess and Whiteside counties.

Learn the four Rs of electrical safety

Each year thousands of people are injured or die from electrical fires and electrocution. An estimated annual average of 155,000 residential electrical fires claim more than 700 lives, cause 6,800 injuries, and result in over \$1 billion in personal property damage each year.

Jo-Carroll Electric Electric, as part of an overall effort to reduce these accidents, has joined forces with the National Electrical Safety Foundation in a public education program to raise the awareness of electrical safety.

In May, the National Electrical Safety Foundation kicks off National Electrical Safety Month to remind citizens about the **four Rs** of electrical safety:

- **Respect** the power of electricity.
- **Read** and follow the operating instructions that come with every electrical product.
- **Replace** worn or frayed electrical cords.
- **Relocate** appliance cords so that grown-ups won't walk on them and children can't pull on them.

You can provide help to the success of National Electrical Safety Month by practicing electrical safety habits.

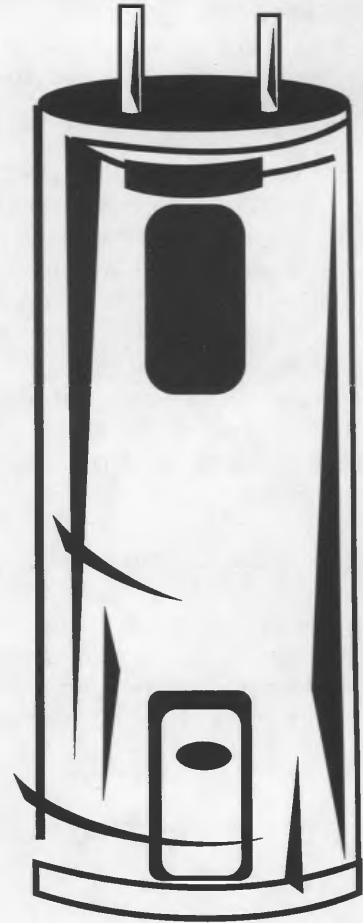
Jo-Carroll Electric is proud to be an integral part of moving this important initiative forward to promote and increase the awareness of electrical safety.

Notice of closing

The offices of Jo-Carroll Electric Cooperative will be closed Monday, May 26, in observance of Memorial Day. Enjoy your holiday!

Call Jo-Carroll Electric today and get a FREE 52-gallon electric water heater!

Would you like to replace your old gas water heater? Are you building a new home? Call JCEC today and get set up with a FREE 52-gallon electric water heater and participate in our special Choose and Save Program!* The Choose and Save Program gives you our best electric water heating rate and five years of maintenance on elements and thermostats. Enjoy the clean, safe, efficient comfort of an electric water heater with an efficient price!



**Jo-Carroll Electric
Cooperative, Inc.**
793 U.S. Route 20 West
P.O. Box 390
Elizabeth, Illinois 61028-0390

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*Restrictions apply. The special program includes the 52-gallon electric water heater only, a 5-year minimum usage at a location served by JCEC. one per resident, must participate in the Choose and Save Program, and must be installed within 30 days. Installation available at member's expense (including plumbing, electrical work, and disposal of the heater being replaced). If self-installed, a JCEC employee will check the installation. Ten-year warranty on water heater tank and five-year warranty on all other parts.

When your power is out . . . *we're on the line!*

Check your circuit breakers or fuses. If possible, determine if your neighbors have electricity. Then call Jo-Carroll Electric's Outage and Emergency Report Line. Please have your account number and location readily available so we may restore your service quickly.

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Outside Elizabeth — dial 1-800-927-5254



Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

Light right to save money

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

Indoor lighting

- Turn off lights in any room not being used.
- Light-zone your home and save electricity. Concentrate lighting in reading and working areas and where it's needed for safety (stairwells, for example).
- To reduce overall lighting in non-working spaces, remove one bulb out of three in multiple light fixtures and replace it with a burned-out bulb for safety. Replace other bulbs throughout the house with bulbs of the next lower wattage.
- Consider installing solid state dimmers or high-low switches when replacing light switches. They make it easy to reduce lighting intensity in a room and thus save energy.
- Use one large bulb instead of several small ones in areas where bright light is needed. **Earl Meyer**
- 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 and 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 bulb 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

continued on page 16c...



Much of the new line is in the private right-of-way. Notice that the conductors have not been brought to full tension and are sagging.

New power line at Jo-Carroll

During the past winter months, a contractor working for Jo-Carroll built a 6.5 mile high capacity electric distribution line in northern Jo-Daviess County.

The line replaces several sections of old worn line from the early days of the cooperative as well as several miles of rapidly failing underground cable from the 1970s. It is being constructed by the Superior Line Construction Company of Appleton, Wisconsin at a cost of \$310,000.

As well as replacing unreliable sections of line, the new construction is being built with larger conductors that are capable of carrying more power than the old lines.

The new line will be used to tie the Scales Mound Substation to the Canyon Substation to create a loop in order to improve service to a wide area. Jo-Carroll line workers will now have the ability to deliver the power from either direction, Scales Mound or Canyon, which can be critical in the event of a line fault such as a downed line or pole.

Although it has a very low density, the Jo-Carroll system covers over 1,100 miles of rugged terrain, and the ability to send power in either direction of the loop can be critical during outages. Under the right circumstances, a substation can even be taken out of service without interrupting the flow of power to our members. For example, the new line will make it possible to tie the Elizabeth Station to Scales Mound if the Canyon Station should fail.

The project is scheduled to be complete in May.



This section of line, shown here before the wire is strung on the poles, is along Mill Creek, and it will replace a section of underground line that was no longer reliable.



Superior Construction Company equipment at work-notice the heavy conductor that will be important to insure reliability.

Electric water heaters safer than gas

According to a study by the National Fire Protection Agency, heating water with electricity is seven times safer than heating with gas (manufactured natural gas). The agency found that gas water heaters cause seven times as many home fires as electric water heaters!

Some additional reasons why you should have an electric water heater:

- ➡ Electric water heaters can be placed virtually anywhere because there is no need for a flue or a vent.

- ➡ Electric water heaters do not create heat from burning something. There are no products of combustion, no danger of explosion from gas leaks, no threat of carbon monoxide poisoning, and indoor air quality is not compromised.

- ➡ Electric water heaters do not require the purchase of carbon monoxide alarms.

- ➡ Electric water heaters require less maintenance because there is no pilot light, no vent, no flue nor a heat exchanger that can corrode.

- ➡ Electric water heaters have more insulation than most gas models because they can be insulated on all sides - including the top and the bottom.

- ➡ Electric water heaters are more efficient than gas. The electric heating elements are in direct contact with the water so they are 100 percent efficient, while a gas water heater loses 40-60 percent of its heat up the flue.

- ➡ Jo-Carroll Electric will give you up to \$125 cash toward the purchase of an electric water heater.

- ➡ Jo-Carroll Electric offers free electric water heaters to our members who allow us to control them.

- ➡ \$3 monthly rebate is available for all controlled electric water heaters.

Air conditioning rebates available

If the summer heat has been more than you can tolerate and you are ready to purchase a central air conditioning system, remember that your electric cooperative offers rebates on high efficiency units. You can purchase your air conditioner anywhere. All we need to process your rebate is a copy of your sales slip showing the brand, model, SEER rating, size of the unit and installation date.

The higher the seasonal energy efficiency rating (SEER), the less energy the unit uses.

A unit with a SEER of 10 is a standard unit today, while only a few years ago SEERS of 7-8 were common. A SEER of 11 uses about 10 percent less energy than the standard SEER 10 model.

Rebates are available for SEER ratings of 12 or higher.

SEER 12 = \$40 per ton rebate.

(12,000 BTUs cooling capacity).

SEER 13 = \$50 per ton rebate.

SEER 14 = \$60 per ton rebate.

These rebates for central air conditioning remain in effect through 1997.

Light right to save money continued from page 16a...

artificial light required.

- ➡ Jo-Carroll has rebates for energy efficient lighting.

Outdoor lighting

- ➡ 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.

Jo-Carroll Electric will be closed May 26th for Memorial Day

Office hours

7:30 a.m. to
4 p.m.
Monday through
Friday

Outages and emergencies

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The Figures Don't Lie!

Figures from the U.S. Department of Energy and the U.S. Department of Agriculture on federal financing of electric utilities (see the box below) show that electric co-ops receive the least amount of federal monetary assistance per consumer than either the investor-owned or municipal utilities.

The assistance to co-ops is in the form of a **lower-than-market interest rate on loans**. The bonds of municipal utilities are tax exempt. Investor-owned utilities keep the federal taxes they collect from their customers which amounts to interest-free loans.

Federal Assistance To Electric Utilities

Rural electric co-ops

1. Number of systems.....	915
2. Total RUS loans outstanding.....	\$11,698,818,000
3. Annual cost to gov't (7.27% minus 4.40% RUS rate)	\$347,455,000
4. Total customers	11,482,000
5. Assistance per customer	\$30.26

Investor-owned systems

1. Number of systems.....	254
2. Total retained taxes	\$76,607,781,000
3. Annual cost to gov't (at 7.37%)	\$5,645,993,000
4. Total customers	87,560,000
5. Assistance per customer	\$64.48

Municipal (city-owned) systems

1. Number of systems.....	503*
2. Tax-exempt bonds outstanding	\$77,480,231,000
3. Total interest paid	\$4,440,943,000
4. Annual cost to gov't (24% tax rate times interest)	\$1,065,826,000
5. Total customers	13,333,000
6. Assistance per customer	\$79.94

*503 out of 2,005 reported statistics to DOE

SOURCE: U.S. DOE, USDA

Please don't post signs on electric poles

This time of the year many people begin to think about putting up signs for the upcoming elections, for garage sales, or no trespassing, etc. We request that you do not attach signs, fence wires, or anything else to our poles.

When there is a need to climb a pole, linemen use climbing hooks (gaffs) which dig into the pole about a half-inch. If the hook strikes a nail and is deflected, it is possible a fall may occur. Even if there is no problem climbing the pole, the nails and wires can snag a lineworker's insulated glove increasing potential for electric shock injuries while he is trying to restore your power. So, for safety sake, please do not attach anything to our poles or equipment.

When your power is out . . . we're on the line!

Check your circuit breakers or fuses. If possible, determine if your neighbors have electricity. Then call Jo-Carroll Electric's Outage and Emergency Report Line. Please have your account number and location readily available so we may restore your service quickly.

Local calls — dial 858-2207

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Jo-Carroll Hi-Lines⁴⁴

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

Reliable power supply

**Dairyland
Power has the
resources to
meet our
energy needs**

There has been substantial coverage in the media about potential energy shortages in eastern Wisconsin and northwestern Illinois during the next few months. About one-third of the region's nuclear generating capacity is temporarily out of service due to a series of maintenance outages. This includes two nuclear generation facilities in eastern Wisconsin (Kewaunee and Point Beach) and several nuclear units in northern Illinois. This situation makes eastern Wisconsin electric utilities more heavily dependent on imports to meet energy needs.

"Let me assure you that Dairyland has adequate resources to reliably serve our customers, including Jo-Carroll," says Bill Berg, Dairyland Power Cooperative general manager. "In addition, Dairyland and our member-owners stand ready to assist the utilities in the eastern part of the state to the degree that we are able, and believe our efforts can contribute to mitigating the problem."

"Dairyland has taken steps to ensure its generation resources beyond our customers' needs are available to assist utilities in need," Berg adds. "We have also made sure our transmission lines are in top condition to enable the transfer of electricity to eastern utilities."

Dairyland Power is a member of the Wisconsin Reliability Assessment Group, which includes transmission planners and operations staff from the Wisconsin utilities. This group has assessed the impact of these circumstances on the utilities' abilities to reliably provide for the needs of all of the state's consumers.

The electric utilities of Wisconsin say that, given the present circumstances, the needs of the state can be met. However, additional power plant or transmission outages or heavily increased demands in the eastern part of the state could result in voluntary or mandatory outages for customers in that area.

"It has been determined that such load curtailment of Dairyland's customer base on the western side of the state would not benefit the situation to the east," Berg says. "Therefore, we are planning no load curtailment as a result of these present conditions. We will continue working to ensure our member cooperatives have reliable generation and transmission resources."

Dairyland is one of 88 members in the Mid-Continent Area Power Pool (MAPP) which fully expect to meet the summer peak load requirements in the MAPP region. MAPP is an association of electric utilities doing business in the Upper Midwest. The MAPP Reliability Region includes Minnesota, Iowa, North Dakota, Nebraska, western Wisconsin, parts of Montana and South Dakota, Manitoba and Saskatchewan. Approximately 16 million customers are served in the MAPP region.

MAPP also has been meeting with representatives from the Mid-American Interconnected Network (MAIN), the region east of the MAPP region, about the possible supply shortages MAIN utilities face this summer. In response, MAPP has engaged in several activities to ensure the maximum amount of transfer capability is available to move energy into eastern Wisconsin.



Notice of closing

**Jo-Carroll Electric Cooperative will be closed Friday, July 4,
in observance of Independence Day.**

Enjoy your holiday!

The Woodchuck

Al Handfelt grew up on a dairy farm near Menominee. He was always handy with machinery, and he repaired things around the farm himself whenever possible. At one point he rebuilt an old sawmill to saw fence lumber to fix the fences for the home farm. It wasn't long before neighbors and friends would ask him to do a little sawing for them in his spare time.

Soon, word got around the area, and local people would bring various projects that needed custom sawing out to his place. After a time, he found he could fill his evenings and weekends with saw work. In the fall of 1988, he made the decision to work with wood full time and he established The Woodchuck.

Al chose to locate his new business at the site of an old played-out quarry. Jo-Carroll extended the three-phase power line and first energized the service in December 1988. The business started slowly, doing a small volume of the types of jobs that he had been doing on the farm, working mostly by himself.

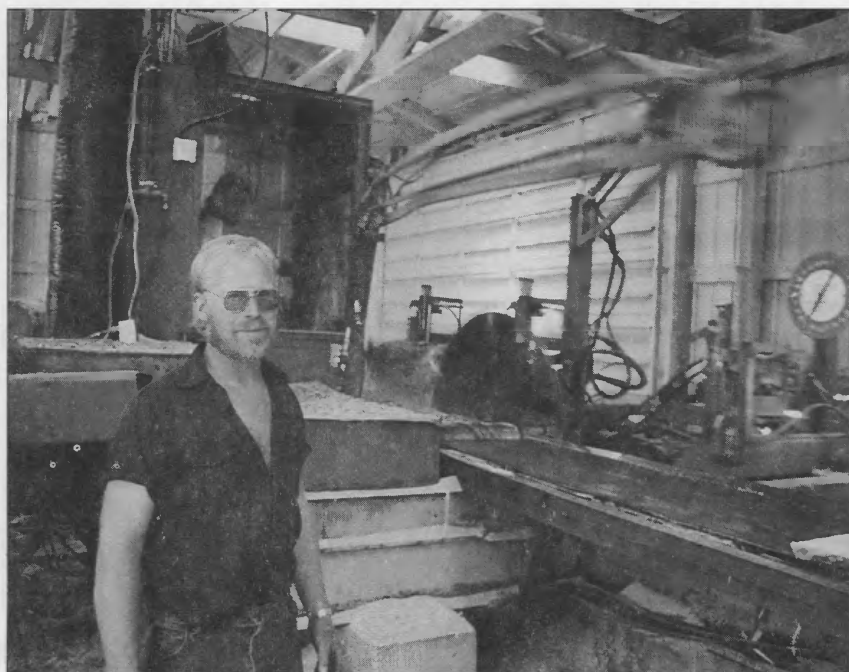
Now, less than ten years later, Al has seven full-time and three part-time employees, and plans to have a total of 18 full-time employees before the year's end.

On an average day, the operation will take about three semi-truck loads of raw timber logs from local forests, and mill it into about one semi-truck load of finished lumber.

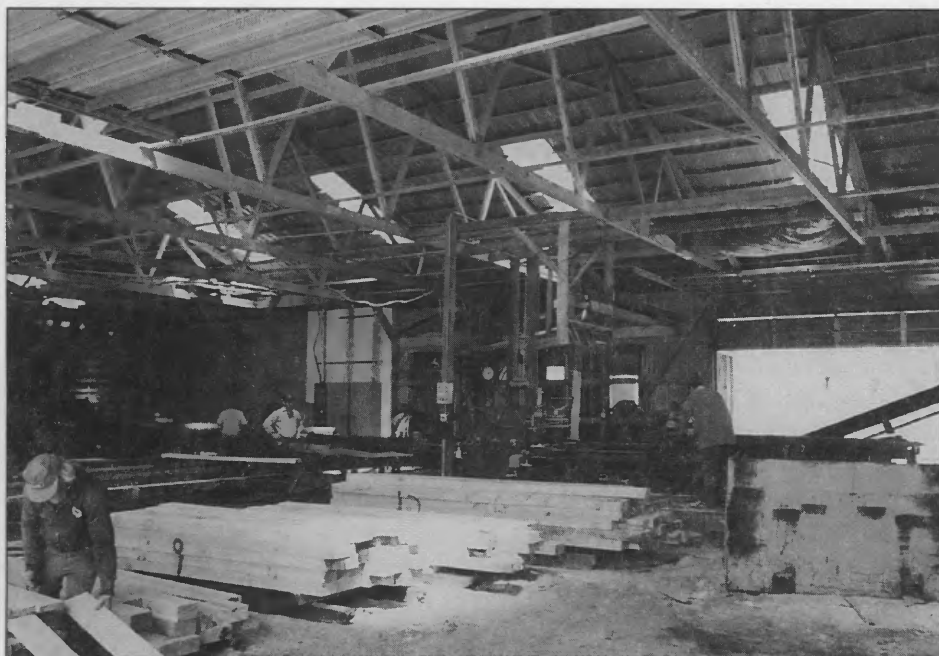
The majority of the logs are hardwoods like oak, elm, ash and hickory, and these are milled into finish-grade lumber that is used for making cabinets, flooring and general lumber for building. The finished wood is sent to be kiln dried locally, and much of the output of Handfelt's mill ends up being used to build local homes.

In most raw material operations, some part of the original material is lost. In this case nearly every tiny bit is used. Some of the lesser grades of wood are milled and sent to a company to make pallets. The bark is peeled off and ground into bark mulch. The rounded edges of the logs are cut off and sold as both block and slab firewood. Everything else is chipped and sold as wood chips for landscaping.

Al Handfelt pauses from his work to have his picture taken with some of the equipment he uses to turn rough logs into finished lumber. ▼



▲ Jo-Carroll Electric ran three-phase power into The Woodchuck in December, 1988, to provide the necessary power to get the sawmill running.



◀ Al's large, well-equipped lumber mill has seven full-time and three part-time employees, and converts about three semi loads of logs into about one truckload of finished lumber each day.

Al explained that "timber is a harvestable crop, just like corn or beans. When the trees get over about two feet in diameter, they are mature and need to be harvested to keep the forest healthy." He characterized wood as, "one of the most important renewable resources that we have and none of it goes to waste here."

Al builds most of his own machinery, in order to design the best way to do the various jobs. For example, he recently put together an assembly-line like device that will bring the leftover pieces of raw wood and the slab wood on to a conveyor belt where it can be sized and separated into small bundles.

These bundles will be shrink-wrapped with a fiber handle attached, making a clean, easy-to-transport bundle of firewood. These will be marketed to campgrounds, second homes and convenience stores for people who use less than truckload amounts of fire wood. **Paul Wurster, Jr.**

The Woodchuck is located on North Main, near East Dubuque, Illinois, about 1.5 miles north of Highway 20 on the west side of the road. They are open to the public each day through the week for firewood or mulch and wood chip sales.

Al also has some finish lumber for sale, and of course, continues to operate his custom milling for people who have lumber that needs worked or special wood for a specific project. The Woodchuck's phone number is (815) 747-2428.

Al is a third generation member of Jo-Carroll Electric Cooperative. "My father and grandfather both operated dairies for years and they found out how much work was saved having Jo-Carroll bring electricity out to the country. It's the same with a mill, you use a lot of power and you save a lot of work.

"Jo-Carroll was very helpful when they extended the three-phase out to my business ten years ago and they are back again to help me now that I've grown and need to upgrade my service to 600 amps."

This large pile of leftovers from the milling process will still yield a lot of useful wood. Some will be used to make pallets, while more will go into shrink-wrapped packages for sale as fireplace wood. ▼



Make your home electrically safe

Here are ten simple ways to help you use electricity more safely around your home.

1. Put safety covers on all unused wall outlets so children can't explore them with tiny fingers. Replace any broken wall plates.
2. If cords are frayed or cracked, replace them. Never nail or staple cords to the wall or floor. Keep furniture off cords, even if they're hiding beneath carpet.
3. Extension cords are meant to be used temporarily. It's not safe to use them as permanent household wiring.
4. Use three-prong plugs in three-prong outlets. Never cut the third prong off to fit into a two-prong outlet. Don't force plugs into outlets if they don't fit easily.
5. Install ground fault circuit interrupters in bathrooms and kitchens. They help prevent electrocutions where water and electricity might meet.
6. Make sure your light bulbs are the proper wattage for the fixtures they're used in. If you don't know the proper wattage (lamps and light fixtures often have it stamped or etched-in), check with the manufacturer.
7. Circuit breakers and fuses should be of the current sizes for your circuit. If you're not sure, call Illinois Rural Electric Co. or an electrician.
8. Keep water away from appliances. If you dry your hair in the bathroom, unplug your dryer when it's not being used. If it gets wet, unplug it and have it checked by a qualified repair person.
9. If an appliance consistently trips a circuit or if it shocks you, get rid of it.
10. Protect yourself and your computer and entertainment equipment. Look for cracks in wiring, plugs and connectors.

Be careful with hand-held hair dryers

With tens of millions of hand-held hair dryers in use, they present a real danger near water—especially older models. In fact, these small dryers can be deadly when accidentally immersed in water. Between 1977 and 1990, the U.S. Consumer Product Safety Commission (CPSC) received reports of more than 200 deaths associated with hair dryers around water; more than 50 percent of the deaths involved children under age 10.

Fortunately, manufacturers of nonprofessional hair dryers have made major changes in safety standards, and since early 1991, dryers are much safer. So, if you purchase a new model, it should have a miniature shock protector. Or, you can make an older dryer safer by installing a ground-fault circuit interrupter (GFCI) in the circuit where you usually plug it in; you will have immediate protection against electrocution or severe electrical shock injuries.

CPSC offers the following suggestions for the use of hand-held hair dryers:

- Never use a dryer in the bathtub; when standing on a wet floor or with wet hands.
- Never leave a dryer plugged in when not in use.
- If using near a sink, drain the sink of water before plugging in the dryer.
- If dropped into water while the plug is attached to an outlet, be sure to unplug the cord first before touching the dryer or the water.
- If the dryer falls into water, don't use it again until it has been inspected at a service center.
- Keep dryers out of reach of young children!
- Never store a plugged-in hair dryer on a rack or shelf over a sink or bathtub.
- Don't poke hairpins or wires through the heating element's protective grillwork.
- Never set the hair dryer down when it is operating.

Reader prize

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Local calls — dial 858-2207

Outside Elizabeth — dial 1-800-927-5254



Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

**Commentary
of Paul Simon
on Illinois
Public Radio
March 5, 1997**

**Basic human
needs**

This commentary is a mini-protest that will not change anything, but it will get something off my chest that aggravates me. I applaud most of the new technology that brings sweeping changes to our offices and through computers gives me information in minutes that in the pre-computer age would take me months to accumulate. I love it when I am in a remote village in Portugal and I can get cash out of a machine in 60 seconds with an ATM card given to me by a bank or credit union here in the United States. I don't understand how it works, but I know that it works, and it is a great convenience.

But when I place a phone call to an office and a recorded voice on the other end tells me, "Thanks for calling our company. If you know the extension of the person you are calling please dial that now." Well, I don't know the extension or even the name of the person to whom I want to talk. I just want some information. The recorded voice continues, "If you want the design department, dial 1, if you want to reserve time to discuss making a bid, dial 2," and so the voice continues through the first nine numbers, but none of the nine is exactly what I want, so out of frustration I take a chance on something that sounds like it might be close, and then the line is busy. I have wasted what seems like two minutes.

I sympathize with Napoleon when he told one of his officers, "You may ask for anything you like except time." I feel like sending a bill to the company. I make a mental note that if I ever have enough money to buy stock, don't buy it in this company. It has to spend too much time for public relations to calm down people like myself whose time they have wasted. There ought to be a special award for businesses and law offices and physicians' offices and schools and hospitals and assorted entities that have a real live human being answering the phone and asking in a pleasant voice, "May I help you? I feel like responding, "You already have."

So here's a toast to the various business and professional phone listings that have a warm, human body who talks to us. May your diminishing tribe survive and perhaps even grow someday. Your service to humanity is huge compared to the minor miracle of cloning sheep.

To Feel. . .

Welcome, comfort, important and appreciated

To Be. . .

Understood, respected, recognized and remembered

To Receive. . .

Orderly and timely service

When basic human needs are violated
then an issue or complaint arises.

Complaints are our friends! We need to know if we are pleasing those who depend on our services. . .we especially need to know if and when we're not!

Materials presented at Complaint and Conflict Resolution Workshop
presented by Bill Barrick and sponsored by the
Galena Area Chamber of Commerce.

The "Blinks"

Overhead and underground electric lines are susceptible to the "blinks." Jo-Carroll Electric has a network of over 1,000 miles of line. This network is divided into sections called distribution feeders. The feeders are protected by devices that interrupt the power when a fault occurs on the line. The device will turn the power back on after a short period of time. If the fault is still present, the device will again turn the power back on after a short period. If the fault is still present, the device will operate again. If the fault is clear, the device remains closed and the power stays on. When these operations occur, they cause the "blinks."

The causes are many

Faults may be caused by several problems. Lightning damaged equipment, tree limbs making contact with the line, animals touching energized conductors and equipment, and loose connectors are just some of the reasons these faults occur.

During storm season, distribution feeders are hit by lightning numerous times. Insulators, switches, transformers and other line equipment are exposed to high voltage surges caused by lightning strikes. Lightning arresters are installed to protect the equipment. Lightning puts an enormous amount of stress on the arresters and line equipment.

An example of a problem would be an insulator slightly damaged during a storm. The damage at the time of the strike would be small and the line would operate normally. A month or two later, regular operating stress may break the insulator down. The line then starts to blink occasionally.

Miles of line and hundreds of insulators

There are approximately 600 insulators on a distribution feeder. The average length of a distribution feeder is 20 miles. This includes all branch taps and services. Each insulator has to be inspected to be sure it has not been damaged. Arresters, switches and transformers are also damaged in much the same way and require inspection. The damage may be very hard to detect visually and can require many hours of manual inspection by our crews.

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Tree limbs

Tree limbs contact lines and cause "blinks." Jo-Carroll's forestry program operates year-round. Approximately \$180,000 is budgeted per year for forestry work. For the past three or four years, our service area has had ideal conditions for the growth of brush and trees. Ample rain early in the spring accelerates tree growth.

Animals

Animals can cause problems as well. Squirrels, raccoons, snakes and birds also cause many "blinks" on the system. Animals come in contact with conductors and the pole or other equipment at the same time causing a fault. Usually the equipment is damaged by the large electrical arc and the high current involved.

The demand for inexpensive solid state equipment is very high. To keep costs down, manufacturers do not provide battery backup. A small battery backup in a digital clock could stop the nuisance of resetting clocks, VCRs and microwave oven clocks. A one dollar capacitor would also help with the problem.

Electronic equipment

Adjustable speed drives on computers, dimmer switches or other electronic controls can cause computer "blinks." An electric coffee maker with a high starting current was found to be the cause of computer blinks when both were on the same circuit in a house.

In recent years, improvements in lightning arrestor technology have given electrical suppliers a dependable and economical tool to protect electrical equip-

ment. With the new technology, equipment will be better protected and decrease the problem with blinking lights. In 1990, Jo-Carroll began to use the new arresters. Results have been good and improvements can clearly be seen.

Forestry program

A comprehensive forestry program was initiated in 1990. Tree swap, tree removal, mechanical brush removal, ground treatment, year round basil treatment, low volume foliage spray and new trimming methods were all utilized. We continue to make good progress with our tree problems.

A member who doesn't want a tree trimmed may cause reliability and safety problems for many members down the line.

Karl Zerfoss, Jr.

Working together

We all need to all work together to solve these problems.

You can help us eliminate some of the outages caused by trees by allowing us to trim under primary lines. Planting trees under power lines costs the cooperative considerable time and labor. Always plant trees away from lines.

Animals cause many problems yearly. There were several members without power last year due to animals making contact with energized conductors and equipment. Animals making a slight contact with electrical equipment will cause the "blinks." Several products are on the market now that prevent some of these problems. Jo-Carroll uses some animal guard products. We are looking at more products that will improve and prevent more problems in the future.

Safeguarding solid state equipment, computers and household appliances can be accomplished by the member. Surge protectors that prevent lightning surges from entering the home can be purchased from Jo-Carroll at cost. Nothing is available that will protect your home from a direct strike, but small surges can be prevented. Computers should be protected independently with special surge protectors. A UPS system will prevent data loss. A separate in-house circuit for your computer could also help.

If you have "blinks," write down the date and time and call us. We monitor our substations and distribution feeders at the substations. The branch lines from the main feeder are not monitored. If you see problems in your area, call and let us know. Your call and information may help us track down the cause.



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Getting back on line

We have come to expect that if we lose electric service it will be restored within a few hours at most. But when a devastating event, like a tornado, ice or snow storm causes major damage to a co-op's system, longer outages cannot be helped. Crews work long, hard hours restoring service, but it's a task that needs to be done methodically to be done safely.

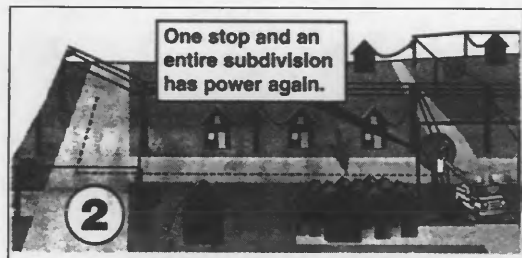
Every electric cooperative follows a basic principle when it comes to restoring power—priority goes to the lines that will get the most people back in service the quickest. This usually begins with main lines from the substations and continues out to tap lines and then to individual service lines.

A Major storm has just hit this electric cooperative system. Here's a simplified look at how your co-op typically goes about the task of restoring electric service.



Step 1: The substation is energized but a main distribution line is damaged near the substation, leaving most members without power.

All repairs start with the main line. A large number of members (shown with arrows) will have power returned once the main line is fixed. All other repairs would be pointless until this line is restored as it feeds all the other lines.



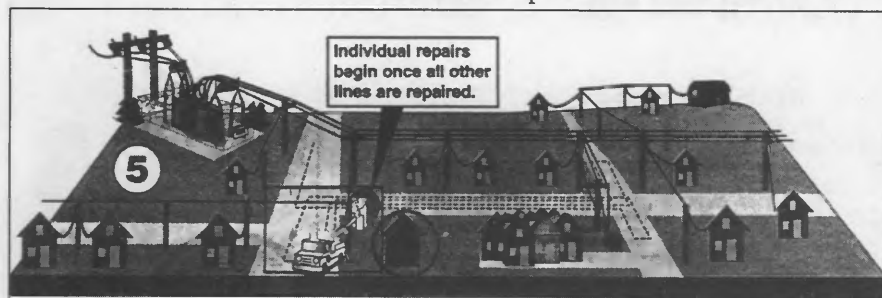
Step 2: With the main line restored the line crew can isolate other damage and prioritize repairs. Though a couple of repairs were closer, fixing the line that serves this subdivision down the road will get a larger number of consumers on more quickly.

Step 3: Moving back down the road to fix this tap line will restore electricity to the three homes marked with arrows.



Step 4: A smaller tap line serving a number of homes and the farm on the hill is next on the list for the line crew. The move probably doesn't make the folks in the lower left circled house too happy. They've seen the crew driving by their home and working right across the road. They see lights in homes of all their neighbors but they don't have power!

That's because even though electricity is coming to their pole (that happened with the first repair in Step 1), the service line from their pole to their meter is damaged. Individual repairs come after all distribution and tap lines are restored.



Step 5: Only after the tap lines are repaired does the crew start work on individual service lines. The crew has been past the circled home three times and could have stopped to restore power anytime after the first main line was repaired and electricity was flowing to the pole nearby. But it's not fair to other members for a crew to

spend hours fixing one outage, when the crew can move down the road and restore power to dozens of homes in the same amount of time.

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

MANAGER'S REPORT by Connie M. Shireman



Shireman

Chances are you rely on cooperative enterprise every day! Reading the paper or catching up on the news on TV or radio?

Most newspapers and broadcast facilities are members of the world's largest cooperative organization—the Associated Press.

The AP was formed to help local affiliates report on state, national, and world events at the lowest possible cost. Local newspapers, TV and radio stations cannot afford to maintain individual correspondents everywhere where news is made. Through the AP, news gatherers work together cooperatively, exchanging information and sharing in the expense of reporting the news.

Electric cooperatives work the same way.

Delivering electricity to sparsely populated regions is also expensive. The only way to provide power at affordable rate in these areas is through not-for-profit cooperatives similar to the AP. Each is a local customer-owned utility with members sharing in the expense of getting power. Electric cooperatives provide one of life's necessities to America's countryside.

...cooperatives for your every need.

Few people realize just how common cooperative free enterprise is. Sending flowers? FTD is your long-distance florist co-op. Hungry? Land O'Lakes, Ocean Spray and thousands of other companies are marketing cooperatives that help individual farmers get a better price for their product. Then there are cooperative insurance companies like Mutual of Omaha and Blue Cross Blue Shield, credit unions and food and product cooperatives.

Chances are you enjoy several good co-ops every day. Wherever the toughest jobs are, that's where you'll find us.

America's 960 electric cooperatives serve 30 million people in 46 states. Of these, 900 are distribution cooperatives and 60 are generation and transmission cooperatives, owned by their member distribution systems.

Enjoyed a
good co-op
lately?

Notice of closing

Our offices will be closed Monday, Sept. 1, in observance of Labor Day. We will resume normal operations on Tuesday, Sept. 2. Enjoy your holiday!



The cooperative difference

Today many electric cooperative consumers don't remember the first day electricity came to their homes. In fact, your electricity was probably already there when you moved in—one of those automatic things like the telephone line and running water.

The day you joined your electric cooperative you became a member of a unique organization. An electric cooperative is different. In fact, there are a lot of positive differences between receiving your electricity from a cooperative and receiving it from an investor-owned utility (IOU) or municipal utility.

The bottom line:

- Your electric cooperative is not-for-profit and consumer-owned, like the local credit union or farm supply cooperative. That means any revenue above expenses is eventually returned to the member (you) in the form of capital credit payments.
- Your electric cooperative is committed to providing the best possible service at the lowest possible cost. We take pride in our cooperative—a grass roots system of service started by pioneers like those who settled this area. Keeping the cost of electricity affordable helps keep local businesses competitive, while preserving our rural heritage and standard of living.

The board room:

- As a member of this electric cooperative, you have a direct voice in the operation of the cooperative. You elect the board of directors and vote on business matters at the annual meeting.
- The Directors and management at your electric cooperative have a genuine interest in you. After all, directors receive their electricity from the cooperative, just as you do.

The philosophy of service:

- Cooperatives were the first to serve rural areas. They were formed when IOUs refused to serve sparsely populated areas. Because IOUs are profit motivated, they didn't see the value of serving rural and suburban areas.
- Cooperatives are involved in our communities. We live here, too, and take an active interest in bettering our communities through involvement in local schools, civic clubs and business organizations.
- Electric cooperatives help each other out. Your electric cooperative is one of hundreds of cooperatives across the country providing electricity and other services to rural and urban America. When a major storm or other disaster forces an outage, neighboring cooperatives often come to the rescue, providing their equipment and personnel to help get the power back on fast.

Once in a while, electric cooperatives are taken to task for the low-interest loans received from the Rural Electrification Administration. This program was developed to provide funding for the high cost of constructing millions of miles of power lines needed to provide electricity to rural America. Today, these funds are essential to maintain those power lines and the equipment needed to serve new growth.

In truth, IOUs and municipal utilities receive far more subsidies than electric cooperatives. IOUs receive big tax benefits, and municipal utilities are allowed to raise capital by selling bonds that have tax-exempt interest.

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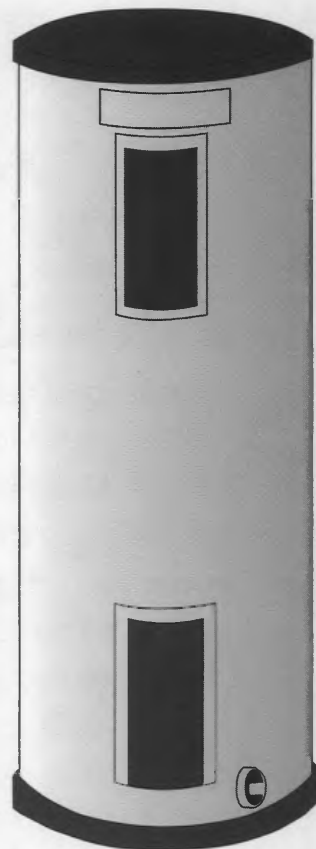
Call Jo-Carroll Electric and get a free electric water heater

***To qualify for free water heater
you must meet the following requirements***

- Have service with Jo-Carroll Electric Cooperative.
- Agree to have a load control installed on the new water heater.
- Have water heater picked up and installed within 30 days.
- Notify Jo-Carroll Electric that the water heater is installed and provide entrance to the home as soon as water heater is installed for installing control or inspection.
- After the inspection you will be charged \$1 to activate the warranty.
- A water heater credit of \$3 will appear on your electric bill each month that 100 kwh have been used.

If more information is needed
call Jo-Carroll Electric Cooperative

(800) 858-5522



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The Call To Care



As small children, we needed a blanket to feel safe and secure. As we grow older, we rely on our family for security. Now, you can use the First CallSM Personal Emergency Response Service to give you peace of mind, as well as

a feeling of safety.

The telephone and emergency pendant system put you just a button away from trained, professional operators ready to dispatch emergency help to you. This twenty-four-hour per day service is yours for just pennies a day. First CallSM is available from participating rural electric cooperatives and health care providers.

Join the thousands of men and women across America who are feeling safe and secure with First CallSM. Install the service in your home, or in the home of a loved one today, and enjoy peace of mind tonight.

First CallSM Personal Emergency Response Service

Jo-Carroll Electric Cooperative, Inc.

Jo-Carroll Hi-Lines⁴⁴

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

PRESIDENT'S REPORT by Connie M. Shireman



Shireman

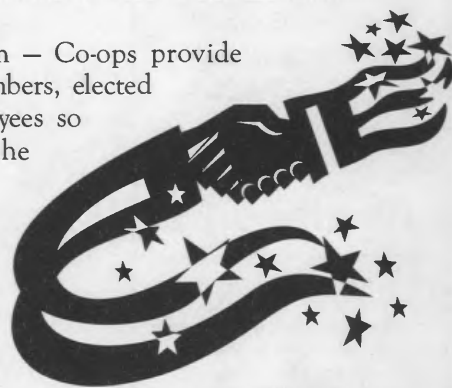
Toad Lane? Yep, your electric co-op is descended from a buyers' co-op that was located in a tiny store on that modest thoroughfare in Rochdale, England. It was formed in 1844, and known as the Rochdale Equitable Pioneers Society. Rochdale co-op members bought food staples in quantity and sold them to each other at low prices. The result was the first successful cooperative of the industrial era.

The Rochdale pioneers' idea was simply that a group of people could pool their resources to satisfy a common need that they couldn't satisfy any other way. But while co-ops got their start in England, they are a very important part of the American economy today. According to the National Cooperative Business Association, more than 100 million Americans belong to one or more of 47,000 co-ops.

There are three types of co-ops: producer-owned, consumer-owned and worker-owned. Electric co-ops are consumer-owned, and, like most co-ops, were organized when nobody else would provide a service people needed. In addition to electric co-ops, consumer co-ops may buy and sell food or heating fuel or even operate childcare facilities.

Co-ops are guided by the seven following co-op principles.

- Voluntary and open membership — Co-ops are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership.
- Democratic member control — Co-ops are democratic organizations controlled by their members, who participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership.
- Member economic participation — Members contribute equitably to, and democratically control, the capital of their co-op. At least part of that capital is usually the common property of the co-op. They usually receive limited compensation, if any, on capital subscribed as a condition of membership.
- Autonomy and independence — Co-ops are autonomous self-help organizations controlled by their members. If they enter into agreements with other organizations or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their autonomy.
- Education, training and information — Co-ops provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their co-op.
- Cooperation among co-ops — Co-ops serve their members most effectively by working together through local, national, regional and international structures.
- Concern for community — While focusing on members' needs, co-ops work for community development through policies accepted by their members.

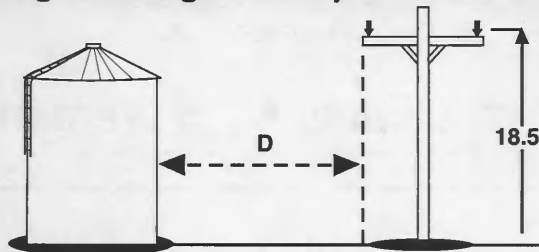


**Americans
Working Together**

**October is
co-op month**

Keep grain bins safe distance from power lines

High-Voltage Safety Clearances



Height of Grain
Storage Structure

D=Minimum Distance
From Line* to Bin Wall

15 feet	55 feet
20	68
25	80
30	93
35	104
40	118
50	143
60	168
70	193
80	218

*Based on a typical power line having a vertical clearance of 18.5 feet above the ground and a supply line phase to ground voltage of more than 750V to 22KV; National Electrical Safety Code Rule 232

On-farm grain drying and storage bins are common sights in the countryside, providing convenient and economical handling for corn, beans, and other grains. Because these bins and the augers used to fill them are made of metal, a good electrical conductor, special care is needed in siting, wiring and maintaining these grain handling facilities. Good planning and upkeep can save the lives of farm workers.

Power for grain bins and equipment will typically be provided at a maximum of 240 volts, and wiring requirements for these installations are spelled out in the National Electrical Code. Most new systems built today put the service wires underground to avoid problems with trucks or moveable equipment hitting overhead wires. A qualified electrician should install the wiring who is familiar with the proper materials, burial depths and use of rigid electrical conduit.

The high-voltage lines from Jo-Carroll Electric to the farm's transformer are required to meet a different set of rules under the National Electric Safety Code (NESC). These lines are most often overhead and have no insulating coverings. Therefore a minimum distance is needed between the wires and any equipment to maintain a high safety factor.

The 1993 NESC considers not only the bin or storage structure in relation to power lines, but the augers and elevators commonly used to load and unload the bins. Power lines (above 750 volts) must be at least 18 feet above the highest entry or probing point of a bin. This means a

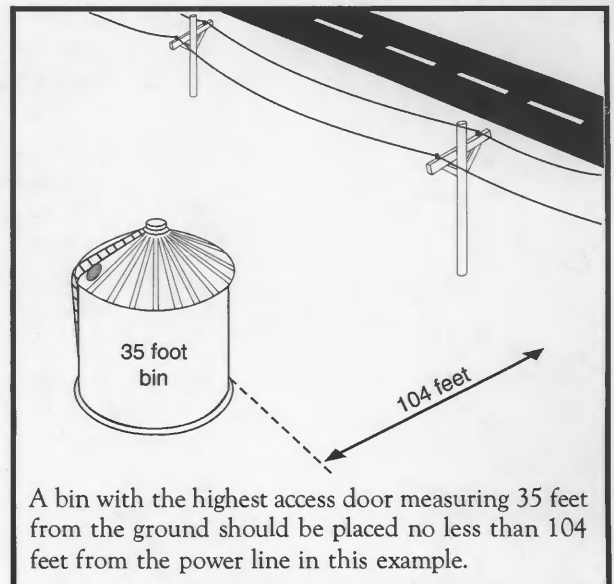
bin with a peak of 35 feet would need 53 feet of vertical clearance for high-voltage power lines in the immediate area.

The NESC takes this precaution even further, extending the clearance zone around the bin for protection while moving augers. The exact vertical clearance depends on the bin height, power line height and distance from the bin, but for our 35-foot bin example the high-voltage power line would usually need to be at least 104 feet from the bin.

Farmers planning any new or upgraded grain handling facilities should keep these clearance requirements in mind. Call our office before starting construction so we can check the clearance distances and make sure you have the proper transformer and metering capacity to meet your needs.

We also have a helpful booklet from the National Food and Energy Council titled "Planning Electrical Needs For Crop Drying And Storage." It includes service considerations to the bin, wiring at the bin, and the line clearances mentioned earlier. For your free copy of this booklet just call Jo-Carroll Electric at (815) 858-2207.

Above all, remember to practice safety around electricity wherever you are. We want to keep you as a healthy member!



A bin with the highest access door measuring 35 feet from the ground should be placed no less than 104 feet from the power line in this example.

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Enviro-Watch

Do you worry about the loss of power or heat in your home when you are away? Do you have a second home that you can't check each day in the winter? Are you concerned about a confinement building or your grain dryer losing power? Jo-Carroll Electric Cooperative can now "babysit" your home, grain dryer or confinement building when you are away.

The "Enviro-Watch" is a new product that uses advanced technology and Jo-Carroll's 800 line answering service to bring peace of mind to those who rely on knowing that the power and heat is on. If the furnace breaks down or the power goes off, you can be notified immediately.

Power outages can and will happen for many reasons, and Jo-Carroll has no way of knowing the power is off until someone calls to report the outage. The same is true of furnace failures.

The "Enviro-Watch" monitors both the power and the temperature in your home. If the power goes off or the temperature falls below 42 degrees, the unit will automatically call the Response Center's 800 number to report the condition. The Center's 24-hour operator will immediately call one of your listed contacts to correct the situation for you.

The same is true of confinement buildings or grain dryers — if there is a problem, the "Enviro-Watch" will notify you or whoever you list to be contacted.

The "Enviro-Watch" has been designed for easy installation and use. The unit plugs into a telephone jack and electrical outlet and features a test button and monitor light that allows you to verify the unit is correctly connected to the phone line.

The "Enviro-Watch" sells for \$93.75 plus tax. The fee for monitoring the unit is \$4.50 per month. The units are available at the Jo-Carroll office in Elizabeth. A notification instruction sheet and monitoring agreement will be completed when the unit is picked up.

Rural TV drops WSBK

Effective Oct. 1, 1997 Rural TV will no longer offer WSBK as a part of the Basic Package, Star Pack and Power Plus. You will still be able to obtain this on an A La Carte Basis through Jo-Carroll Electric.

Reducing energy use of water beds

For some people, crawling into a nice, warm water bed will be the best way to survive the coming winter. By following a few simple pointers regarding your water bed, you can stay warm in the winter, enjoy the comfort in the summer 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. It will be warmer than the room temperature, unless you do not use a heater.

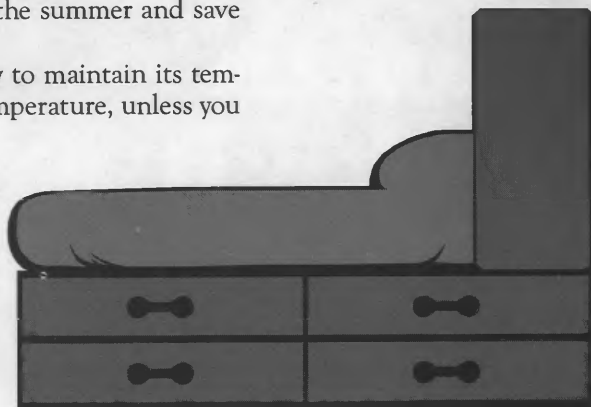
The average water bed uses 90 to 150 kilowatt-hours a month. The amount of electricity costs \$9 to \$15.

Covering your water bed will reduce energy use. A partially unmade bed uses 30 percent more energy than one that is made.

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

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

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





**October
is Co-Op
Month —
make it a
safe
harvest
month
too!**

More than 30,000 collisions on public roads each year involve agriculture equipment. A motorist driving 50 mph has less than 10 seconds to react to a tractor 400 feet ahead that is traveling 15 mph. Watch for the triangular slow-moving vehicle emblem. Farmers, be sure that faded emblems are replaced, positioned with the point up and clearly visible from the rear.

We urge farmers to renew their commitment to safety, and be extra careful when working around electric lines.



Jo-Carroll Electric Cooperative

Affirmative action, equal opportunity employers

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

PRESIDENT'S REPORT by Connie M. Shireman



Shireman

What makes a great utility?

Guest Editorial by Glenn English
Chief Executive Officer, National Rural
Electric Cooperative Association

People make utilities great. Electric cooperative employees have consistently delivered a higher level of customer service than any other electric utility company in the country. Even research conducted by our competition gives us higher ratings

than the investor-owned and municipal utility companies.

That fact alone makes us good providers of electric service. It is the spirit of cooperation between people, however, that makes your electric cooperative unique and a great utility.

Consumers all across the country give their local co-op employees high marks for understanding their local needs and for having the flexibility to meet their individual needs. Co-op employees also get high marks for delivering state-of-the-art service, for caring about consumers, for their commitment to local service, for

Continued on page 16b...

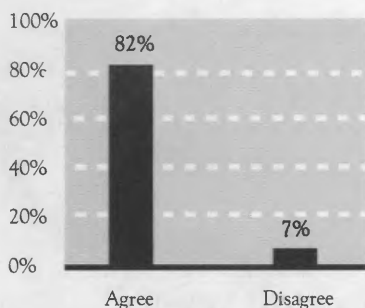
Consumer-Members like local control, responsibilities

Recent national consumer research conducted for electric cooperatives shows that co-ops get top marks for providing high-quality service. A large majority of member-consumers believes that local control of an electricity provider is important. A similarly large number of respondents feel their electric co-ops are responsive to their needs.

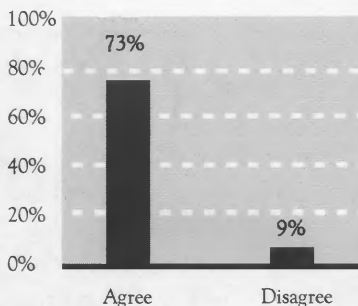
How important is local ownership? Are co-ops responsive to members?

For most member-consumers of electric co-ops, it is important that their electricity provider is both locally based and responsive to their needs.

"It is important to me that the people providing my electricity are locally based."



"I feel like my co-op is responsive to my needs."



Office closing

Tuesday, Nov. 11
in observance of
Veteran's Day.
Thursday and
Friday, Nov. 27
and 28 in
observance of
Thanksgiving.
Enjoy your
holidays!

What makes a great utility continued from page 16a...

innovation and for being active in their communities.

Today, in state capitals across the country and in Washington, D.C., there are dozens of big corporations working on plans that could ultimately damage the ability of local co-ops to provide the great service you have a right to expect. Those plans could also end up costing you money.

All electric co-op employees, in one way or another, are fighting to protect you from these damaging proposals. In some states the rules have already been changed, and in some cases those changes will give cooperatives an opportunity to expand the high level of service they are already providing. In other parts of the country, the jury is still out on whether or not residential consumers will benefit.

The trust and loyalty electric cooperatives have earned gives them the ability to continue to work for your best interests. Electric cooperative employees are united in their effort to provide you with the best service available anywhere in the country. They will fight for change that helps them do that.

But changing the electric utility industry is shaping up to be a classic David and Goliath struggle. It is a struggle between greedy corporations out to make a fast buck at your expense and your electric cooperative fighting for changes that will help you.

Electric cooperatives have known all along that to be a great utility company you have to make people your first priority. To be successful in this business you have to care about the people you serve.

America's electric cooperatives have a strong record of caring about people. That record cannot be disputed. That record makes a great utility.

Office hours

7:30 a.m. to
4 p.m.

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What is electric thermal storage?

Electric thermal storage heating is a clean safe, comfortable and reliable method of heating your home or office. This heating choice is growing in popularity in America because it is 100 percent efficient and provides consumers with considerable savings in heating costs.

These savings are realized by taking advantage of off-peak electric rates offered by electric utilities. These off-peak hours are the times during the day when a utility has a surplus of available electric supply. Because of this surplus, the utility charges lower rates for electricity used during that time. Electric thermal storage heaters convert electricity into heat during these off-peak hours and store that heat in specially designed high-density ceramic bricks capable of retaining vast amounts of heat for extended periods of time. During the day, as a room thermostat calls for heat, fans in the heater circulate the stored heat evenly and quietly throughout the room.

Jo-Carroll Electric has available for purchase the Steffes ETS unit. This unit offers safety, efficiency, comfort, ease of installation, serviceability, and versatility.

The ETS is 100 percent efficient. Superior cabinet insulation retains stored heat longer to be released by thermostatically controlled fans as the room requires.

All Steffes ETS heaters have quality mounting brackets, providing positive stability and correct heater-to-wall spacing.

For more information on Steffes ETS units please contact Brad Pecinovsky at (800) 858-5522. Jo-Carroll Electric is currently offering lower rates and rebates for purchase of these units.

When your power is out . . . we're on the line!

Check your circuit breakers or fuses. If possible, determine if your neighbors have electricity. Then call Jo-Carroll Electric's Outage and Emergency Report Line. Please have your account number and location readily available so we may restore your service quickly.

Local calls — dial 858-2207

Outside Elizabeth — dial 1-800-927-5254

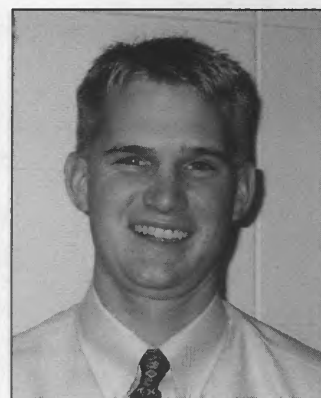


Brad Pecinovsky joins Jo-Carroll

Bradley J. Pecinovsky has joined the staff of Jo-Carroll Electric Cooperative as the member service coordinator. Brad is no stranger to the electric industry. Originally from Cresco, Iowa, Brad worked at Hawkeye Tri-County REC during summer breaks from college and as a 1,000 hour employee immediately following college.

Brad is a graduate of Loras College in Dubuque, Iowa. While at Loras he was active in student government, theater and intramural athletics. Previously, he was employed by McLeodUSA, a local and long distance phone provider headquartered in Cedar Rapids, Iowa. While at McLeodUSA, Brad assisted business customers with their phone service.

In his free time Brad enjoys camping, hunting and biking. He has recently relocated to the area and is residing in Elizabeth. Brad is very excited about his new position with Jo-Carroll and is eager to start building a working relationship with our members.



Brad Pecinovsky

Now is the time to weatherize your home

We all know it is expensive to heat and cool a home. By making a few improvements around your house, you can reduce these costs. Efficient energy utilization and conservation are the keys to saving money.

More than half the heat that escapes from the house is through cracks and loose-fitting windows and doors.

Weatherstripping materials will reduce air infiltration around these areas. These are various types of materials you can use for weatherstripping. These materials have a wide variety of life, durability, and cost. Most of these materials are easy to install. The best ways to decide what is most suitable for your home is to visit a hardware or a building supply store.

Caulking loose-fitting windows and doors is another way to prevent air loss. Caulking compounds are materials used to fill, cover, and seal cracks and construction joints. Again, there are several types to choose from. With caulking, you also need to consider the adhesive and the type of application that will work best. Replace old caulking that is cracking or flaking. Clean out old joints first to get good adhesion. Caulking can be accomplished with a few low-cost tools and a little practice to get a good seal. Be sure to follow the manufacturer's instructions.

As a general rule, apply caulking wherever two different materials or parts of the house meet. Some of these are:

- Exterior joints where windows and door frames meet siding.
- Corners formed by siding.
- Where exterior masonry fireplace chimney meets siding.
- Where porch meets siding.
- Joints between foundation and wall siding
- Where the sill plate meets the foundation
- All other exterior openings.

Again, efficient energy use and conservation is the key to saving energy dollars. By using these weatherstripping and caulking procedures, you will stop air and moisture infiltration into your home. These procedures will greatly decrease your home's heating and cooling bills.

"Remember — If you have a 1/16 inch crack around a standard door, this will let in as much air as a hole in the wall this size!"

Load management system testing

As cooler temperatures and fewer daylight hours arrive with autumn, the energy professionals at your electric cooperative are preparing for another Illinois winter. This includes a test of the cooperative's load management system.

If you currently participate in a residential dual fuel or heating load management program, the system will be tested beginning at 5 p.m., Wednesday evening, Nov. 19. This means that controlled electric heating will be turned off at 5 p.m. and remain off throughout the evening. During the time the electric heat is off, customers will rely on their backup heating system. All electric heating systems will be turned back on by 11:15 p.m.

If you experience any problems with your heating system during this test, please contact Jo-Carroll Electric at (800) 858-5522.

Why is load management important?

Why is load management important to Jo-Carroll Electric Cooperative members? The answer is simple. Load management helps us control our peak demand which is the greatest demand placed on our electric system. This helps manage our energy costs today and into the future.

Electricity cannot be stored and must be produced at the time it is used. There are no storage alternatives for excess energy, and battery

storage is not yet an economic alternative.

The moment you flip a switch in your home or business, electricity flows from a power plant to your home. In order to meet your electrical needs, power plants operate 24 hours a day.

Load management is a technique used by our wholesale power provider, Dairyland Power Cooperative, to reduce peak demand. This means reduced costs for all electric facilities and improved efficiency.

More than a decade ago, we began installing a load management system at Jo-Carroll Electric Cooperative that allows us to reduce our load by shutting off various items by remote control at times of high electrical demand. Our cooperative currently has several members participating in the dual fuel and water heater program.

How does it work?

The load management system was designed to save you money...not to inconvenience you or your family. Load management is used during periods of peak load (highest demands on our system). Typically, our cooperative's highest demand is on the coldest winter days when electric heat is used more, cars and tractor engine heaters are plugged in and more people are spending time indoors. (Hot summer days also create high demand with air

conditioning and irrigation use).

Dairyland Power Cooperative operates a special network of radio transmitters which send out load-control signals. These signals are received by a special load management receiver installed in a member's home or business.

The load management system is flexible to allow the most efficient use of the electrical system. For example, electric water heaters can be controlled during morning and evening peak energy periods to save you money. Rather than starting up a power plant for a short period of time or purchasing more expensive power from another utility, electrical demand is reduced by shutting off water heaters for a while. Most water heaters are large enough to provide your family with hot water during the control period.

Participants in these programs realize immediate and future savings by reducing their energy costs. You are also helping to reduce future energy costs by deferring construction of costly new power plants. All consumers can help reduce their energy costs by being conscious of their energy use — especially on the coldest winter days.

For more information on Jo-Carroll Electric Cooperative's load management program alternatives, contact (800) 858-5522.

Reminder . . .

Do not forget about Jo-Carroll's automatic bill payment program. For additional information, contact us at (800) 858-5522.

Jo-Carroll Hi-Lines ⁴⁴

Jo-Carroll Electric Cooperative, Inc., Elizabeth, Illinois — (815) 858-3311

PRESIDENT'S REPORT by Connie M. Shireman



Shireman

Board election

One of the most important aspects of a cooperative is the democratic election process that decides which of the cooperative's members will serve on the board of directors. Prior to annual meeting, a special mailing is made to elect directors for a three-year term. Only the members who receive electric service in the district may vote for the director from their district, on the basis of one vote per membership.

The nominees who will appear on the ballot are chosen by a nominating committee of Jo-Carroll members. This year's nominating committee will meet at the headquarters building Jan. 7, 1998, at 7:30 p.m. to submit the names. Any member interested in becoming a candidate should contact this committee. Directors are to be elected in Districts 1, 3, and 4 this year.

Members of the committee include:

District 1:

(Incumbent: Leonard Ricke), Edwin Handfelt, 7442 N. Main, East Dubuque; Francis C. Powers, 16131 Oak Bluff Court, East Dubuque; and Delbert Schulting, 689 N. Main, East Dubuque.

District 3:

(Incumbent: David Hughes), Ken Haas, 1601 S. Apple River Road, Elizabeth; John Haas, 1601 S. Apple River Road, Elizabeth; Edward Andersen, 573 N. Scout Camp Road, Stockton.

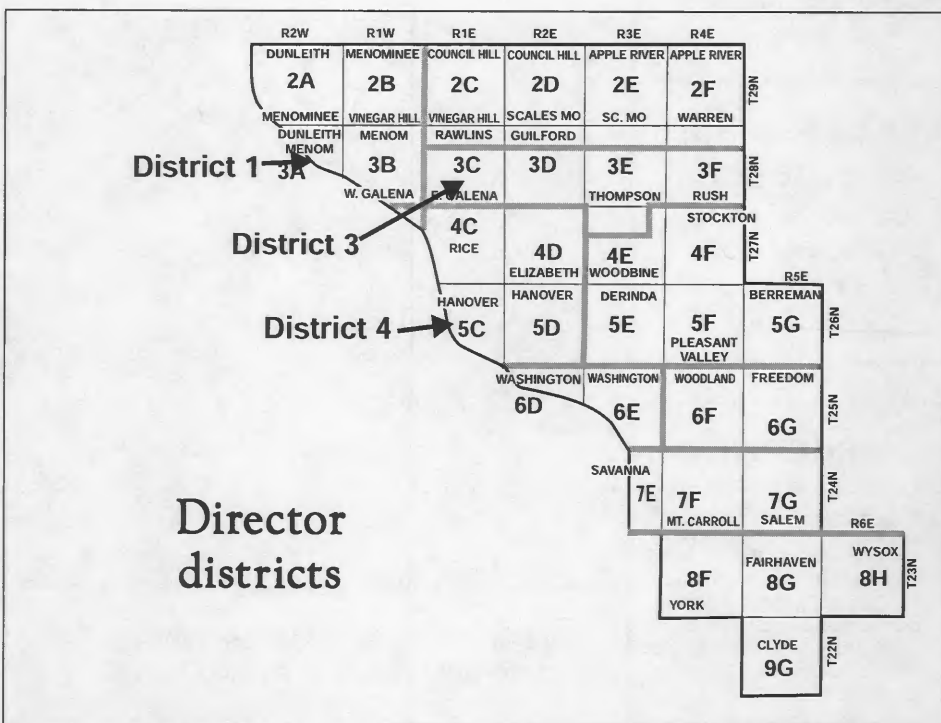
District 4:

(Incumbent: Don Crawford), Joe S. Pash, 8265 S. Hanover Hill Road, Hanover; Laverle Streicher, 164 W. Hanover Road, Elizabeth; John Steele, 6985 S. Steele Road, Hanover.

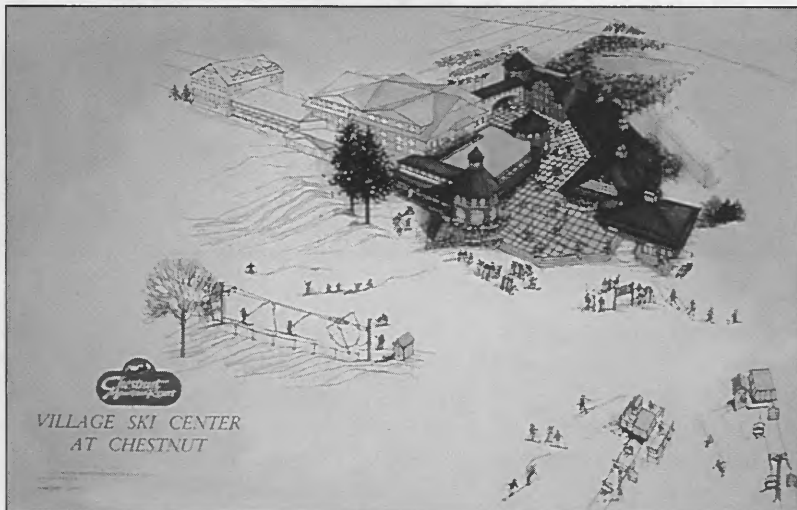
Office closings

Dec. 25 Christmas
Dec. 31 New Years

Director districts



Chestnut Mountain expands services



Sketch of the current facilities along with addition of the village ski center at far right.

Once again, another Illinois winter is upon us. To some this statement excites feelings of fear and anxiety. However, to skiers and snowboarders the sight of snow rejuvenates the soul and invites a challenge of person versus mountain — Chestnut Mountain that is. The questions become — Are these winter visitors prepared to be dazzled by the addition of the new Village Ski Center and challenged by The Far Side snowboard terrain park?

The addition of the Village Ski Center, The Far Side and the Children's Learning Center will further help Chestnut Mountain Resort stake a claim as the premiere ski resort in the Midwest.

Along with the recent additions of two new ski slopes and a state-of-the-art water intake system for snow-making, it is hard to deny Chestnut Mountain that honor.

The new 20,000 square foot Village Ski Center offers an increased skier services area which quadruples the previous offerings. Gary Hanson, marketing director, explained that Chestnut Mountain Resort basically outgrew its original facilities. The new center promises to accentuate convenience by minimizing the wait for rentals and lift tickets. To further increase customer satisfaction, the new building offers computerized ticketing, snowboard rental and 2,200 ski rentals. In addition, the Ski Center houses a ski shop, ski school, first aid center and slope side restrooms.

Snowboarders — be prepared for challenge and intrigue on The Far Side snowboard terrain park. The Far Side, which was added earlier this year, is a seven acre snowboarding extravaganza that features a half pipe called "The Pipe Dream." The new snowboard park is the largest of its kind in the Midwest. This area is also serviced by a 900-foot-long triple chairlift.

James Winnill

To further display Chestnut Mountain's emphasis on customer satisfaction,

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7:30 a.m. to
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Friday

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Chairlift for the far side, Snowboard Park. To the left is a new 750 kva transformer installed by Jo-Carroll.

the owners created a special children's ski program and Playcare Center. This 5,000-square-foot area provides children ages two and up a supervised environment that includes toys, play stations and cribs/beds. The Powder Pups and Powder Rangers are programs designed to help young people (age 4-12) learn to ski and develop their skiing skills.

As one of Jo-Carroll's oldest and largest commercial members, we are glad to see Chestnut Mountain's continued success. Chestnut Mountain participates in the cooperative "peak alert" program, which benefits all of Jo-Carroll's members. Chestnut Mountain voluntarily turns off its large snow-making equipment and turns on generators during Jo-Carroll's peak times, which reduces the demand bill for all Jo-Carroll members. This unique utility-consumer partnership in energy conservation is a model for this type of relationship. Jo-Carroll is excited about the new additions to Chestnut Mountain and the future success of this commercial member.



Village ski center under construction.



The new Village Ski Center will increase convenience for patrons.

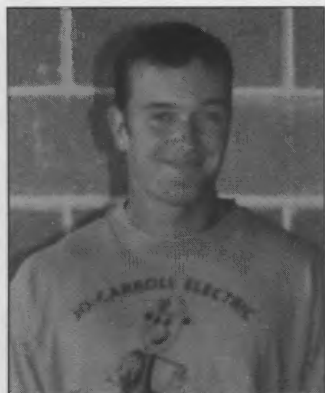
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Jesse Shekleton

Shekleton earns journeyman status

Congratulations to Jesse Shekleton on recently receiving journeyman lineman status. Jesse is the newest member of the Jo-Carroll line crew, hired in May of 1994. In order to achieve his journeymanship, Jesse had to complete numerous hours of field training coupled with a book study program over a three-year period.

Prior to being hired at Jo-Carroll, Jesse attended Northwest Iowa Community College in Sheldon, Iowa, where he completed the Powerline Technology program. The coursework consisted of a one-year program that introduced students to electrical theory and on-the-job training such as climbing poles, operating electric utility equipment and constructing new line. Many people cringe at the thought of working with electricity, but Jesse chose to pursue a career as a lineman because of his interest in the trade and fascination with electricity.

The three-year journeyman program is both intense and challenging. Jesse noted that the greatest challenge he faced en route to achieving journeyman lineman status was becoming well trained and qualified in all facets of his job. Line work is a very demanding and stressful occupation. However, Jesse notes that the most rewarding part of being a lineman at Jo-Carroll is "the mental and physical challenge of the job along with working around a great group of guys."

Congratulations once again, Jesse, on receiving your journeyman status and for providing dedicated service to Jo-Carroll members.

"What causes my lights to blink?"

"What causes my lights to blink?" is a very popular question in the electric utility business. Usually, blinking lights are a result of momentary outages that occur when some type of disturbance exists on the line. This could be a lightning strike, an automobile striking a pole, or a squirrel or tree branch coming into contact with an energized power line.

Actually, when lights blink, it is an indication that the electric co-op's equipment is operating properly. Blinking lights reflect the operation of equipment that protects the lines and keeps the power from going off for more than just a moment. The co-op's distribution system includes special devices called reclosures that operate whenever there is a short circuit on the line. If the short circuit is temporary, which is usually the case, the reclosure permits power to continue flowing through the line with only a brief interruption of service (meaning your lights blink!).

Without this device, every short circuit, temporary or otherwise, would cause the power to be off until the co-op could send a line crew to restore service. Usually, these reclosures will operate or trip three times before stopping the flow of electricity and causing a power outage. This reclosure operation protects the lines from damage.

Keep in mind that if your power is blinking on and off frequently throughout the day, you should call the Jo-Carroll office. More than likely there is a problem that needs to be taken care of. And remember, your lights blinking on and off usually means our equipment is protecting your home.

