New Electronic Pain Killer... relieves backache, headache, even pain of tennis elbow, arthritis & bursitis!

Tested by doctors, INFRAŁUX™ is handheld and portable. Its infrared heat relieves pain without medication! FDA registered. **Try it FREE for 30 days!** ELIMINATE UNNECESSARY

Say goodbye to pain. No matter the type you suffer from-headaches, tennis elbow, arthritis, bursitis, sinusitis, backache, neuralgia, muscular pains, sprains, or any musculoskeletal condition-here is a quick easy answer. Put INFRALUX next to the pain and within minutes, you can get on with work or play.

SOOTHING PAIN RELIEF. **BUT WHY INFRARED HEAT?**

There is nothing new about infrared heat. Doctors and therapists have used and recommended it for years in pain treatment. But until now, there hasn't been a compact, easy-touse unit.



Why infrared? With ordinary methods such as heating pads and hot water bottles, much of the heat is dissipated on the skin's surface. There's no lasting effect.

But with infrared heat, the treatment goes down d-e-e-p where you need it. In fact, INFRALUX's shortwave, visible infrared heat will penetrate up to 10mm of skin tissue to reach irritated nerve endings. Your INFRALUX seeks, finds and soothes!

notes in his respected "Manual of

Electro Therapy" THAT MILD INFRARED RADIATION MIGHT **BE THE ONLY WAY TO RELIEVE** PAIN WITHOUT THE USE OF **MEDICATION.**

MEDICATION.

In fact, William J. Shriber, MD

Why take medication when it isn't needed? INFRALUX is the most natural route to pain relief.

HOW THE INFRALUX WORKS.

All you do is hold the INFRALUX unit next to where you hurt. It even works thru clothing! Within moments, you'll sense comforting, soothing heat.

INFRALUX heat goes to where the pain is-to blood vessels, nerve endings, and other subcutaneous tissue.

USE AS OFTEN AS NEEDED.

Unlike drugs and medication, INFRALUX can be used as often as needed. It's made to help you day or night, at home or at work. And be

RECOMMENDED **BY DOCTORS** FROM ACTUAL DOCTORS'

REPORTS ON INFRALUX:

"I have used the unit in my practice for six months and I find it relieves pain and muscle spasms, stiff shoulders and elbows from bursitis and tendonitis. Patients suffering from arthritis use the Infralux in the morning and get excellent J.L.G., MD results.

"On patients with a variety of muscleskeletal painful conditions, Infralux was demonstrated to be effective in V.S., MD relieving pain.'

sure to pack it for out-of-town trips. You can enjoy soothing relief wherever, and whenever.

U.L. LISTED

INFRALUX is easy to carry too in its handsome vinyl bag. No bigger than a small flashlight (six inches long). It plugs in any 110V outlet and it is U.L. listed for your safety.

TRY IT FOR YOURSELF

The minute your INFRALUX arrives in the mail, give it a good try. Put it to the test on that nagging backache, that stiff neck, those arthritic pains that hit so suddenly. If, after a month, you're not astounded at how much better you feel, return it for a full refund.

HERE'S HOW TO ORDER

INFRALUX is only \$39.95 (plus \$2.85 shipping and handling). To order, simply send your check to Baystar at the address below. Credit card holders can speed their delivery by using our toll-free number. (Maryland residents add 5% tax.)





110 PAINTERS MILL ROAD DEPT. N47 OWINGS MILLS, MD 21117 (301) 363-4304 [®]The Baystar Company 1983



Illini's 45th annual meeting scheduled Tuesday, February 15, in Champaign

The Ramada Inn Convention Center will be the location for Illini Electric Cooperative's 45th annual meeting Tuesday, February 15. Prior to the business meeting, a luncheon will be served beginning at 12 noon.

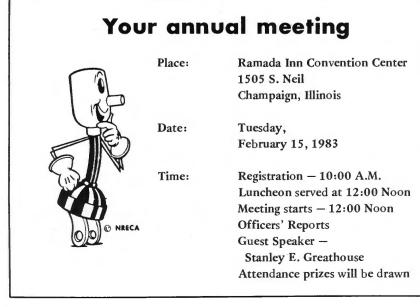
In order to have enough meals reserved, the Cooperative must know in advance how many people will be attending. The annual meeting notice will be sent to each member around February 1, along with a reservation card. This card must be returned along with a dollar for each meal to be served. In the past a large number of meals were reserved which the Cooperative was forced to pay, even when these people did not show up. Please be assured this is not an attempt to discourage you from attending; we only want to limit the number of meals unserved yet paid for.

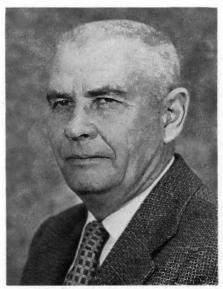
Tuesday, February 9, is the cutoff date for return of the reservation card

and dollar donation for each meal. At this time, we must turn in an exact count for the meals. Meals will not be served without a returned reservation card prior to February 9. Please help us by returning these cards as soon as possible.

The board of directors and staff would like to invite each and every member to attend the annual meeting, to hear the officers' reports on the past year's activities and to exercise your democratic right to vote in the election of directors.

In addition to the officers' reports, directors will be elected from the following areas: Champaign County Northeast, Champaign County Southwest, Douglas County West. The nominating committee, appointed by the Board of Directors, will submit names to be voted upon at the meeting. Nominations will also be accepted from the floor.





Charles Cole, President of the Board of Directors of Illini Electric Cooperative, welcomes each and every member to your annual meeting.

Keynote speaker will be Stanley E. Greathouse of Johnsonville (Wayne County). Mr. Greathouse is on the Board of Directors of Wayne-White Counties Electric Cooperative in Fairfield and a National Rural Electric Cooperative Association board member representing Illinois.

The Ramada Inn Convention Center is located at 1505 South Neil Street in Champaign, just one block north of the Cooperative's office. Plenty of free parking is available, so plan to be there. For those in attendance, many good prizes will be awarded at the close of the meeting.

For an informative and interesting afternoon, mark your calendar for February 15 and return your reservation card by February 9.

ILLINOIS RURAL ELECTRIC NEWS

18

miles.

Your cooperative is 45 years old

Proposed Lines To Serve 447 In 3 Counties Must Guarantee \$12 Per Mile Monthly Income; Average Bill to Be \$4.80

These headlines greeted Champaign County newspaper readers early in 1938 and were sweet words to a group of people working hard to bring electricity to rural areas of Champaign, Ford and McLean counties. The headlines announced the official notification of a loan to Illini Electric Cooperative for the construction of approximately 173 miles of electric lines. Rural dwellers would at last be able to see the benefits of electricity — so common in the cities and towns come to their areas.

That official act by the Rural Electrification Administration (REA) 45 years ago – on February 8, 1938 – is one of the most significant milestones in the history of Illini Electric Cooperative. Illini now provides dependable, reasonably priced electric power to more than 4,200 member-owners over almost 1,600 miles of energized lines in a service area that reaches into eight east-central Illinois counties, including Champaign, Ford, McLean, Douglas, Edgar, Moultrie, Piatt, and Vermillion.

As we prepare for your cooperative's 45th annual meeting, this is a good time to reflect back on the major dates and events that have helped shape your electric system. Those dates and events are tied together by people, too, including two founding directors who still share their enthusiasm for electric cooperatives although they have retired from the board.

C. V. Swanson of Ludlow and Burdette Griffith of Dewey served as president and vice president of the first governing board of Illini. Their accomplishments, along with those of all the others who worked so hard and so long to make the cooperative a reality, would take much more space than is available. Swanson served more than 44 years as an Illini director, while Griffith was a director for some 23 years, including service as president of the board.

Let's review some of the milestones in your cooperative's history:

• On November 29, 1937, a temporary committee was elected to carry out the organizational work for a Champaign County rural electrification committee. Swanson was chairman of that committee, and Griffith was among several on the committee who became the original directors of Illini.

• Headlines on December 10, 1937, announced Swanson's election on December 8 as the first president of what had been named Illini Electric Cooperative. Swanson noted that some people wanted to name the cooperative Champaign County Electric Cooperative, but he said some organizers envisioned the new cooperative serving rural consumers in more than just Champaign County. Two months later, when REA approved the first loan for \$186,000, rural consumers in three counties were to be served by the new cooperative electric system. Those two months, even with the cold winter conditions, were especially busy months for the new cooperative. Some 225 volunteers canvassed the countryside to enroll 447 member-owners.

• Shortly after the announcement of the loan approval, the Caldwell Engineering Company was hired to design the proposed line and do the engineering work on the first section of line.

• On May 14, 1938, six people who were working to obtain right-of-way reported they had lined up about 84

December 4, 1938 – Swanson, right, reads congratulatory message as directors (from left) Andrew Sharpf, Burdette Griffith, and T. Z. Gasser look on. • Seventeen days later, on May 31, 1938, Cater Construction Company of Kansas City submitted low bid of \$131,197.94 for the first system construction. The young cooperative was on its way.

• By September progress was being made. On September 10, 1938, the first pole was raised on the system, and the occasion was marked by a special ceremony. John B. Anderson, stepfather of Swanson, and a tall, straight man despite his 94 years, was selected to crash a kerosene lamp against the first pole, symbolizing the break with the non-electric past. The ceremony attracted state rural electrification officials and farmers from throughout the area, as well as federal officials and crews of the Cater Company.

• Fall of 1938 was filled with line construction. Costs averaged between \$700 and \$800 per mile, according to accounts. One reason cited was the low cost of 30-foot poles - \$2.69, delivered.

• December 3, 1938, was one of the most memorable days in Illini's history. The line was energized, and more ceremonies were held, taking place at Swanson's home west of Ludlow.

Three men have managed Illini in those 45 years. The first was Vernon C. Green, from 1938 until 1942. N. B. Elliott followed Green and was manager until 1960. In that year, an engineer who had worked for the cooperative since graduating from the University of Illinois in 1947, Walter R. Smith, was selected to manage the growing cooperative. He had been assistant manager for two years, and was system engineer prior to that. Smith is in his 24th year as manager.



January 1983

Agriculture outlook Farm problems 'extend beyond the

There will be a lot more food in the world than people will eat this year and, because of that, American farmers are heading into their fourth straight year of depressed income.

The federal government isn't guessing what farmers will earn in 1983, since Agriculture Secretary John Block banned the traditional farm income estimates a year ago. But analysts at the Agriculture Department's annual Outlook Conference in December doubted net farm income would change much from last year's \$19-billion – more than \$13-billion less than just three years earlier.

As a result, rural areas that depend on agriculture will continue their economic suffering, say Department economists.

"Any improvement will come very slowly," said J. Dawson Ahalt, deputy assistant agriculture secretary for economics. He added, "These financial problems extend beyond the farm gate and affect farm suppliers and other farm-related businesses."

Specifically, crop prices have fallen to 1978 levels as the cost of producing those crops continues to rise. Land, which farmers have traditionally been able to use as equity for loans to get them through hard times, has fallen in value during the last two years. Farmers' net cash flow decreased \$1-billion in 1982 to a five-year low of \$37-billion and the total farm debt jumped 10 percent.

The reasons for such depressing figures are complex as the world economy itself. Simply stated, there's a food glut. Experts expect that world grain reserves will reach a two-month supply this year, "the highest global stocks-to-use ratio in more than a decade," according to Ahalt. Nearly 60 percent of that surplus is in the United States.

Record production of some crops has come at the same time as a faltering world economy and a stronger dollar have made many countries unable to afford to import as much food, especially from the U.S. The volume of U.S. farm exports dipped two percent last year, but the value of those exports fell 11 percent as the oversupply depressed prices. "Many of the problems that plagued us in fiscal 1982 unfortunately will not go away in fiscal 1983," said Alan Tracy, deputy under secretary for international affairs. He predicts that while farm exports will rise three percent this year, they will drop in value by four percent.

"The likelihood of a continued strong U.S. dollar, a weak global economic recovery, and smaller Soviet grain imports are likely to restrain the volume and value of U.S. exports," said Tracy.

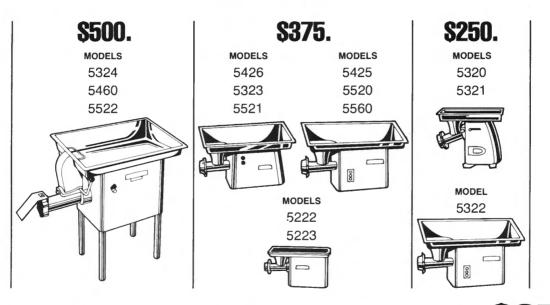
The Reagan Administration hopes that continuing attempts to develop foreign markets through credit programs and overseas visits by sales teams will combine with a general economic recovery to boost farm exports and prices.

Martin Feldstein, chairman of the White House Council of Economic Advisers, said at last month's Outlook Conference that federal budget deficits expected to top \$150-billion would hurt U.S. exports. Heavy government borrowing forces more competition for credit, he explained, pushing up



THESE TOLEDO SCALE FOOD GRINDERS ARE WORTH THIS MUCH





AND IF YOU EVEN *LOCATE* ONE FOR US, IT'S WORTH **S**

Toledo Scale wants these grinders back. Not because they don't work, but because they do. These grinders were designed for safe, efficient use. But they've been around a long time. Many now have original safety equipment removed or damaged. Such conditions present a risk of serious injury, to the point of operators losing fingers or hands. If you have one of these Toledo grinders, or know of someone who does, it can be worth money to you and them. Take a look. Then contact us as soon as you can.



Write to Cindy Szabo, Toledo Scale, 350 W. Wilson Bridge Rd., Worthington, Ohio 43085 with your name, address,

and Toledo grinder model number. OR CALL, TOLL-FREE 1-800-848-4375

IN OHIO CALL COLLECT 0-614-438-4909

Toledo Scale/Retail Industry Division/Worthington, OH 43085/1-800-848-4375/In Ohio Call Collect 0-614-438-4909



Illini Electric News

ILLINI ELECTRIC COOPERATIVE 217-352-5241 CHAMPAIGN, ILLINOIS

More electricity during winter months!

Why do we use more electricity during the winter months?

Champaign

ILLINI ELECTRIC COOPERAT

This is a question we often receive this time of year; and although we have some ideas as to why one's usage may be higher than usual, we do not know specifically why a particular individual's electric energy usage is up: We do not know because we are not the ones who used the power. Even though the individual asking the questions is the one using the power, he does not always know where he used it either. This is because we use electricity for so many things so many times a day that we take it for granted and are not really conscious of the fact that we are using it.

For those who may be questioning why their electric energy usage is up in the winter months, we will try to list some of the easily overlooked uses for this time of year:

1. Holiday (Thanksgiving, Christmas, and New Year's Day) cooking and baking.

2. More use of lighting because of the shorter daylight period.

3. Most heating systems require the use of electric power and run almost continuously during the extreme cold periods.

4. Many use space heaters here and

energy notes

Wood

A recent survey of wood stove use in mid-Missouri showed that seven of 83 respondents used kerosene as their fire starter, two used gasoline and one used oil. Chimneys were inspected and cleaned once or twice a year by 63 there in their homes and buildings.

5. Stock tank heaters and fountains are in use.

6. Engine heaters are being used for cars and tractors. In some known cases as many as five engine-heating units are being used at the same time.

7. Electric blankets and heating pads are being used more.

8. Clothes dryers are used more, and those in unheated rooms use more energy.

9. Forgetting to shut a light or an oven off and discovering it several hours or a day or two later.

We have not mentioned your power meter in the above list because only in the rarest of cases do we find a defective meter. Electric meters are extremely accurate instruments; and if one is defective, it is usually defective to the member's advantage. Meters wear with use over the years and any wear causes a drag on the unit; and consequently, they slow down and actually read less than they should.

If you feel at times that your power bill is higher than it should be, please consider the points above in determining why it is that way. If, however, there is an extreme increase and you cannot justify it as usage, please inspect your wiring system for possible

percent. Only 46 percent had a smoke alarm. While University of Missouri sociologists and extension personnel who conducted the study are concerned that wood users are "living dangerously," they aren't sure their results represent typical wood stove use. But safety experts say the study emphasizes a national trend.

A recent report from the Federal Emergency Management Agency, U.S. shorts or other problems (stuck thermostats, pumps running continuously, etc.). If you cannot in anyway justify the increase, contact your cooperative and we will aid you in finding the solution.

Illini Electric Cooperative

MAILING ADDRESS-P. O. Box 637, Champaign, Illinois. Phone 352-5241.

HEADQUARTERS LOCATION-1605 South Neil Street.

OFFICE HOURS-7:30 A.M. to 4 P.M. Monday through Friday-closed all day Saturday, Sunday and Holidays.

HOLIDAYS OBSERVED-New Year's Day, Lincoln's Birthday, Good Friday, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving, Christmas Eve and Christmas.

REPORTING SERVICE INTER-RUPTIONS,—Broken poles and Fallen Wires—Phone 352-5241—day or night—7 days a week.

Fire Administration, showed a 66-percent increase in fires in residences where wood stoves or fireplaces were used for heating.

The Agency said the reasons for the fires were the same safety mistakes shown in the UMC study: improper installation, combustible materials near the stove and a lack of maintenance – like checking for creosote formation in chimneys.

"How Rural Electric Cooperatives Contribute to Our Community, State and Nation"

Illini Electric Cooperative will sponsor one participant in the "Youth to Washington" tour. The tour is a one-week, all-expense-paid trip to Washington, D. C. The week will be spent traveling and sightseeing in the nation's capital. The winning student will join approximately 50 other Illinois students in Springfield June 10 for the chartered bus trip and will return to Springfield June 17.

In addition to the winner's tour, 10 finalists will tour Springfield's shrines and visit the legislature in session. The evening meal will be with the Senators and Representatives from





our area. The Springfield tour is April 19 and again all expenses including transportation will be provided.

The winner and semi-finalists will

be chosen from entries in an essay contest. Any sophomore or junior from any of the area high schools in the Cooperative's service area may enter.

28

Contestants will submit an essay on "How Rural Electric Cooperatives Contribute to Our Community, State and Nation" (exact title may vary) and submit to Illini Electric Cooperative's office on or before March 31, 1983. Essays are to be type-written on 81/2 x 11 inch paper, one side only, double spaced and not to exceed 1,000 words. Resource material will be mailed to each contestant or may be picked up at the Cooperative's Member Service Department in Champaign. Essays will be judged by a panel of judges on originality, content, accuracy of facts and composition.

Resource material and official rules may be obtained by completing and sending in the official entry form below.

'YOUTH TO WASHINGTO Illini Electric Co P.O. Box	poperative 637
Champaign, Illin	ois 61820
Name	Date
Age Name of school	Class year (circle) 10 11
Mailing Address	
CityZip	Phone
I understand that this entry form entitles nished by IEC. I agree that Illini Electric Cooperative essay submitted for this contest.	
	Signature of Student
Parent's or Legal Guardian's Statement To Washington, D. C., & Springfield, IL.	To Go On All-expense-paid Trip
We, the undersigned, give permission for	
if (he or she) becomes a winner of Illini Electri take the expense-paid tour to Washington, D. Illini Electric Cooperative and the Associat Illini Electric Cooperative will assume no lial ducted tour.	c Cooperative's 1983 Essay Contest, to . C., and Springfield, IL, sponsored by tion of Illinois Electric Cooperatives.
signature of parent or guardian	mailing address

17

"I can show you why a genuine Bonanza Building is the best buy for your budget."



Mr. Ken Ruegsegger West Liberty Builders West Liberty, Iowa

I can show you this value because I build what I sell — the genuine Bonanza building.

There's a Bonanza Builder near you who can show you how you can get the best value for your dollar in farm, horse barn or commercial buildings. للكلي كالتركي والتركي التركي الت

Call today or send us the coupon. Call Toll Free 1-800-637-2046 From Illinois Call 1-800-252-5735 Builder territories available in a few selected areas.

	nearest Bonanza Builder contac	ct me.
ADDRESS:	PHONE:	
COUNTY:	TOWN:	
STATE:	ZIP:	
	e d in: □ Machine/Storage □ Uti □ Horse □ Dairy □ Beef □	
Bonanza Bu P. O. Box 9,	ildings, Inc. Charleston, IL 61920	ILRE1

NEW WONDER-FORMULA—HAILED ON NETWORK TV!

PEELS OFF PAINT JUST LIKE PAPER!

LIFTS • PEELS • STRIPS AWAY UP TO **18 COATS OF PAINT WITH ONE** SINGLE 60-SECOND APPLICATION!

- Simply apply—let dry—peel away paint like paper in one single action
- Ends sanding—scraping—spraying—chipping steel-wool FOREVER!
- Amazing European discovery turns layers of paint to a single sheet of 'paper' so it peels away just like you'd lift and turn the pages of a book!

WORKS ON ANY SURFACE . . . WOOD. BRICK, METAL, PLASTER, **GLASS, STONE, ANTIQUES!**

Amazing new formula actually penetrates old paint (varnish and lacquer, too), in minutes. Transforms it into a soft, plastic-like film. Then simply let set ...lift, roll, strip up to 18 coats of paint away in a single peel-away action! Yes, years of built-up paint peel away as quick and easy as you'd turn this very page! Ends sanding, scraping, chipping and foul-smell-ing chemicals ONCE AND FOR ALL!

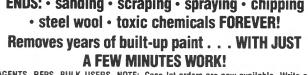
There's no dust up. No clean up. Just a single peel-away action restores the bare, original finish . . . good as new in a flash!

SO EASY EVEN A CHILD CAN DO IT!

Called 'Peel-Away', this new wonder-formula has been offically registered with Gov't. patent offices throughout the World. It is completely odorless—completely safe! Reacts only with paint, varnish, lacquer or shellac... othing else! So you can use it on even finest furniture, precious art frames, why even delicate wicker or valuable painted-over marble. In fact, it is so safe, so gentle, it is used by London's British Museum and world-famous art galleries to strip old art frames and century-old paneling. Even used by antique art frames and century-old paneling. Even used by antique dealers to strip down priceless furniture treasures for resto-ration. Yes, 'PEEL-AWAY' literally lifts away every last layer of old paint even from hard-to-get-at places such as impossible-to-reach windowpane corners . . . grooved molding . finely tooled woodwork, etc., etc.

SIMPLY COAT IT ON—SEE IT TURN PAINT TO "PAPER" IN JUST MINUTES...AND PEEL IT AWAY IN A SINGLE LIFT-OFF-ACTION!





AGENTS, REPS, BULK USERS, NOTE: Case lot orders are now available. Write on your letterhead to our industrial division for wholesale prices.



Best of all this new wonder-formula is so easy to use Simply mix with water and coat onto any painted surface. Then press down special 'Peel-Away' magic-fibre Lift-tex strip-away cloth, (included free) let dry and adhere to . and without even dirtying your hands, lift away surface old paint, just like you'd peel a banana. It is as simple and easy as that. No mess. No fuss. No odor. Old paint lifts away like a single sheet of paper. Original bare-wood finish comes through like new again.

SO ECONOMICAL TOO! MERE PENNIES PER JOB! AND THE PEEL-AWAY MAGIC-FIBRE CLOTH IS COMPLETELY RE-USABLE, GOOD FOR YEARS TO COME!

Peel-Away is every home-owners dream come true. Ideal for indoors on walls, windows, furniture, etc. — plus 101 outdoor uses too. And it costs only a little more than a penny per foot coverage. Homeowner's size alone gives enough coverage to strip away as much as 500 to 750 feet of wall and door trim, window frames, furniture molding, stair railing,

patio furniture, roof-gutters. . . its uses are almost endless. SAVES WORK, SAVES TIME, SAVES MONEY ... MAKES TAKING OFF PAINT EVEN EASIER THAN PUTTING IT ON!

So for the new low-cost, super-fast way to peel away old paint . . . lift away old lacquer, varnish and shellac . . . order PEEL-AWAY today on full money-back guarantee. REMEM-BER: You must be able to simply coat . . . peel . . . lift and strip away up to 18 layers of old paint in a single peel-away action . . . without sanding, scraping, chipping or steel wool . . . or purchase price refunded in full. Order today.

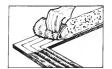
© 1982, Brand Name Testing, Inc



STEP 1: Simply coat 'Peel-Away' wonder-formula over old, en-crusted paint; (up to 18 layers



STEP 2: Cover treated area with magic-fibre 'Lift-tex' stripper-cloth, (included FREE). Let set and adhere to coated surface



STEP 3: Right before your eyes paint turns to "paper lifts. peels, strips away IN A FLASH!

_ Zip _

MAIL NO-RISK COUPON TODAY
Dumond Chemicals, Dept. PWWB-282, Dumond Place, Glen Head, New York 11545
Please RUSH me the quantity of the "PEEL AWAY" New Wonder Formula checked below. If I am not completely satisfied with the way it "peels away" up to 18 coats of paint with just one single application, I may return for a full refund (less postage and handling, of course.)
CHECK OFFER DESIRED
Small Size (enough for up to 3-room apartment) only \$9.95 plus \$2 postage & handling.
Homeowner Size (enough for regular size homes) only \$16.90 plus \$3 postage & handling. YOU SAVE \$4.00!
Handyman's Super-Size (enough for use in homes with extensive outside trim) only \$31.95 plus \$4 postage & handling. YOU SAVE \$11.85!
Amount enclosed \$ (NY residents please add sales tax) No C.O.D.'s please. CHARGE IT! (\$15 minimum charge) VISA MasterCard
Credit Card # Exp. Date
Name
Address

State .

City.

Div. Brand Name Testing, Inc.



Need to control bulk power: Cole

Electric cooperatives must continue their efforts to gain more control over their supply of bulk power, officials of Illini Electric Cooperative stressed during Illini's 45th annual meeting February 15.

Charles C. Cole of Rantoul, board president, said, "One of the major problems that your cooperative is constantly faced with is an adequate and reliable source of bulk power on reasonable terms and at a reasonable price." Bulk power represents about 60 percent of the cost of providing service, he said. "Great effort is in progress to acquire better control of that vital factor by the federation of Illini Electric Cooperative with 14 other electric cooperatives in a generation and transmission cooperative known as Soyland Power Cooperative."

Members attending the meeting in Champaign were updated on Soyland's progress toward its goal of developing bulk power facilities over which member-cooperatives will be able to exercise control of their bulk power terms, conditions and costs. Guest speaker Tom Seng, administrative assistant and director of the environmental department of Soyland, recalled the 20-year history of Soyland. He noted the important role officials of Illini have played in helping the federation work toward self-owned electric generation for the more than 100,000 member-owners of the 15 member-systems.

Seng discussed the problems electric cooperatives face today as they negotiate with investor-owned utilities for bulk power. He said high costs and the uncertainty of future supplies create the major problem for electric cooperative member-owners.

He said, "Relations between cooperatives and the power companies were developed greater loads and rural regions were completely dependent on the investor-owned public utilities for their bulk power supplies. Bulk power costs were high, wholesale service was often unreliable and after the Arab oil embargo of 1973 some investor-owned electric utilities served notice to electric cooperatives and municipal systems that they would no longer provide bulk power at any price."

It was against this background of high costs and uncertain future supplies that Soyland was organized, he added.

Illini Manager Walter R. Smith said

frequently troubled as cooperatives none of the past accomplishments of electric cooperatives would be possible without the Rural Electrification Administration loan program, which he termed vital to the future success of both distribution cooperatives such as Illini and generation and transmission cooperatives such as Soyland. "The present Administration is attempting to curtail the rural electrification program this year," Smith said, as he urged members to express their views on proposed cutbacks to their United States Representatives and Senators.

> Cole advised members that Central Illinois Public Service Company, the cooperative's wholesale power



Three members of Illini Electric Cooperative have been reelected to the cooperative's board of directors for three-year terms. From left, they are: Charles C. Cole, Rantoul; G. Jay Stiehl, Tuscola, and Wilbur W. Gady, Sadorus. At the right is Manager Walter R. Smith. The election took place during Illini's 45th annual meeting, held Tuesday, February 15, in Champaign.





Above, Jamie Krukewitt, 1982 Youth Tour winner, spoke. At left, Thomas H. Moore, general manager of the AIEC, presents a Safety Accreditation Award to Larry Carter.

supplier, raised the wholesale rate for Illini by 24 percent, effective this past January 1. This increase will mean that Illini's rates will increase about 15 percent early this spring. "None of us enjoys increasing costs for our necessary supplies and services. Although rates for electric service have increased substantially ever since the 1973 oil embargo, the price of electric service has not increased as fast as that of other energy sources that we need and purchase," Cole added.

Treasurer G. Jay Stiehl of Tuscola reported that electric consumption for 1982 increased about 2.5 million kilowatt-hours over 1981, reflecting the severe weather during the first months of the year. Total revenue was \$4,856,455, and margins totaled \$371,869. The cooperative paid \$2,589,414 for wholesale power in 1982.

Three members of the board of directors were reelected to three-year terms. They are: Charles C. Cole, Rantoul; Wilbur W. Gady, Sadorus, and G. Jay Stiehl, Tuscola. After the members' meeting, the board met in a reorganizational session and reelected officers: Cole, president; Robert D. Clark, Atwood, vice president; Herbert L. Aden, Newman, secretary, and Stiehl, treasurer.

Illini Electric Cooperative

MAILING ADDRESS–P. O. Box 637, Champaign, Illinois. Phone 352-5241.

HEADQUARTERS LOCATION-1605 South Neil Street.

OFFICE HOURS-7:30 A.M. to 4 P.M. Monday through Friday-closed all day Saturday, Sunday and Holidays.

HOLIDAYS OBSERVED-New Year's Day, Lincoln's Birthday, Good Friday, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving, Christmas Eve and Christmas.

REPORTING SERVICE INTER-RUPTIONS,—Broken poles and Fallen Wires—Phone 352-5241—day or night—7 days a week.



"How Rural Electric Cooperatives Contribute to Our Community, State and Nation"

Illini Electric Cooperative will sponsor one participant in the "Youth to Washington" tour. The tour is a one-week, all-expense-paid trip to Washington, D. C. The week will be spent traveling and sightseeing in the nation's capital. The winning student will join approximately 50 other Illinois students in Springfield June 10 for the chartered bus trip and will return to Springfield June 17.

In addition to the winner's tour, 10 finalists will tour Springfield's shrines and visit the legislature in session. The evening meal will be with sension. The evening meal will be with sension our area. The Springfield tour is April 19 and again all expenses including transportation will be provided.

The winner and semi-finalists will be chosen from entries in an essay contest. Any sophomore or junior from any of the area high schools in the Cooperative's service area may enter.

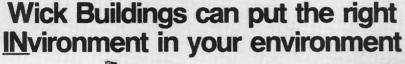
Contestants will submit an essay on "How Rural Electric Cooperatives Contribute to Our Community, State and Nation" (exact title may vary) and submit to Illini Electric Cooperative's office on or before March 31, 1983. Essays are to be type-written on 81/2 x. 11 inch paper, one side only, double spaced and not to exceed 1,000 words. Resource material will be mailed to each contestant or may be picked up at the Cooperative's Member Service Department in Champaign. Essays will be judged by a panel of judges on originality, content, accuracy of facts and composition.

Resource material and official rules may be obtained by completing and sending in the official entry form below.

	P.C	ctric Coop). Box 637 gn, Illinois	1
Name			Date
Age	Name of school		Class year (circle) 10 1
Mailing A	ddress		
City		Zip	Phone
		rative wil	l have exclusive rights to use the
I agree	that Illini Electric Coope	erative wil	
I agree essay subn Parent's o	that Illini Electric Coope nitted for this contest.	ement To	l have exclusive rights to use the Signature of Student O Go On All-expense-paid Trip
I agree essay subn Parent's o To Washin	that Illini Electric Coope nitted for this contest. or Legal Guardian's State agton, D. C., & Springfiel	ement To d, IL.	Signature of Student
I agree essay subn Parent's o To Washin We, the if (he or sha take the ex Illini Elect	that Illini Electric Cooper nitted for this contest. The Legal Guardian's State agton, D. C., & Springfiel undersigned, give permission becomes a winner of Illini spense-paid tour to Washing ric Cooperative and the A ric Cooperative will assume	ement To d, IL. 1 for Electric C rton, D. C. Association	Signature of Student Go On All-expense-paid Trip

17

I blooms many years there years will be replaced. Ac ilbs in time for spring plan 40c towards postage and or return for full refund! 200 Glads, \$1.95	ct now to ting. Send
STATEZIP	
	ilbs in time for spring plan





- A wide range of agricultural buildings
- Solar buildings

- Horse barns
- Livestock confinement buildings
- Commercial and specialty buildings
- **Exclusive Country** Gentleman design



Wick Buildings[®] A product of Wick Building Systems, Inc. ... offering the solar advantage! Mazomanie, WI 53560 • Adair, IA 50002

For new building design and pricing information, call your nearest Wick Buildings dealer listed below or phone toll free 1-800-356-9682, weekdays

(In Wisconsin call 1-800-362-5457)

ILLINOIS

AbingdonLyle Roberts • 309-462-2928
Arthur Enos Helmuth & Sons • 217-543-2298
Ashton Consol Builders & Supply • 815-453-2442
CarlinvIlle Donald Bacon • 217-627-2297
Carrollton Jim Parkinson • 618-576-2287
Danville Carl Wise • 217-776-2462
EffinghamCurtis-Jansen • 217-342-2159
Eureka Dan Wiegand, Jr. • 309-467-4527
HardinBill Parkinson • 618-576-2287
Highland Curtis-Jansen • 618-654-9807
Lawrenceville Darrell Fisher • 618-928-2605
Lena Freeport Builders • 815-563-4211
Lindenhurst Don Jackson • 312-356-1004
Lyndon Dale Woodworth • 815-778-4469
Marlon Glenn Hudgens • 618-993-5560

Mason City
MazonJ.R. Enterprises • 815-448-2406
MetropollsKoch Brothers Builders 618-524-4565
Monmouth Phil Britt • 309-734-6458
Paris Wilson Contracting • 217-275-3411
Princeville Paul Streitmatter • 309-385-4848
Royalton Robert Smith • 618-984-4470
Spring Valley . Malooley Brothers • 815-664-2353
Wataga Harold Bramlett • 309-375-6470
Waterman Little Enterprises • 815-264-3302
West Salem George's Farm Supply
WISCONSIN 618-456-8461
Genoa City Chuck Schuren

414-279-5424 or 815-895-9218



YARDS LACE LACE — LACE — LACE . . . 40 yards of Lace in delightul patterns. Edgings, insertions, etc. Assorted beautitul designs, colors and widths. Proces at least 10 yards in length-nome facing. Only \$1.75 or double orders \$3.35. 3 orders just \$4.95. Pts. include 50e pstg. and hding with EACH set of 40 yards you buy. Satisfaction guaranteed! FREE with lace 50 BUTTONSI 50 New, High Quality Buttons. Assorted colors, sizes and shapes. Sent FREE with each lace order. Please allow up to 6 weeks tor delivery. delivery. LACE LADY 1602 Locust St. DEPT. LB-892 St. Louis. Mo. 63103



Total Cost For Both Upper& Lower Dentures

Write for free details

- High Quality at Budget Prices
- In by 10 a.m.; out that same afternoon with your new dentures
- Fitted by Licensed Dentists
- · We will process insurance and **Medicaid forms**
- **Complete dental services** offered
- We'll meet your bus, make your motel reservations,

Free hookup if you come by recreational vehicle! Please call for an appointment

Frederick C. Lauer DDS Mid-America **Denture** Clinic

Bus. Loop I-44 West, Rt. 3, Box 19C Mt. Vernon, Mo. 65712 (417) 466-7196

our patients now number in the thousands...all the way from Malne to Callfornla, Canada to South America, Florida to Washington.

TRAPS AND DEVOURS ALL KINDS OF FLIES, MOSQUITOES, GNATS, ANTS, SILVERFISH, WHY EVEN ROACHES.

GIVES OFF AN INVISIBLE HONEY-SCENT, INSECTS FIND IMPOSSIBLE TO RESIST! TRAPS THEM ON CONTACT, **THEN KILLS THEM DEAD!**

Imagine if you can, one of the world's most breathtakingly beautiful houseplants . . . that to human eyes looks like a giant "flower show" Tropical Lily—but to insects that are unlucky enough to come near it, spells SURE, CERTAIN DEATH!

Yes, a wonder of nature that not only erupts with lavish displays of beautiful golden spring blooms . . . as it lines itself up like a squad of insect destroying sentries, mammoth heads on the constant alert against flying, crawling creeping insects that dare to invade your room and set foot near it.

This is the 'double-wonder' that awaits you when your plant stands with its glorious trumpet of bloom . . . these Lavender King Cobra Lillies. Each and every plant grows so spectacular in size, so dazzling in beauty that a single giant-size bloom makes a corsage by itself . . . and just 3 or 4 plants transform an entire windowsill into a South Sea Island paradise . . . ever "on the lookout" for crawling and flying pests!

BEST OF ALL—NEEDS NO SPECIAL NUTRIENTS BECAUSE IT FEEDS AND NOURISHES ITSELF . . . ON INSECTS!

Truly a conversation-piece all by itself \ldots plus a fascinating educational experience for both children and adults, too. Because there is simply no other plant in all of nature that gives you such TOTAL eye-stopping beauty PLUS anti-insect protection.

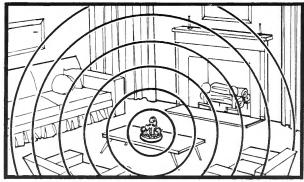
To put it simply, it is bound to leave your friends, family and house-guests absolutely spellbound . . . not only with its uncanny ability to lure and attract flying and crawling pests . . . trap them . . . digest them . . . and help keep an entire area insect-free ALL YEAR 'ROUND!

BUT SUPPLIES ARE STILL SORELY LIMITED—WE MAY NOT BE ABLE TO REPEAT THIS OFFER THIS YEAR—ACT NOW!

AMAZING KING COBRA LILY King Cobra Lily® Chirsamphora Californica



Off Walls—Even Off the Floor! Helps Rid Your Home of Insects—Pests ALL YEAR 'ROUND



ONE SINGLE PLANT PROTECTS AND DESTROYS YEAR AFTER YEAR AFTER YEAR.

KING COBRA, Dept. CLBA—52 Roberts Lane, Glen Head, NY 11545

YES, please rush me the amazing KING COBRA plant that traps and devours all kinds of creeping, crawling insects year after year. I must be pleased and delighted in every way or you will refund the full purchase price (less postage and handling of course) without question.

- □ 1 King Cobra Plant only \$3.95 plus 75¢ postage & handling.
- □ 2 King Cobra Plants only \$6.95 plus \$1.25 postage & handling. PLANT LOVERS *DISCOUNT* special—
- □ 3 King Cobra Plants only \$9.95 plus \$1.50 postage & handling. YOU SAVE \$2.65!
- 6 King Cobra Plants only \$17.98 plus \$2.00 postage & handling. YOU SAVE OVER \$8.00!
- 12 King Cobra Plants only \$32.95 plus \$3.00 postage & handling. YOU SAVE OVER \$20.00!

Total amount enclosed \$_____ (N.Y. Residents add sales tax) No C.O.D.'s please. NAME _____

State.

Address.

City _____

13

.Zip



Power cost adjustment No Ripp-Off

It's called a "power cost adjustment," or a "fuel adjustment charge," or any one of several other designations. But as far as some consumers are concerned, including our members, it's mistakenly called a rip-off.

Most distribution electric cooperatives in Illinois refer to the charge as a power cost adjustment, since they do not actually purchase fuel, only electricity. However, the charge on which this is based is determined by the wholesale power supplier, in our case Central Illinois Public Service Company, and the charge at this level is called a "cost of power" or "fuel adjustment charge."

The power cost adjustment is the only way an electric cooperative can recover extra dollars spent for the higher cost of coal, oil or uranium needed to produce electricity. There is no profit in the power cost adjustment charge for the electric cooperative – it simply reflects what the power supplier has charged the co-op as a result of increasing costs to produce the power.

Some people feel that hydro electric power would be the exception to the rule since its "fuel," falling water, is free. But there are other factors which can affect the cost of producing power, among which are labor costs, demand factors, power factor and decreased energy consumption by the users.

Most people believe fuel adjustment is a relatively new thing. It isn't; in fact, there have been fuel adjustment provisions since the 1950's, but because the cost of producing power remained relatively stable for so many

years, the majority of electric systems in the United States discontinued fuel adjustment practices. Then, in the early 1970's when fuel costs became unpredictable, and began the rapid escalation, the Federal Power Commission (now Federal Energy Regulatory Commission) in Washington, D.C., redefined the fuel adjustment clause. On November 13, 1974, a new description was issued and electric systems are now regulated by that order. Thus, the fuel adjustment charge was reintroduced and has become a point of confusion today.

Doing away with the power cost adjustment is not as easy as one consumer thought. She suggested the co-op instruct its servicemen to turn off their trucks instead of letting the engines run while they went about their work. This, she reasoned, would compensate for the increasing cost of fuel. That, she was told, was not the answer.

The above description applies to the month-to-month change in wholesale power cost adjustments. Normally this only changes slightly each month.

On July 1 of last year, the Cooperative revised its rate schedule upward approximately 11 percent to reflect the increased costs of materials, labor, etc. At the same time, we informed you that we were negotiating with CIPS to minimize the increase in wholesale power cost to take effect this past fall. The final settlement was for an increase of slightly over 24 percent effective January 1, 1983.

The board of directors decided to initially show this increase as part of the wholesale power cost adjustment. Beginning with your March 3 bill, most of this increase was shown, and all of it is applied on the April 3 bill.

To explain how the power adjustment clause is figured, let's take a look at the present farm and home rate. When the rate schedule was prepared last summer, we used an average of $37\frac{1}{2}$ mills as our base wholesale power cost. A mill is a tenth of a cent, so $37\frac{1}{2}$ mills is 3.75 cents per kilowatthour. As the cost of producing power goes up or down, the cost of purchased power by Illini Electric goes up and down.

The power cost adjustment varies each month as the wholesale cost of the power we buy falls below or exceeds 3.75 cents (371/2 mills) per kilowatt-hour. When the cost is below, as it was with the February 3, 1982 bills, you received a credit which is subtracted from the total cost of your bill; when the cost of power exceeds 3.75 cents the adjusted figure is added to your power bill as a separate figure called wholesale power cost adjustment. Remember, this is not the total cost of power, only the amount exceeding the base figure of 3.75 cents.

The power cost adjustment is applied to the monthly bills at the same rate as we are assessed by CIPS and, since power requirements as well as fuel and other costs fluctuate each month, the power cost adjustment also fluctuates.

We feel that this method of figuring your total bill is the fairest way of arriving at the true cost of supplying you with electricity. Without it, we may be overcharging you or operating your cooperative at a deficit. We hope that this explanation will give you a better understanding of why we use the power cost adjustment. We welcome your inquiries if you have any further questions.

Common causes of low and high voltage

may be the result of any one of several abnormal conditions. Check first with your neighbors to see how their lights and appliances are doing. If they are having the same trouble, you can be fairly certain that something is wrong somewhere on the main power line or in the substation. A lineman must then be sent out to find the trouble and make the necessary repairs to restore proper voltage.

If you have installed some major appliance or piece of electrical equipment, the transformer or service wires may be overloaded. Everything would still operate normally except when you try to use this new equipment. Then evidence of low voltage would indicate an overload. The transformer, service wires or both should be changed.

Sometimes low voltage and loss of power is due to loose or badly corroded connections somewhere on the service wires between the transformer and the fuse box inside your house. Our linemen have found that more than 85 percent of these troubles occur on the member's side of the meter - in the meter base, in the breaker box below the meter (usually

Low voltage or not enough power a bad breaker here) at the entrance cable connection at the house, or a loose connection inside the fuse box. The most common causes seem to be too many wires in one connector, the wrong connector for connecting aluminum conductor to copper, and not having connections tight enough to begin with.

> If there is a loose or open connection in one of the hot lines between the transformer and your fuse box, it will act exactly the same as if you had a meter pole breaker tripped off or a main fuse burned out in your fuse box. Here are some of the symptoms:

> 1. Some of your lights and 120volt appliances will work normally and others will not work at all.

> 2. None of your 240-volt appliances will operate.

> 3 If you have any 240-volt appliance turned on, voltage can then feed back through this appliance and some of your lights may be quite dim. Turning off or unplugging the 240-volt appliance will cause all the dim lights to go out completely.

> If there is a loose or open connection anywhere in the neutral line, the following symptoms become quite evident:

1. Some lights will get quite dim when a 120-volt motor or other appliance is turned on.

2. Other lights will get extremely bright. This is a dangerous voltage as far as light bulbs, television, microwave ovens and radio tubes are concerned and the trouble should be found and corrected as soon as possible before excessive damage occurs. For the protection of your 120-volt lights and appliances you should turn them all off until the trouble has been found and corrected.

3. All 240-volt motors and appliances will operate normally without any danger of being damaged.

Although we are always willing to help anyone with their voltage problems, Illini Electric Cooperative cannot assume any responsibility for damages or losses caused by these abnormal voltages. There is no possible way that we can prevent damage due to wind, lightning, falling limbs or trees, tractor, truck or automobile hitting a pole or guy wire, bad meter pole breakers, burned connections due to overload, wrong materials being used, loose connections done by others and all the other conditions that can sometimes cause voltage fluctuations.

Do you understand your electric bill?

due to the fact that bills have an old habit of arriving and piling up each month. Billing may be looked upon as a charge for many services taken cold air rushes out and the unit must advantage of and enjoyed over a 30-day period occurring several weeks prior to the date your bill is due. freezer may cause a variation. An

And think of it this way - if there were no electric bills to pay, what would living and working conditions be like?

question: "Why is my bill higher than my neighbor's who lives across the I do?"

April 1983

People in general look upon bill family may use more electricity paying with despair. Perhaps this is than another using the same appliances. One housewife may open her refrigerator door twice as often as another. Each time the door opens, run more to replace it.

The amount of food stored in a empty freezer runs more than a full one. Freezing food requires more electricity than storing food. Electric ranges consume electricity according Every now and then we hear this to the number and types of meals prepared.

No two families have the same road and has the same appliances that amount of washing and no two women wash in the same way. One may iron There are many reasons why one one day a week while the other irons a

few pieces each day. Each time the . iron cools and is reheated, it uses additional electricity.

One family may think 60- or 75-watt bulbs are sufficient, while the other uses 100- to 150-watt bulbs in every socket. While one family retires at 9 o'clock and another watches TV until 11 o'clock, there can be no comparison of the consumption of electricity.

Finally, one family may have adequate wiring and the other poor wiring. Voltage drop in poor wiring reduces efficiency and wastes electricity. Won't you agree that no two families live alike or have the same habits so the amount of electricity used will vary with the family?

15

"I can show you why a genuine Bonanza Building is the best buy for your budget."



Mr. Ken Ruegsegger West Liberty Builders West Liberty, Iowa

I can show you this value because I build what I sell — the genuine Bonanza building.

There's a Bonanza Builder near you who can show you how you can get the best value for your dollar in farm, horse barn or commercial buildings.

Call today or send us the coupon. Call Toll Free 1-800-637-2046 From Illinois Call 1-800-252-5735 Builder territories available in a few selected areas.

Have the nearest	Bonanza Builder contact me.
NAME:	
ADDRESS:	PHONE:
COUNTY:	TOWN:
STATE:	2IP:
	Machine/Storage 🛛 Utility Garage se 🗋 Dairy 🗌 Beef 🗌 Business
Bonanza Buildings, P. O. Box 9, Charleste	



too, but it will not do as good a job as groundwater, because the temperature fluctuates. Still, using an existing pond may be a better bet than drilling a new well or two.

For those not fortunate enough to have a good water supply, there is yet another alternative, but its attractiveness is somewhat dampened by its fairly stiff initial cost. It is called a "closed loop earth-coupled system," and it involves laying a large grid of plastic piping about six feet underground, where the temperature remains fairly constant all year long.

After filling the loop with water, you connect your water-to-air heat pump in the usual way. The earth's insulating properties take over from there, providing a home-grown source of even-temperature "groundwater," even when the winter winds are howling outside.

About 20,000 of the systems are perking away, mostly in Canada, Sweden and Germany, and there is no great hurdle to making them work here, too, except the initial cost. You will need to buy about 400-500 feet of pipe for each ton of air-conditioning capacity on the cooling side of your heat pump. The average 1,500-squarefoot home, incidentally will have about a two-ton unit.

After swallowing the initial cost, you have a system capable of providing years of relatively low-cost heating and cooling.

To summarize, a heat pump is a good way to heat and cool your home with one unit, and a water-to-air heat pump is better yet, because of increased efficiency.

A study performed in early 1982 showed that for a home requiring 100-million British thermal units (Btu's), a groundwater heat pump cost only \$3.59 more to heat for a winter than a well-maintained natural gas furnace with spark ignition and an automatic flue damper. To heat the same home with a propane furnace May 1983

A. I. E. C. Publicatio	ons
P. O. Box 3787	
Springfield, Illinois	62708
mail me c	opies of the publication
	lose \$2.00 to cover the cost of
the book and pay pe	ostage and handling.)
Print Name	
Address	
	teZip
	Springfield, Illinois (mail me co "Home Weatherizati (For each copy, enc the book and pay po Print Name

cost \$477 more than the water-to-air heat pump, and a fuel oil furnace

giving 7.5 percent efficiency would would have burned \$573 more of your dollars than a groundwater heat pump.

Wick Buildings can put the right **INvironment in your environment** Quality Engineering • Quality Materials • Quality Completion A wide range of agricultural buildings Solar buildings Horse barns Livestock confinement Idinas® **:**ПП buildings Commercial and A product of Wick Building Systems, Inc. specialty buildings ... offering the solar advantage! **Exclusive Country** Mazomanie, WI 53560 • Adair, IA 50002

For new building design and pricing information, call your nearest Wick Buildings dealer listed below or phone toll free 1-800-356-9682, weekdays

(In

ILLINOIS

Gentleman design

Abingdon Lyle Roberts • 309-462-3928
Arthur Enos Helmuth & Sons • 217-543-2298
Ashton Consol Builders & Supply • 815-453-2442
Carlinville Donald Bacon • 217-627-2297
Carroliton Jim Parkinson • 618-576-2287
Danville
EffinghamCurtis-Jansen • 217-342-2159
Eureka Dan Wiegand, Jr. • 309-467-4527
Hardin
Highland Curtis-Jansen • 618-654-9807
LenaFreeport Builders • 815-563-4211
Lindenhurst Don Jackson • 312-356-1004
Lyndon Dale Woodworth • 815-778-4469
Marion Glenn Hudgens • 618-993-5560

Wisconsin	call	1-800-362-5457)
-----------	------	-----------------

Mason CityW.A. Grandy Co./ Ken & Jerry Harnacke • 217-445-2481
MazonJ.R. Enterprises • 815-448-2406
MetropolisKoch Brothers Builders 618-524-4565
Monmouth Phil Britt • 309-734-6458
Paris Wilson Contracting • 217-275-3411
Princeville Paul Streitmatter • 309-385-4848
RoyaltonRobert Smith • 618-984-4470
Spring Valley . Malooley Brothers • 815-664-2353
WatagaHarold Bramlett • 309-375-6470
Waterman Little Enterprises • 815-264-3302
West Salem George's Farm Supply
WISCONSIN 618-456-8461
Genoa City Chuck Schuren
414 270 E424 or 915 905 0219

414-279-5424 or 815-895-9218

Selected dealer territories available. Contact: Wick Buildings, Mazomanie, WI 53560



ILLINI ELECTRIC COOPERATIVE 217-352-5241 CHAMPAIGN, ILLINOIS

What is the facilities charge

By RAY WEISS

Champaign

ILLINI ELECTRIC COOPERATIV

Member Service Adviser We have heard the question, "What is the facility charge on my bill this month?"

Beginning last July, your bill has shown the "facility charges" as a separate charge. It has always been a part of the billing, but was more commonly known as the "minimum charge" or the higher cost per kilowatt-hour for the first block of kilowatt-hours used. Now the facilities charge does not include any kilowatt-hours.

But what is a facility charge? First let us list some things it is not:

1. It is not a charge for reading vour meter.

2. It is not a charge for doing some work at your premises.

3. It is not a new charge, but the way it is shown on the bill has changed.

The Random House Dictionary of the English language – the Unabridged Edition defines facility: "... something designed, built, installed, etc., to serve a specific function affording a convenience or service." Charge is defined: "(1) to impose or ask as a price, (2) to require payment: to charge for a service, (3) a fee or price charged." Applying these definitions we have some insight to what "facility charge" is.

1. It is a charge assessed to recover the cost of the poles, wire, trans-

formers, meters, and electrical hardware needed to make electricity available to each member. Funds, which must be repaid with interest, have been borrowed from the rural Electrification Administration of the Department of Agriculture and the National Rural Utilities Cooperative Finance Corporation. These funds have been used to build the lines to vour house, farm, or business.

When rate schedules are established, one school of thought is to assess a higher rate for the first kilowatt-hours to recover a portion of the costs of the poles, wire, etc. The rest of the rate is assessed to cover the cost of power and other operating costs. After all of these costs have been met, any funds left are called margins and are assigned to the member-owners as capital credits. These capital credits represent your equity in Illini Electric Cooperative.

In the last 10 years, the method of developing rates has been altered by assessing a facility charge, without any kilowatt-hour allowance, to provide for the cost of the physical facilities. This approach lets the charge per kilowatt-hour remain lower. The charges for energy and the wholesale power cost adjustment, then, provide funds to pay the power bill and operating expenses. Again, any funds left over are margins and are assigned as capital credits to the member-owners.

2. The facility charge is the amount that would be charged if no electricity was used during the month. It is the charge for having electricity available.

3. The facility charge will be on your electric bill each month as part of the charge for electric service.

Illini Electric Cooperative

MAILING ADDRESS-P. O. Box 637, Champaign, Illinois. Phone 352-5241.

HEADQUARTERS LOCATION-1605 South Neil Street.

OFFICE HOURS-7:30 A.M. to 4 P.M. Monday through Friday-closed all day Saturday, Sunday and Holidays.

HOLIDAYS **OBSERVED**-New Year's Day, Lincoln's Birthday, Good Friday, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving, Christmas Eve and Christmas.

REPORTING SERVICE INTER-RUPTIONS,-Broken poles and Fallen Wires-Phone 352-5241-day or night-7 days a week.

Energy conservation— Catch 22

It might be called energy conservation's Catch-22.

The label may be unfamiliar, but many consumers in Illinois and across the country are becoming wellacquainted with this principle - or soon will be.

It takes the form of a nasty little string attached to conservation's noble cause. It works like this:

You find yourself squeezed by the rising cost of living and make up your mind to do something about it. There's nothing you can do about the fixed costs you face, so you zero-in on some costs you can reduce, particularly energy expenses. You weatherize your home, turn down the thermostat, leave rooms unheated, put in a stove or energy-efficient fireplace system to use firewood you've cut yourself - all in the interest of saving energy and money.

Pretty soon, you begin to see some results - your efforts have paid off in lower fuel and electric bills. But, many of your neighbors and friends are doing the same things and they, too, are using less energy.

That's when conservation's Catch-22 rears its ugly head.

With all this conservation going on, your electric supplier - private utility, municipal system or electric cooperative - soon finds itself in a financial bind. Fewer kilowatt-hours of electricity are being sold and revenues are declining while inflation is raising the cost of doing business.

The supplier can't do anything about its fixed costs, either - and there are limits to the operating economies that can be taken.

As a result, the supplier has no choice but to increase revenues by raising the price of each kilowatt of electricity.

This means that you and your neighbors will soon find that your conservation efforts have brought higher electric rates and little or no overall savings in dollars.

All your "best-laid plans" have come to naught, right? Not entirely.

Perhaps you haven't achieved your original goal of reducing your energy expenses, but look at what you have achieved:

 Your home is now more energyefficient than ever - and that means it'll require less energy throughout its lifetime, whatever the costs may be.

28

• You and your family have probably learned a lot about vourselves that you'd been careless and wasteful about energy use in the past, and that you can get along quite well using far less.

These achievements can't be translated into dollar values, but, when coupled with those of your energyconscious neighbors across the country, they will diminish the drain on the world's limited energy resources.

And that could have important implications for our children and their children, who may - or may not have new technologies to provide essential energy for their world.

It is a lofty and sentimental view, of course, but those future generations may one day look back at ours, grateful that our vision wasn't totally blocked by wasteful habits, an unrelenting allegiance to comfort, mindless greed - and a principle that could be called conservation's Catch-22.

Electricity doesn't take a vacation

Now that vacation time is upon us, and you are planning to be gone for an extended period of time, your electric bill should decrease right? If you think this, you are certainly wrong!!!

It is a misconception by too many people, that when they leave on a vacation, their electric meter stops until they return. If they are on vacation for two weeks they expect their electric bill to reduce to one-half of their normal monthly usage. Let's ask ourselves a few questions before we assume our electric bill should decrease by any considerable amount during vacation time.

1. Was the water heater turned off during your vacation? Remember, if the electric water heater is left energized during vacation, it will continue to operate, and maintain the tank temperature even if you are not using any hot water.

2. Was the refrigerator emptied and turned off? If not it will continue to May 1983

operate to maintain the pre-set temperature.

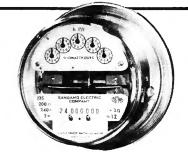
3. Was the freezer also emptied and turned off? Unless it is practical to do so the freezer should be left energized.

4. Other electrical appliances that keep running while you are on vacation are: clocks, remote television sets. and automatic lighting.

If you are determined that no electricity is to be used during your vacation, you can accomplish this by turning off your main breaker or fuse box. Remember, when you do this the automatic appliances and lighting will stop. Your refrigerator and freezer will defrost, your electric water heater will not have hot water ready for use upon your return. It's a decision only you can make.

We suggest that should you decide to leave your electricity on, to consider the following tips:

1. Unplug all appliances not in use. 2. The water heater should be



turned off at the breaker or fuse box.

3. If a light is to be left on it should be connected to a timer.

4. If you intent to be gone for an extended period of time come into our office and make arrangements so your electrical service will remain uninterrupted.

5. Read your meter upon leaving and again upon your return. This will let you determine the number of kilowatt-hours used during the period of time you were gone.

Another reminder is that many vacationers bring home several days or weeks of dirty laundry. This laundry will give your electric water heater a work-out during your first day or two at home.

SPECIAL INTRODUCTORY OFFER!



NO RISK GUARANTEE: You must be completely satisfied with your purchase or we will refund your money promptly no questions asked! GLOWS WITH THE LUSTER OF POLISHED BRASS!

DELUXE FOLDING SCISSORS 79c An open & shut case of convenience. Quality steel blades, cushioned plastic handles, ingeniously engineered to fold to absolutely safe 3" size to slip easily into pocket, purse, sewing kit, first aid kit, glove compartment, tackle box, etc. Great for in-store coupon clipping. Vinyl case included. A great value at only $79 \notin Pr$, 2 Pr. \$1.50, 6 Pr. \$4.25, 1 Dz. \$7.95 ppd. Fund Raisers write for quantity prices. Money-back guarantee. Pls. allow up to 6 wks. for delivery. TWO BROTHERS, INC. Dept. FS-584 1602 Locust St. St. Louis, Mo. 63103



Total Cost For Both Upper&Lower Dentures

- High Quality
 - Low Prices
 - 1 Day Service
- Licensed Dentists
 - General Dentistry
 - Processing of Ins. Forms

Complete Dental Services plus Ozark Hospitality WE WANT YOU SATISFIED!

We'll meet your bus, make your hotel reservations, or give you free hookup for your recreational vehicle.

Please call for an appointment or WRITE FOR FREE DETAILS

SAVE

MORE

2 FOR

\$**14**18

Frederick C. Lauer DDS Mid-America Denture Clinic

Haywood Drive Rt. 3, Box 19C Mt. Vernon, Mo. 65712 (417) 466-7196

Patients now number in the thousands . . . from the Atlantic to the Pacific from Alaska to the Southern most tip of South America.



Harry Kuhn

and Ryan live in Steeleville.

Egyptian Electric Cooperative Association is a member-owned electric utility serving some 10,500 farms, homes and businesses in parts of eight counties in Southern Illinois.





DELUXE FOLDING SCISSORS 79c An open & shut case of convenience. Quality steel blades, cushioned plastic handles, ingeniously engineered to fold to absolutely safe 3" size to slip easily into pocket, purse, sewing kit, first aid kit, glove compartment, tackle box, etc. Great for in-store coupon clipping. Vinyl case included. A great value at only $79 \notin Pr$, 2 Pr. \$1.50, 6 Pr. \$4.25, 1 Dz. \$7.95 ppd. Fund Raisers write for quantity prices. Money-back guarantee. Pls. allow up to 6 wks. for delivery.

TWO BROTHERS, INC. Dept. FS-585 1602 Locust St. St. Louis, MO 63103 are better than new ones! Fix it and forget it! Let us send you complete information. This is our 33rd year. **VIRDEN PERMA-BILT CO.**, 2821 Mays St., P. O. Box 7160IN, Phone: 806/352-2761, Amarillo, TX 79109

5.7

DID YOU KNOW? That old stock tank, water reservoirs, etc., coated with Virden Tank Coat,

* * *

Canning L Sterilizing	
Rack	easy to remove with tongs carrying hendle
Send Check of	or - bright zinc finish
Money order	to:
217-768-3828	LID CADDY \$1.69
Allow 4-8 weeks delivery. Dealers-Fundraisers Inquiry	Dave Fleigle Post. & Hand. + 1.31 Box 272, D
Patant Applied For	Moweagua, IL 62550 \$3.00



UNIBUILT HÖMES We Deliver

That's right...Unibuilt homes are delivered directly to the building site, complete with wall and floor coverings, kitchen and bath fixtures in place. Plus Unibuilt's modular design features better quality construction and comfort than you would expect from a conventional stick-built home, but at significant savings to you!

- Several sizes and designs to choose from.
- Completely pre-engineered and architect designed.

I want to know more about Unibuilt's modular home system.



A Product of the Reasor Corp. P.O. Box 460 Charleston, Illinois 61920

- Energy efficient using superior insulating technology.
 Meet or exceed FmHA, BOCA, FHA
- Meet or exceed FmHA, BOCA, FHA and local building codes.
- Ready for your family in 45 days or less!

For more information on affordable Unibuilt homes, mail the coupon or call TOLL FREE 800-637-2040. In Illinois: 1-800-252-6546

 Please send literature. Please have a salesman ca 	.11.
NAME	
ADDRESS	
PHONE	
СІТҮ	
STATEZIP	
	REN I



Spot cooling fits limited budgets

Window air conditioners can be your best buy for older homes without ductwork. They can also be your best buy if your cooling budget is limited.

Many older homes and some newer homes are not equipped with ductwork which will accommodate modern air-conditioning systems. In this case, a properly sized window air-conditioning unit will be your best choice and electric wiring to operate the unit will probably be less difficult and costly to install. It is less costly to spot cool your home with individual units rather than cool all of your home with a central air-conditioning unit. For example, you can cool the areas such as kitchen and living rooms during the day, keeping the bedrooms closed off. Then during nights, use smaller units to cool your bedrooms.

Proper location of a window air conditioner is important. Try to locate it in such a way as to move the cooled air toward the open living areas during



Thad Bales, seated left, of Homer is the winner of the 1983 Illini Electric Cooperative "Youth to Washington" Essay Contest. Thad, a student at Homer High School, was selected winner of the contest during final judging April 21 in Urbana. As winner of the local contest, Thad was scheduled to join approximately 65 other Illinois youth for a week-long, all-expense-paid tour to Washington D.C., June 10-17. Ten essays were entered in the final judging. Seated with Thad is Charles C. Cole of Rantoul, president of the board of directors of Illini. Standing are, from left, parents Mr. and Mrs. Robert Bales and Clo Page and Jean Greenwood, English teachers at Homer High School. Mr. and Mrs. Bales are members of Illini Electric Cooperative.

the day. Also, try to locate the window unit so that it is in the shade during the hottest part of the afternoon and early evening.

A window fan can also be a cool energy saver in the summer. Placed in a window opposite an open window, it draws cool outside air through the house, much the same as an attic fan.

For best results, a variable speed reversible fan made for window installation should be used. Lightweight box fans are not intended for window use. Place the fan opposite the room or rooms to be cooled and let the fan draw the air from outside through the room across the living area. This creates a vacuum in the room which pulls outside air into the house and produces a gentle, natural breeze, not like the heavy, forced stream of air produced by a box or oscillating fan.

Box fans can be used similarly to draw air across a room or floor when placed opposite an open window, on a stand or table; but as mentioned before, they are not built to take the stress of window operation for a prolonged period.

If a fan is used for supplemental cooling, care should be taken that the fan does not eliminate the results of your air conditioner, such as the removal of humidity. Fans work best in cool evenings after sundown, or on days when the temperature and humidity are not high.

A fan put to proper use can go a long way toward making a home more comfortable, and the energy bill lower this summer.

Use of room air conditioners and/or fans can not only reduce kilowatt-hour consumption, but they help hold down peak demand during the summer months.



Your cooperative purchases electric energy on a wholesale basis. Its cost is based on a charge per kilowatt-hour plus a charge based on the peak demand during the 30 day billing period. This demand charge amounts to nearly two-thirds of our wholesale power cost, which is a very significant amount.

The demand charge has very little to do with the number of kWh's purchased, but is based on the peak amount of electricity being used during any 30 minute time period. In addition, the peak demand set at each substation during the summer months, sets the minimum demand charge for the next 12 months. This is more than you ever wanted to know about demand costs. We merely want you to realize why we are promoting the Condition 90 demand reduction program.

Remember, using your appliances during the "off peak" period may not save you any kWh's, however it will reduce our demand cost which will show on your bill as a reduced wholesale power cost adjustment over the following months.

As the outdoor temperatures rise to 90 degrees or above, our system demand will rise to a high peak each afternoon due to the large number of air conditioners running at one time. Condition 90 is aimed at alerting you to the costly peak and encourage you to shift usage of heat producing appliances away from the peak periods that normally occur during the summer.

The term "load shifting" means distributing your electric use to different times of the day. As we have said, peak demands usually occur between the hours of 10:00 a.m. and 10:00 p.m. during the summer, especially on very hot days and during extended "heat waves." Obviously, you should try to shift as much of your heavy electric use as possible to hours before or after those peak times.

It's not difficult to do. You might think of it as budgeting. First you must determine how you use the most electricity. Then you need to "budget" times before or after the 10:00 a.m. to 10:00 p.m. hours for that usage.

In most homes, the heaviest demand appliances used during the summer are the air conditioner, the electric water heater, the clothes washer, the clothes dryer, the electric range and oven and the dishwasher. Controlling the times you use these appliances will be your best effort at controlling peak demand.

For instance, instead of setting aside a particular "laundry day" it's better to wash a few loads on several days. Put in a load to wash when you get up in the morning. By the time you've finished breakfast, that load can be put in the dryer and you'll be using that energy during a low-demand period.

Or you can wash a load during the late evening hours, and put those clothes in to dry just before bed. When you get up in the morning they'll be dry. Use cold water whenever possible to do the laundry. Water heaters are among the highest demand appliances in a home.

Making the best use of your electric range and oven is important in controlling use. If you have to cook during those peak demand hours, it's best to cook one-dish meals such as casseroles, cook as many items in the oven at one time as possible, and try to avoid use of the oven and the range burners at once. If you have a microwave oven, use it as much as possible. Microwaves are very energy efficient and don't heat up the kitchen. Another good alternative to range and oven cooking is the slowcooker which is also a low demand appliance. And both methods are time and energy savers for the homemaker.

It's especially important for the working housewife to avoid the urge to do everything just after coming home from work in an effort to "get it over with." Use the suggestions above for preparing evening meals, let the dishes wait for a little while after dinner or go ahead and rinse them but don't turn the dishwasher on until just before bed.

Weekends are a good time to do chores which involve heavy demand appliances because demand is much lower on those days. Make that special full meal for Sunday dinner and use leftovers for soups and casseroles throughout the next week. Do heavy laundry that requires hot water and long drying time on Saturdays.

The refrigerator is an appliance that uses a lot of energy but it simply isn't a "shiftable" one. You can make good use of it however by making sure it's set at the right temperature and that your family doesn't stand in front of the open door for a long time trying to decide what they want to eat.

These few simple efforts can make a big difference. Along with setting your air conditioner at a reasonable temperature (78 degrees or above), shifting the use of other appliances is something we can all do with no expense and very little inconvenience. These individual efforts will help reduce demand on our electric system. It's like voting — you may think one vote doesn't really count but what if no one made the effort.

June 1983



• No. 4507 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½. Size 14½ (bust 37) takes 1-7/8 yards 60-inch fabric.

• No. 9329 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½. Size 14½ (bust 37) dress takes 1-5/8 yards 60-inch.

• No. 4964 is cut in Multi-size pattern. Sizes (6, 8, 10, 12), (14, 16, 18, 20), Order your regular size.

• No. 9050 is cut in Women's Sizes (34, 36, 38), (40, 42, 44), (46, 48, 50). Order your regular size.

• No. 4996 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3¼ yards 45-inch fabric.

• No. 9413 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½, 22½, 241/2, 261/2. Size 141/2 (bust 37) takes 21/4 yards 60-inch.

 No. 9048 is cut in Waist Sizes 24, 25, 26½, 28, 30, 32, 34. Size 261/2 wrap 2 yards 45-inch; other 1-7/8.

• No. 9195 is cut in Women's Sizes 36, 38, 40, 42, 44, 46, 48, 50. Yardages given in pattern.

• No. 9420 is cut in sizes 101/2, 121/2, 141/2, 161/2, 181/2, 201/2, 221/2. Size 14½ (bust 37) takes 4½ yards 45-inch.

• No. 9346 is cut in sizes 2, 4, 6, 8. See patterns for yardages.

• No. 4531 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 2-5/8 yards 45-inch fabric.

• No. 9174 is cut in sizes (6, 8, 10, 12) (14, 16, 18, 20). Order your regular size.

го: ратт	TERNS		
Illino	is Rural Electric	c News	
	Box 3787		
Sprin	gfield, IL 6270	8	
I have end	and \$	(\$2.25 per nettern	_ aach
check or n	nonev order a	_(\$2.25 per pattern ccepted) for the fo	- cash
patterns:	noney order a	copied) for the re	110 10 1112
Pattern No.	Size	Pattern No.	Size
<u>.</u>	·	· · · · · · · · · · · · · · · · · · ·	
			
Print Name			
A. J. J			
Address			
City			
••••		Zip	

Highlights

(Continued from page 5)

Among the many notable experiences for Illinois youth participating in the 1983 Tour were visits to Gettysburg National Military Park, new National Aquarium at Baltimore, Air and Space Museum at the Smithsonian Institution, Library of Congress, Mt. Vernon, Arlington Cemetery, Lincoln Memorial, Washington Monument, Jefferson Memorial, Vietnam War Memorial and National Zoo.

A large number of the students on the tour were winners of all-expensepaid trips as winners of their local cooperatives' essay contests. Others participated as "Willie Wiredhand" tourists, including students who did not win their cooperatives' contest and children and grandchildren of cooperative directors and employees, who are not eligible for the essay competion. "Willie" participants pay all their own expenses.



At Last! A Small Tiller That Works! Forget about big, clumsy yank-you-along tillers forever! The Mantis tills a sensible 6"-9" wide

(not 20" or more like big tillers). Mantis weighs just 20 lbs. (not 200 to 300 lbs.). Mantis' tines are so rugged they're warranted unbreakable for life... Mantis' engine is so durable we give you a lifetime replacement

agreement. Mantis' tines go through tough soil like a chain saw goes through wood. No jerking, no yanking you along...and Mantis turns on a dime! Put the fun back in gardening.

GARDENING

Γ

Weighs 22 Pounds

line Powered

direct saves you \$.

TILLS KNEE DEEP! ... WEEDS SHALLOW

RUNS SINGLE HANDED ... MAKES SOII WEED FREE FAST ... WITHOUT HARD WORK

TINES ... PRICED RIGHT

Weeds Fast from

Dept, C-103

St. Louis, Mo. 63103

12 to 2 In. Wide

WEIGHS 22 LBS.... VERY GENTLE, WON'T JUMP LIKE OTHER TILLERS ... ADJUSTABLE - HOOD - TIN AND ALL FROM 18 TO 2 INCHES WIDE ... PRICED RIG

Tills Deeper Than

Other Tillers Do

1. Built for commercial use . . . Rugged Air Force approved engine . . . Try this tiller in your own garden . . . 1 month money back trial period, liberal warranties . . . Sold factory

SEN	D TODAY FOR FREE INFORMATION
	For more information write
	Mantis Manufacturing Co. 1458 County Line Rd., Dept. 237 Huntingdon Valley, PA 19006
Na	me
Add	dress
City	y
Sta	te Zip



Stamp proposed for REA's 50th anniversary

Plans are being formulated by the Rural Electrification Administration, the National Rural Electric Cooperative Association and other segments of the rural electrification program for observance of the 50th anniversary of REA in May 1985.

At the request of the Association of Illinois Electric Cooperatives, several members of the Illinois Congressional delegation have written to the Postmaster General urging him to authorize the U.S. Postal Service to issue a commemorative stamp to mark the occasion. Members of the delegation who have notified us that they have written to Postmaster General William F. Bolger include: Senators Charles H. Percy and Alan J. Dixon and Congressmen Frank Annunzio (D-17th District), Robert H. Michel (R-18th District), Edward R. Madigan (R-15th District), Richard J. Durbin (D-20th District) and Paul Simon (D-22nd District).

In his letter, Congressman Simon said that he agreed that "the REA has made the lives of rural Americans better, and it has improved the nation's economy, especially in agriculture. I, too, believe that a commemorative stamp would be a good way to honor the 50th Anniversary of the REA;..."

Ceiling fans are practical as well as attractive



A touch of nostalgia may do more than create the mood of a long-past, unhurried era. The slowly revolving blades of an electric ceiling fan are practical as well as pretty.

A fan may not drastically lower your power bill, but it will raise the comfort level of a room. In the winter, the turning blades force the rising warm air back down into the living area of a room. For an example: In houses with vaulted ceilings or houses with wood burning heaters — these fans do a good job of moving the heat from the ceiling area to where it is needed. In the summertime, the constant motion helps circulate conditioned air or offers slight breezes as a much less expensive alternative to air conditioning.

Ceiling fans can be attractive and useful in almost any room in the house. Fans are available in a wide range of styles from rustic to contemporary to ornate. Some may have lights attached as an added feature. Usually, when a lamp is included, they may be operated together or independently.

You may discover extra advantages of a ceiling fan. If a fan is located above an open porch, screened porch or sun room, the air movement will discourage biting insects. In a home that is disturbed by outside noises, the faint motor sound of some models provides a soft background hum that may help drown out other offensive noises.

When purchasing a ceiling fan, you will need to consider the style, the diameter of the fan blades, the ceiling height (fans usually hang down about 12 inches and those with lights will reduce head clearance by another eight inches), the blade construction (high quality wood or metal is important) and the efficiency of the fan.

To compare the efficiency of various ceiling fans, note the amount of air that each is rated to move.

Also, compare the electricity consumed by the fan at each setting. The lower the wattage required to move the air, the more efficient the ceiling fan.

TVA anniversary marked with capital symposium

The Tennessee Valley Authority (TVA) called by some the "highest achievement of American democracy," will celebrate its 50th anniversary this year.

The TVA Act was signed into law May 18, 1933, the day after Congress approved legislation establishing the authority. Originally conceived to become the development agency for an area of America three-quarters the size of England, TVA has evolved into a flood-control, energy-production enterprise that has improved the quality of life for hundreds of thousands in the Tennessee River Valley.

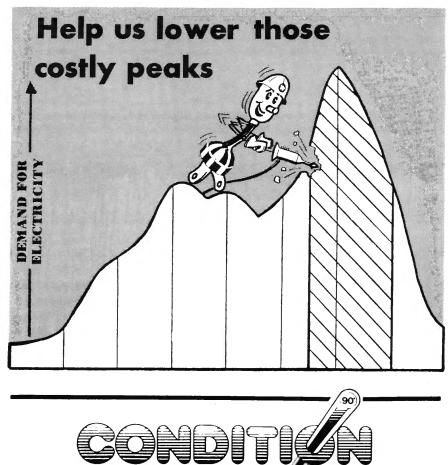
Observance of the anniversary in Washington included a half-day symposium on TVA March 22 in the Caucus Room of the Cannon House Office Building. Invited symposium participants included Senator Jennings Randolph of West Virginia, the sole remaining member of Congress who voted on the TVA Act in 1933.



Summer energy savers

- Set air conditioning thermostats no lower than 78°.
- Run air conditioners only on really hot days and set the fan speed on high.
- In humid weather, set the fan at low speed to provide less cooling but more moisture removal.
- Clean or replace air conditioning filters at least once a month.
- Close off unoccupied rooms.
- If you are leaving home for more than several hours, turn off air conditioning temporarily.
- Use vertical louvers or awnings on the windows or draw draperies and shades in the sunny windows.
- Keep windows and outside doors closed during the hottest hours of the day.
- Vents and exhaust fans should be used to pull heat and moisture from attics, kitchens and laundries directly to the outside.
- Avoid cooking or using heat-generating equipment during the hottest part of the day.
- Open windows on cooler days instead of using air conditioners.
- Buy only the size air conditioning system you need to do the job.

Excess cooling power is inefficient and expensive. The EER (Energy Efficiency Ratio) for most air conditioning units is available from the dealer. The higher the EER, the more efficient the air conditioner. The labels on window air conditioners should also contain EER ratings. If you don't see the label, ask the dealer for the information.



is here

CONDITION 90...a critical period on weekdays when you should limit use of your heavy electric appliances to the coolest parts of the day, before 10 a.m. and after 10 p.m. CONDITION 90 occurs during those summer days when the temperature soars to 90 degrees or more. The period between 10 a.m. and 10 p.m. is when consumers demand the greatest amount of electricity. Your electric cooperative asks that on CONDITION 90 days you help lower our expensive peak demand by using your major appliances during the cooler hours, early morning and late evening.

YOU CAN HELP LOWER COSTS ... During periods of peak electricity demand, the warmest part of CONDITION 90 weekdays, our power

supplier must operate expensive "peaking" generators. These are lessefficient coal-fired units held in reserve to meet peak demands. By timing your use of heavy appliances to before 10 a.m. and after 10 p.m. on weekdays when the temperature is predicted to rise to 90 degrees and above, you will help lower your electric cooperative's cost of power.

HERE'S HOW YOU CAN HELP... Be alert for CONDITION 90 days this summer! Any weekday the temperature is predicted to rise to 90 degrees or above, limit your use of heavy, heat-producing appliances during the hottest hours of the day, between 10 a.m. and 10 p.m. Do your cooking, clothes washing, clothes drying and dishwashing in the early morning and late evening hours. 28



		~~						~~~~
XX XX	XX	XXX	XX XX XX	XX XX XX	XX XX	XX XX	XXX XXX	XX XX
XX XX				XX		XX XX	XXXX	XX
XXXXX	XX	XXX	XX	XX	XXXXX	XXXXXXX	X XXX	XXXXXX
XX			XX	XX	XX	XX X	X XXXX	XX
	×		XX	XX	XX XX	XX XX	X XX	XX XX
		XXXX	XXXXX	XXXXX	XXXXXXXXX	XXX XXX	XXXX XXXX	XXXXXX

No. 4884 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½, 22½. Size 14½ (bust 37) takes 2-3/8 yards 60-inch.

No. 9474 is cut in sizes (6, 8, 10, 12), (14, 16, 18, 20). Order your regular size.

No. 9482 is cut in sizes 8, 10, 12, 14, 16, 18. Size 12 (bust 34) ensemble takes 3-3/8 yards 60-inch fabric.

No. 9432 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3-1/8 yards 45-inch fabric.

No. 4553 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 4-1/8 yards 45-inch fabric.

No. 4854 is cut in sizes 8, 10, 12, 14, 16, 18. Size 12 (bust 34) takes 1¼ yards 45-inch; shirt 1-3/8.

No. 9074 is cut in sizes (10½, 12½, 14½), (16½, 18½, 20½), • (22½, 24½, 26½). Order your regular size.

No. 4645 is cut in Women's Sizes 34, 35, 38, 40, 42, 44, 46, • 48. Yardages given in pattern.

No. 4895 is cut in sizes 101/2, 121/2, 141/2, 161/2, 181/2, 201/2, 221/2. • Size 141/2 (bust 37) takes 2-5/8 yards 60-inch.

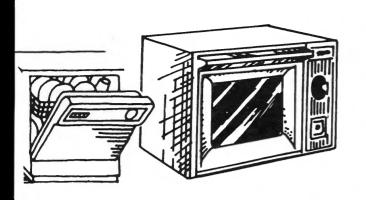
No. 9405 is cut in sizes 101/2, 121/2, 141/2, 161/2, 181/2, 201/2, 221/2, • 241/2, 261/2. Size 141/2 (bust 37) takes 2-7/8 yards 45-inch.

No. 4517 is cut in sizes 34, 36, 38, 40, 42, 44, 46, 48, 50. See • pattern for yardages.

No. 9488 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3-1/8 yards 45-inch fabric.

TO: PATTERNS Illinois Rural Electric News P.O. Box 3787 Springfield, IL 62708 I have enclosed \$_____(\$2.25 per pattern - cash, check or money order accepted) for the following patterns: Pattern No.____Size____Pattern No.___Size

	· 3787	INCWS	
Springfie	d II 62708		
Springin	.iu, il 02700		
I have enclosed	1 \$	(\$2.25 per pattern	– cash
check or mon	ey order ac	cepted) for the fo	ollowing
patterns:			
			~
Pattern No.	Size	Pattern No.	Size
		<u></u>	
Print Name			
Address			
Cim			
City		News (\$2.25 per pattern cepted) for the fo Pattern No.	
State		Zip	



not summer months

• Check the temperature in your refrigerator, too. Place an outdoor thermometer in the fresh food section and leave it there for about 15 minutes. The temperature should be about 38-42 degrees F. If it is not, adjust the temperature control. Check the freezing compartment's temperature, too. It should be around 5 degrees F.

• Colder-than-necessary temperatures waste energy.

• Check the frost buildup on the freezer compartment. It should not exceed one-fourth of an inch. As a general rule, manual defrost refrigerators take less energy to operate than automatic defrost units, but not if frost is allowed to build up excessively.

Your refrigerator should be located away from sources of heat, such as ranges. The motor housing and condenser coil should be kept clean, and unless your refrigerator is designed to be built in, it should be away from the wall an inch or two to allow air to circulate around the compressor.

Once those things are taken care of, instruct your family on good habits in using the refrigerator. Let hot foods cool a bit before placing them in the refrigerator. Reduce the number of times the refrigerator is opened and never leave the door open longer than a few seconds. To thaw frozen foods, first place them in the fresh food section so that, as they thaw, they can help cool the refrigerator.

If you are planning to buy a new refrigerator, it is energy economical to buy one with a power-saver switch. Some refrigerators have heating elements in their walls or doors to prevent "sweating" on the outside. In most climates, the heating element does not need to be working all the time. The power-saver switch turns off the heating element, saving up to 16 percent on refrigerator operating costs.

energy efficiency

Weigh the benefits of a frost-free refrigerator against those requiring manual defrosting. Although you will need to defrost them regularly, the manual-defrost models will cost less to buy and operate than automatic defrost units.

If you choose the manual-defrost model, remember that frost buildup increases the amount of energy needed to keep your food cold.

 by REASONS TO BUILD A PRESIDENT HOME NOW! 10 REASONS TO BUILD A PRESIDENT HOME AS SUPERATIONS 10 REASONS TO BUILD A PRESIDENT HOME NOW! 10 REASONS TO BUILD A PRESIDENT HOME 10 REASONS TO BU	rces of heat, such as	ر و و و و و و و و و و و و و و و و و و و
 MAZING New Tiller MAZING New Tiller MAZING New Tiller Maxing and the second of the second the second of the second the second of the second the		
 RUNS SINGLE HANDED. RUNS SINGLE HANDED. OUNCE LIKE OTHERS. LUSE TILLS KNEE DEEPI AND SHALLOW. Tills 10 to 16 inches deep, fakes gardens weed free fast vihout hard work! It's adjustable, hood, tines and II Tills orweeds, at 18-15-12-9 or 2 inches wide! 'A the cost of other single anded tillers. Air Force approved engine ne month money back trial endimed to other sachines. Send for brochure ou might win a tiller! FREE GARDENING GUIDE DWN TILLER CO., DEPT 455 win St. Ailentown, N.J. 48501 	AMAZING	Custom Home month, based on 180 equal monthly payments. not including taxes and insurance. 2. Cash price is as low as \$23,371 and includes all
 Tills 10 to 16 inches deep, epending on soil conditions. Weeds from ½ to 3 inches deep, inches weed free fast, ithout hard work! It's adjustable, hood, tines and IIITills or weeds, at 18:15-12-9 or 2 inches wide! Write FOR YOUR LOCAL PRESIDENT HOMES REPRESENTATIVE WRITE FOR YOUR LOCAL PRESIDENT HOMES REPRESENTATIVE PRESIDENT HOMES REPRESENTATIVE We ough-erect your home on your lot and four-daton. You do the easy finishing work and save thousands of dollars. Division of Harvey Builders, Inc. 4808 N. Lilac Dr., Minneapolis, MN 55429 (612) 537-3622 NAME Air Force approved engine on month money back trial achines. Send for brochure ou might win a tillet FREE GARDENING GUIDE WWN TILLER CO DEPT 45 WARISH ALIGHTOW, N.J. 08501 	OUNCE LIKE OTHERS. LUSE TILLS KNEE DEEP!	and plumbing systems 3. Own your own home free and clear in 10 or 15 years. 4. We finance everything we furnish and do. 5. Own payment as low as \$100.
akes gardens weed free fast thout hard work! thout hard work! WRITE FOR YOUR LOCAL PRESIDENT HOMES REPRESENTATIVE 9. No hidden costs. No closing costs. No prepayment penalty. '/a the cost of other single model lifers. PRESIDENT HOMES REPRESENTATIVE Air Force approved engine e month money back trial Division of Harvey Builders, Inc. A808 N. Lilac Dr., Minneapolis, MN 55429 (612) 537-3622 Division of Harvey Builders, Inc. Rest of other single achieves. Send for brochure a might win a tiller! STATE CITY PHONE STATE	Tills 10 to 16 inches deep, epending on soil conditions.	in a conventional fixed-rate mortgage 7. Use or alter one of our 63 plans or design your own.
WRITE FOR YOUR LOCAL WRITE FOR YOUR LOCAL 10. We rough-erect your home on your lot and foun- dation. You do the easy finishing work and save thousands of dollars. PRESIDENT HOMES REPRESENTATIVE 10. We rough-erect your home on your lot and foun- dation. You do the easy finishing work and save thousands of dollars. Division of Harvey Builders, Inc. 4808 N. Lilac Dr., Minneapolis, MN 55429 (612) 537-3622 NAME ADDRESS CITY STATE ZIP PHONE	akes gardens weed free fast	(The Eisenhower-1 of 63 basic models in '83 catalog.) bits site 9. No hidden costs. No closing costs. No prepay-
nded tillers. Air Force approved engine Division of air Force approved engine 4808 N. Lilac Dr., Minneapolis, MN 55429 (612) 537-3622 Marvey Builders, Inc. vident wina tiller! ADDRESS City City City City STATE City City STATE ZIP PHONE City City City	Tills or weeds, at 18-15-12-9- or 2 inches wide!	PRESIDENT HOMES REPRESENTATIVE 10. We rough-erect your home on your lot and foun- dation. You do the easy finishing work and save
achines. Send for brochure NAME	nded tillers. Air Force approved engine e month money back trial	
wn TiLLER CO., DEPT. 45 STATE STATE STATE	achines. Send for brochure u might win a tiller!	
	WN TILLER CO., DEPT.45	
	Aain St., Alientown, N.J. 08501 Rure call Alien 201-530-9380	

ush Mailing of Lit Ask for Bei

GARDEN WEIGHS 22 LBSI . WON'T JUMP OR BUILT FOR COMMERC



Cooperatives to benefit from CIPS settlement

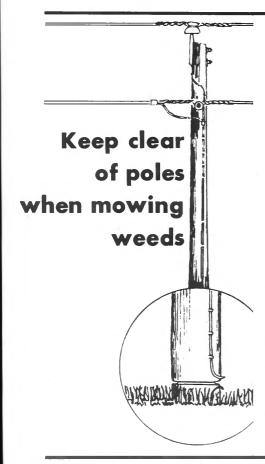
Electric cooperatives that purchase bulk power from Central Illinois Public Service Company, as well as retail customers of the company, will benefit from a \$25 million settlement CIPS received from the Consolidation Coal Company recently.

CIPS announced that it intends to lower its utility bills beginning in June by distributing, through lower fuel adjustment charges, a total of \$18 million to its 307,000 customers. CIPS and the coal company settled the suit out of court on March 31. As part of the settlement, the CIPS contract with the company, operator of the Consolidation Mine in Hillsboro, was terminated. CIPS entered into a contract instead with the Monterey Mine at Carlinville.

CIPS said the lower charges will begin in June, and the adjustment will be made on a monthly basis "so all customers are treated fairly," according to statement released by CIPS President Donald Raymer. The balance of \$7 million will be used for "general corporate purposes," Raymer said. . . .

The \$25 million settlement resulted from a lawsuit between CIPS and the coal company that began in 1976. CIPS had charged the company with failing to deliver the quantity and quality of coal the two companies had agreed upon in a 1970 contract.

A CIPS spokesman told representatives of the Association of Illinois Electric Cooperatives that the electric cooperatives will receive \$2.7 million through slight reductions in the amount of the fuel adjustment clause beginning in April, first appearing on June bills. The spokesman also said that due to a "soft" coal market, no increase would result from switching coal purchases from the mine mouth plant of Consolidation to the Monterey Mine even though transportation costs are involved.



When you are mowing weeds around distribution-line poles, be sure to avoid contacting the poles with the mower. When the mower rides against the pole, the base becomes scored, exposing the inner pole to decaying, insects and weather conditions.

Often the copper groundwire running down the side of the pole is cut by the mower also. When a groundwire is cut, the effectiveness of lightning protection equipment is reduced and the susceptibility of other electrical equipment (transformers, regulators, etc.) to lightning damage increases.

By increasing the potential for lightning damage to equipment on the distribution system, a cut groundwire may expose a member's service to damage from a voltage surge.

So please, when mowing weeds around distribution-line poles, don't let the mower ride against the pole. This will prevent premature decay of the poles and help maintain proper operation of lightning protection devices.

Rates for service

Your next service bill, which will be dated September 3, 1983, will be computed from the new rate schedule recently mailed to you.

The new rate schedule was designed to, as near as predictable, include the amount previously shown as "Wholesale Power Adjustment" plus an additional approximately 8 percent to cover higher operating costs due to increased labor, transportation and debt service requirements.

Although these higher costs are regrettable, electric energy prices have not escalated as rapidly, nor as far, as have the prices of other forms of energy that we purchase such as gas, gasoline, diesel and heating oil and coal. Your board of directors and staff do all within their power to limit operating expenses and still render reliable, high-quality electric service to you.

Your lifestyle can make a difference

You know, you have complete control over how you use your electricity. You choose the ingredients that are necessary for you to maintain your standard of living.

The way you live and the way you use your electrical appliances have a greater impact on your consumption of electricity than the number of appliances you have.

This pie chart shows the amount of questions: energy used in the residential sector "When nationwide. water spa

Illinoisans, on the other hand, have relatively good lifestyles, and we tend to use more energy than the national average. This applies to all forms of energy - not just electricity.

Let's take a look at some of these "lifestyle considerations" that can make your electric bill appear to be higher than "normal."

Family Size

Let's face it, there is a direct relationship between the number of people living at home and the amount of energy that is used. That's especially true if you have teenagers at home. In addition, if friends and relatives are visiting, you can expect to use more energy for cooking, baking, laundry, and hot water.

Space Heating and Cooling

From a comfort standpoint, most of us prefer to be relatively cool in summer and warm in winter. Others prefer temperature extremes. In Illinois, humidity plays an important part in our year-round comfort, too. If we operate dehumidifiers in summer (and, to a lesser degree, humidifiers in winter), this contributes to our household energy consumption because they tend to run continuously. Portable space heaters, air conditioners, and fans in such places as the garage and basement also contribute to our energy consumption.

By taking a look at our "comfort" lifestyle in terms of maintaining relative humidity and temperature, we can use energy wisely in many ways. These range from adding insulation, weatherstripping and caulking to simply turning down the heat and turning off the air conditioning in rooms not used.

Water Heating

About 15 percent of the energy used in the average American home is for water heating. Hot water plays a very important role in everyone's lifestyle - but many lifestyles require substantial quantities of hot water, and that results in higher energy use.

Ask yourself some of the following questions:

"When I take a bath, do I use hot water sparingly, or is the tub completely full of water?"

"Do I take short showers, or do I stay in the shower until the hot water gets cold?"

"Do I repair leaky faucets, or simply let them drip and waste hot water?"

"Do I operate automatic washers and dishwashers with a full load, or just whenever it's convenient (like with a pair of jeans or just a few dishes)?"

Appliance Use

We have a host of time and labor saving appliances available to help us do our work whenever we need their service. As you work through this guide, you may notice how many more electrical servants you have than you expected. These appliances work for you around the clock, whenever you choose to use them. But wise use of appliances can have a positive effect on your energy consumption. For example, ask yourself questions like these:

28

"Do I turn off lights when a room is not in use, or do I leave them on?"

"Does my television set entertain the entire family, or does it entertain an empty room?"

"Do I leave the oven on 'warm' for an extended period of time, or do I cook many dishes at once and then turn the oven off?"

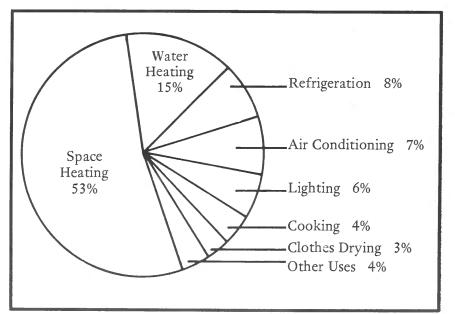
These are prime considerations that affect the amount of electricity you use to maintain your lifestyle. All Americans are part of the residential sector, and a spirited energy management consciousness is likely to start at home.

The effects of a home and farm energy management program can pay big dividends!

Why Is My Electric Bill Higher Than My Neighbor's?

You just answered this question yourself. It's your electric bill, and it reflects the amount of electricity consumed by you and your family in your home and on your farm.

Your neighbor may have a completely different set of circumstances: different number of people living at home, different lifestyle, different size home, different farming equipment and methods, etc. These and many other factors affecting your usage make a comparison with your neighbor less than meaningful.



Looking over examples of proper wiring techniques for farm buildings are Doug Carolus, left, and Dick Hiatt. Carolus, an employee of Illinois Power Company, is chairman of the IFEC environmental control committee. Hiatt is on the staff of the Association of Illinois Electric Cooperatives.



Proper wiring a key to efficient electricity use in farm buildings

E ach American farmer produces enough food for himself and about 80 other people, thanks in no small way to the efficient use of electricity. That efficiency includes proper wiring.

"Back before they had electricity on farms," said Roland Espenscheid, a University of Illinois agriculture engineering professor, "farmers tipped a bushel basket of corn over the fence to feed their hogs and carried feed to cattle in buckets. Operating that way, each farmer could produce enough to feed himself and about 10 other people." Espenscheid was speaking in June to those attending a special seminar on agriculture building wiring at Lincoln Land Community College in Springfield.

While electricity has brought increased productivity to agriculture, farm wiring presents many problems that are alien to residential or light commercial structures, Espenscheid added. The workshop, sponsored by the Illinois Farm Electrification Council, was designed to acquaint power use-member service advisers with the problem and possible solutions.

The main thrust of the seminar dealt with wiring in "hostile environments," especially in the ammonialaden and highly corrosive atmosphere in livestock confinement buildings.

"A carefully installed system of metal conduits and junction boxes that might well last the life of a farm shop or equipment shed would do well to last five years in a hog confinement building," noted Duane Crisp, manager of engineering for Chore-Time Equipment Company, a manufacturer of livestock feeding machinery and lifesupport equipment for confinement buildings. "We favor plastic in the livestock environment," he continued, "while metal may be just fine for shops or grain handling equipment."

Speakers generally noted that a lack of awareness has been a big part of the

problem. Since confinement livestock production grew so quickly, many buildings are relatively new. Corrosion is just now reaching really serious proportions.

Manufacturers have been quick to respond to the need for corrosionresistant hardware, and part of the seminar was given over to demonstrations and exhibits of plastic fixtures and heavily plated metal hardware, much of which have come on the market recently, while some have been "borrowed" from marine or other heavy-duty product lines.

Don Davis, personal line loss control coordinator for Country Mutual Insurance Companies, discussed wiring from an insuror's viewpoint.

"There are some really bad wiring situations on Illinois farms," he said, "and many of them are because farmers did their own wiring and either didn't know how to do it right or cut corners here and there. Many dangerous situations have cropped up





Sooner or later, just about every homeowner runs out of places to put things. Fortunately, it's a problem vour local Bonanza Builder can help with, because he's had plenty of experience helping other people build a little extra storage space into their lives. Whether you need a simple garage for storing an assortment of family cars, plus some extra room for tools and yard equipment, or a larger utility building to house a workshop, hobby center, recre-

ational

what you want. These beautiful, maintenance-free SpaceMaker build-

ings are tough, durable Uni-Frame construction, with attractive, colorful Uni-Rib steel siding. Backed by a full 5-year written warranty on materials and workmanship. Check out the areat variety of sizes, plans and layouts available.

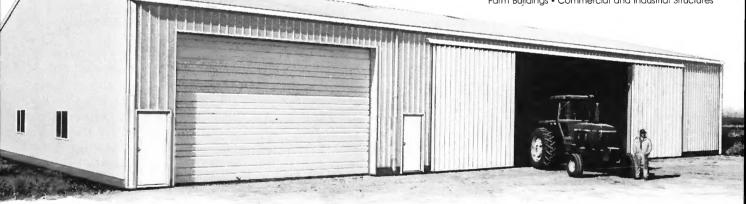
Unclutter your life; call Bonanza today.



vehicles, boats, implements and the like, Bonanza has exactly

A COMPLETE LINE OF UNI-FRAME BUILDINGS FOR EVERY NEED

Garages • Workshops • Storage Buildings • Horse Barns • Farm Buildings • Commercial and Industrial Structures





Bonanza Builders Conveniently Located Throughout Illinois

ONANZA HAS

THE PLACE

TRIPLE T CONST. CO. Box 665, Sesser, 1L 62884 (618) 625-6381

DIVERSIFIED INDUSTRIAL SERVICES P.O. Box 553, East Moline, IL 61244 (309) 755-6966

ROBERT E. LEE. BLDG. CO., INC.

109 E. Hydraulic, Box 148, Yorkville, IL (312) 553-0011 6056

MOORE BUILDING CO. Box 40, E. Rte. 104, Auburn, IL 62615 (217) 438-3336

MOORE BUILDING CO. West Route 316, Box 27, Charleston, IL (217) 348-8135 61920

ENGINEERED STEEL BLDGS., INC. 107 So. Main St., Columbia, IL 62236 (618) 281-5600

J.C. CATES CONST. CO. Route 1, Box 113, West Paducah, KY (502) 443-8562 42086

60560



CALL TOLL-FREE (24 hours, 7 days) 1-800-821-7700, Ext. 307 or Mail Coupon Today for More Information

Name	ILRE
Address	
County	
Town	
State	Phone
Check Interest: 🗌 Machinery	y Storage 🗌 Utility/Garage
🗌 Dairy 🗌 Horse 🗌 Hog 🗌	Beef 🗌 Business Buildings
Send information on selectiv	e Buildership opportunities.



Detection and protection of well pumps

A high bill on a water supply system can be caused by numerous leaks, things: excessive usage, exhausted air supply (or better known as "water logged") and faulty water supply control switches (pressure switches, float switches and drawdown-control switches). Before calling our office and blaming your electric meter for the high kwh usage, first check your pump for the above conditions, because there is only one chance in a thousand that your electric is recording more kwh usage than you are actually using.

WATER SUPPLY CONTROL SWITCHES

Of the three types of water supply control switches, the pressure switches are by far the most common, because they are found on hydro-pneumatic tanks. The 42-gallon size hydropneumatic tank is commonly found on farms in our service area.

Pressure is secured by trapping the original air in the tank and forcing water in with it. Since water does not compress and air does, the air is forced to occupy less and less space, and, in so doing, exerts more and more pressure on the incoming water.

With an automatic pressure switch, the pump is normally stopped at 40 pounds pressure (40 PSI), at which time the tank is about two-thirds (2/3) full of water. With a 42-gallon tank, as approximately seven gallons of water is drawn, the water level is a little below the halfway mark and the pressure has dropped to 20 pounds (20 PSI), causing the pump to start.

A damaged pressure switch with a malfunction can cause your electric usage to skyrocket and also do harm and damage to your pump.

WATER LOGGED

The passage of water through the tank will gradually absorb the air and exhaust the supply. When this happens, the tank loses its capacity to deliver water and, instead of seven gallons being drawn, the usual capacity may be reduced to a gallon or less before the pressure drops from 40 to 20 pounds PSI. This short cycling effect is called "water logged," and is corrected by adding more air. The above problem can also increase the kwh consumption on your electric meter and also do harm to your well pump.

LEAKS

Another problem that is not within the well pump itself, but contributes to high bills is excessive usage and leaks. A thorough inspection of your water supply system is a good investment.

FEEDER CIRCUITS

If a feeder circuit has wires that are too small to adequately supply the electrical needs of the pump motor, you can lose in two ways: (1) the useful life of the motor is shortened because of overheating and (2) much of the electrical energy is lost in the form of heat in the feeder circuit.

Wire size is determined, not only by the energy needed by the motor, but the distance the energy is conducted through the wires and the voltage you plan to use.

Unless you have a very low capacity pump, you are almost certain to need 240 volts to operate your pump motor satisfactorily.

There are three reasons why a 240 volt circuit provides better service: (1) the current flow (amperes) is only ½ as great with 240 volts as with 120 volts,

which keeps down heat loss in the circuit and assures better motor operation, (2) usually, a smaller wire size can be used and (3) there is little or no dimming effect on your lights when your motor starts. Improper voltage and wire size can cause your pump motor to be less efficient, less economical and the life span shortened.

PUMP MOTOR PROTECTION

Your pump motor needs two kinds of protection: (1) overload protection and (2) protection from lightning surges.

Overload protection is provided to keep the pump motor windings from burning out in case of extra-heavy loads. Protection of overloads can be controlled by different types, like; circuit breakers, time-delay fuses and magnetic switches.

Lightning surges develop on power lines during a thunderstorm. Power lines seldom receive a direct strike or bolt of lightning, but the lightning induces high electrical surges in the lines when a thunderstorm is in the vicinity. The high-voltage surges, coming in on the motor circuit from the power line, can damage the motor by puncturing the insulation on the motor windings. This permits the regular line current to leak through the insulation and cause a short. The windings then overheat and the insulation is damaged.

To protect against this situation, you can install a lightning arrester, or use the grounding method for submersible pumps.

Lightning arresters can be purchased for \$10-20 at most hardware stores that handle electrical devices. The homeowner or electrician can install them.

Vacations and seasonal use

you're planning to be gone for a couple of weeks or so, your electric bill should decrease significantly, right? Wrong!

Many people believe that when they leave on vacation, their electric meter stops until they return. If they are on vacation for two weeks, they expect their electric bill to be cut in half. Let's ask ourselves a few questions before we assume our electric bill should decrease by any considerable amount during vacation time.

off during your vacation? Remember, if the electric water heater is left energized during vacation, it will continue to operate and maintain the tank temperature even if you're not using any hot water.

Were the refrigerator and freezers emptied and turned off? If not, they will continue to operate to maintain the preset temperatures.

Take a look at other electrical appliances that keep running while you are on vacation - clocks, attic fans and power ventilators, heating and air conditioning equipment, lights and TV sets with the "instant-on" feature.

If you are determined that no electricity is to be used during your vacation, you can accomplish this by turning off your main breaker or pulling the main disconnect. But remember,

When vacation time comes, and when you do this, the automatic appliances and lighting will stop. Your refrigerator and freezer will defrost, your electric water heater will not have hot water ready for use upon your return, and your home may be too hot or too cold when you walk in the door. It's a decision only you can make. Perhaps you can make arrangements with a neighbor to keep an eye on your place and adjust the heat, water heater and/or air conditioner shortly before you return.

In addition, you may wish to First, was the water heater turned unplug all appliances not in use. If a light is to be left on, it should be connected to a timer. If you intend to be gone for an extended period of time, contact your REC and make arrangements so your electric service will remain uninterrupted.

> Read your meter upon leaving, and again when you return. This will let you determine the number of kilowatt-hours used during the period of time you were gone.

> Another reminder is that many vacationers bring home several days or weeks of dirty laundry. This laundry will give your electric water heater a workout during your first day or two

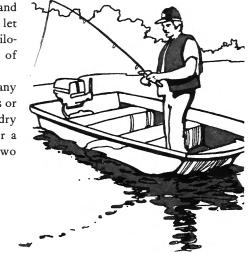
back home. Only you can decide whether your electric meter gets a vacation or not while you are gone.

28

In addition to vacations, you may wish to take a look at some of the seasonal uses for electricity that may cause an increase in consumption.

These include crop dryers, air conditioners, portable heaters in the garage or basement, engine heaters to keep you car, truck, or tractor ready to run, heat tape to keep pipes from freezing, and the list goes on and on.

Let's not overlook hobbies, either, or those businesses that operate from the home. Ceramics, and beauty shops with a number of electric hair dryers, woodworking tools, etc., also have an effect on the number of kilowatthours you use.



Stealing electric service is stealing from your neighbors

Tampering with a meter, unauthorized connection of a service or diverting electric energy for the purpose of reducing kilowatt-hour registration or to avoid payment for energy used is an unlawful act, punishable by up to six months in prison or by a fine up to \$500 or some combination of both. A person guilty of such intent to defraud shall be guilty of a Class B misdemeanor.

The following is an excerpt from the Illinois Revised Statutes, Chapter III 2/3: "Any person, who with the intent to defraud, tampers with, alters, obstructs or prevents the action of any meter, register or other counting device which is a part of any mechanical or electrical machine, equipment or device which measures service, without the consent of the owner of such machine, equipment or device, shall be

guilty of a Class B misdemeanor."

The persons guilty of such fraudulent practices are stealing from the Cooperative and thus increasing the cost of electric service to all members.

If you know of such a practice, we urge you to contact your Cooperative immediately. If you prefer, you need not identify yourself. If you will give us the location, we will conduct an investigation.



PORK CHOPS WITH MUSHROOM GRAVY

pork chops, 1-inch thick tablespoons cooking oil cup sliced fresh mushrooms (or drained canned ones) 1

1/2 cup chicken broth 2 tablespoons all-purpose flour or 1 tablespoon corn starch 1/4 teaspoon salt

1/4 cup cold water 1 tablespoon snipped chives

- 1/2 cup chopped onion 3/4 teaspoon Worcestershire sauce 1/2 teaspoon dried tarragon, crushed

Salt and pepper In 12-inch skillet, brown chops on one side in hot oil. Turn; add mushrooms, and onion and brown on other side. Season with salt and pepper. Add chicken broth, Worcestershire sauce, tarragon, and the 1/4 teaspoon salt. Cover and simmer 35 to 40 minutes. Remove chops to serving platter. Keep warm, Spoon fat from juices. Measure vegetable juice mixture, reserving 1¼ cups. Combine cold water and flour. Stir into juices in skillet; add chives. Cook and stir until thick and bubbly. Cook 2 minutes more. Spoon over chops. Garnish platter with cherry tomatoes. Makes 4 servings.

				CHICK	EN R.	AVIO	L				
	pkg. not				1	med	lium d	onion,	chopp	ed	
		am of mus	hroom :	soup		2 tabl	espoo	ns chi	cken f	at (or	oleo)
	hen or 2							chee:			
		epper, cho						pime			
Cool	< hen,	remove	meat	from	bone	and	cut	into	bite	size	pieces

Saute onion and pimento in chicken fat. Cook noodles in chicken broth, add a little water if needed. Combine all ingredients, place in large casserole and cover with grated cheese. Bake at 400 degrees until mixture is hot through and cheese is melted.

	RED HUT SQUASH	CASSERULE
6	to 8 medium yellow squash, sliced 1/4	lb. Velveeta cheese
-1	large onion, chopped 2	tablespoons milk
1	teaspoon salt 1	or 2 Jalapeno peppers, seeded and
-1	teaspoon sugar	minced
	Paprika	

Boil squash and onion in water with salt and sugar until done. Drain well in a colander and pour into a 1-quart casserole dish. Make a sauce of cheese and milk; pour over squash; add peppers; mix well. Garnish with paprika. Heat in 350-degree oven uncovered for 20 to 30 minutes, or until thoroughly hot.

CHEESE-STUFFED PEPPERS

 Unccsc-SIUFFED
 PEPPERS

 1
 pkg. (3 oz.) cream cheese (softened)
 1/4 cup shredded carrot

 2
 tablespoons oleo (softened)
 1

 ½
 cup shredded carrot
 2

 ½
 cup shredded carrot
 4

 ½
 cup diced celery
 4

1/4 teaspoon ground ginger (optional)

In small bowl, cream cheese with oleo until blended. Stir in cheddar, celery and carrots; mix well. Cut stem end from pepper: remove seeds. Pack with cheese mixture. Chill overnight. Slice thin and arrange on bread halves. Cut each half in two. Makes 16 pieces.

TOMATO RELISH

- 20 cups ripe tomatoes, peeled and cored 8 onions chopped 8 bell peppers chopped 5 cups sugar 3 cups vinegar

1/2 box pickling spices

Chop, mix and cook slow after reaching boiling point, for two hours. Stir often, place in jars and seal.

CHICKEN LIVERS PEKING 1/2 cup chicken broth 2 tablespoons soy sauce 1 tablespoon cornstarch

- Ib. chicken livers, cut up
- tablespoons oleo 22

6 tablespoons salt

2 fablespoons oreo 2 tablespoons chopped onion 1 (3 oz.) can sliced mushrooms 2 (10 oz.) pkgs. frozen Chinese vegetables with seasoned sauce

In large skillet, cook livers in oleo till just brown; remove from pan. In same skillet, cook onions until tender. Add Chinese vegetables with sauce, **undrain**ed mushrooms, and ¼ cup of broth. Cover and simmer until vegetables are thawed, about 3 minutes. Stir to break up sauce cubes. Simmer, covered about 5 minutes or till tender. Stir together remaining broth, soy, cornstarch and ginger. Add to vegetables, cook and stir until bubbly. Add livers; heat through. Serve over hot cooked rice. Makes 6 servings.

SWEET POTATO PIE

- 21/2 cups cooked mashed sweet potatoes 4 eggs slightly beaten 21/2 cups sugar 1 teaspoon nutmeg (optional or other
 - 1 teaspoon vanilla Dash of salt 1 can Dime Brand milk
 - 1 stick oleo, melted

spices if you wish) Mix and pour into unbaked pie shell. Bake at 350 degrees until filling sets. Chill and serve. May be frozen for later use if only baked half brown. **ORANGE SHERBET**

64 oz. bottle orange drink 1 small can (8½ oz.) crushed pineapple (drained)

2 cans Eagle Brand milk ¹/4 cup sugar

pieces 2 (1 oz.) squares semi-sweet choco'ate

4

ILLINOIS RURAL ELECTRIC NEWS

1 oz. square paraffin wax

Mix all the above ingredients together and pour into freezer and freeze.

COCONUT MOUNDS 1 (12 oz.) pkg. semi-sweet chocolate

- 34 cup mashed potatoes, prepared from instant potatoes
 1 lb. confectioners sugar
 1 lb. pkg. unsweetened coconut
- 1 teaspoon almond extract

Combine potatoes, sugar, coconut, almond extract in a large bowl. Mixture will be stiff and needs to be worked with hands. Form mixture into 34-inch balls and place on cookie sheet. Chill about 6 hours. Place chocolate pieces and squares and paraffin in top of double boiler over hot (not boiling) water stirring until melted. Remove from heat and with toothpick dip each ball in chocolate until coated. Place on cookie sheet and chill again until hard. Place or pack on or between wax paper and store in cool dry place. Makes 3 pounds.

Your Own Custom Home \$27155 PER MONTH	 REASONS TO BUILD A PRESIDENT HOME NOW! Own your own home for as little as \$271.55 per month, based on 180 equal monthly payments not including taxes and insurance. Cash price is as low as \$23,371 and includes all finishing materials, cabinets, heating, electrical, and plumbing systems. Own your own home free and clear in 10 or 15 years. We finance everything we furnish and do. Down payment as low as \$100. 	SUR-UP SOLAR PRODUCTS ARGENTA IL 62501 Save up to 2/3 on your hot water bill! Write for free pamphlet about our "Batch" style solar water heater.
(The Eisenhower –1 of 63 basic models in '83 catalog.)	 Low 11.4% Annual Percentage Rate financing in a conventional fixed-rate mortgage. Use or alter one of our 63 plans or design your own. Firm prices include all materials delivered to job site. No hidden costs. No closing costs. No prepay- 	GARDENING? NEW TIGER TILLER TILLS KNEE DEEP! WEEDS SHALLOW RUNS SINGLE HANDED MAKES SOIL WEED FREE FAST WITHOUT HARD WORK.
WRITE FOR YOUR LOCAL PRESIDENT HOMES REPRESENTATIVE PRESIDENT B 4808 N. Lilac Dr., Minneapolis, MN 55429 (
ADDRESS		Weighs 22 Pounds Gasoline Powered Other Tillers Do Uther Tillers Do
CITY STA ZIP PHONE Custom Built Pre-Cut HomesOur Only		NOT SOLD IN STORES FREE GARDENING GUIDE WRITE TO: ALLENTOWN TILLER CO., DEPT.45 c/o Allentown Feed Co., Main St., Allentown, N.J. 08501 For Rush Mailing of Literature call Ask for Betty Allen 201-530-9380

electrics borrow most of their funds for construction from a revolving fund in the federal Rural Electrification Administration. Legislation establishing this fund in 1973 fixes the interest rate for most loans at 5 percent, and permits 2 percent in some hardship cases. When the fund was created, its assets were commitments of rural electric and telephone co-ops to repay previous REA loans, and the agency's cash on hand.

Dollars to lend were obtained by pledging the fund's assets and borrowing from the U.S. Treasury at going market interest rates. As the cost of money escalated in recent years, while the agency's lending rates remained fixed, the dollars of interest income at 5 percent were significantly short of the interest expense, which sometimes climbed as high as 15 percent. The excess of outgo over income promised that in time the body of the fund would have been eaten away in payments to make up the difference.

After a two-year study, the rural electric cooperatives decided they would need to face up to higher interest payments in order to preserve their principal borrowing source, the revolving fund. They took the lead in developing legislation which authorizes the REA Administrator to adjust the interest on revolving fund loans whenever necessary to keep the fund stable.

Companion measures were introduced in both houses of Congress: S.

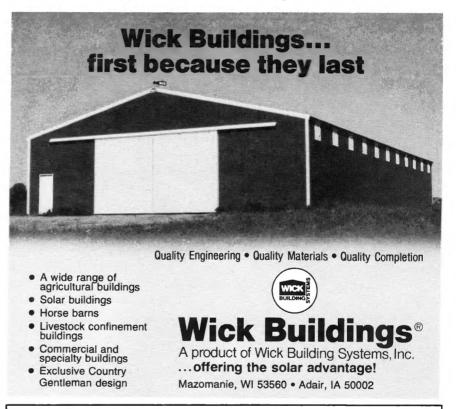


1300 by Kentucky Sen. Walter Huddleston, and H.R. 3050 by Tennessee Rep. Ed Jones. At last count, several weeks ago, they had been joined in sponsorship by 37 senators and 145 representatives.

"It is a tribute to the rural electric systems of the country that we have this proposal before us now," Senator Zorinsky said. "We have a wellthought-out plan that has been studied for almost two years. It asks for no quick-fixes or crash programs, but a simple, sensible solution to maintaining one of the most successful programs this government ever created."

The legislation also provides that the Treasury obligations now comprising the assets of the fund will be converted to permanent capital. This still requires that all rural electric loans must be fully repaid, plus interest, but calls for such dollars to be held in the revolving fund rather than the Treasury and keeps them available for further lending.

The bills also would authorize future refinancing of revolving fund borrowings from the Treasury, and of a different type of loan used chiefly by the cooperative producing electricity for wholesaling to the distribution organizations. This would permit substantial interest savings at times when rates drop.



For new building design and pricing information, call your nearest Wick Buildings dealer listed below or phone toll free 1-800-356-9682, weekdays

ILLINOIS
Arthur Enos Helmuth & Sons • 217-543-2298 Ashton Consol Builders & Supply 815-453-2442
BloomingtonSiron Sales & Service, Inc. 309-663-0331
Carlinville Donald Bacon • 217-627-2297
CarrolltonJim Parkinson • 618-576-2287
Cissna ParkSiron Sales & Service, Inc. 815-457-2134
Danville Carl Wise • 217-776-2462
Effingham Curtis-Jansen • 217-342-2159
Eureka Dan Wiegand, Jr. • 309-467-4527
HardinBill Parkinson • 618-576-2287
Highland Curtis-Jansen • 618-654-9807
Lena Freeport Builders • 815-563-4211
Lindenhurst Don Jackson • 312-356-10004
Lyndon Dale Woodworth • 815-778-4469
MarlonGlenn Hudgens • 618-993-5560

(In Wisconsin call	1-800-362-5457)
	Mason City
	Ken & Jerry Harnacke • 217-445-2481
• 217-543-2298	MazonJ.R. Enterprises • 815-448-2406
uilders & Supply	MetropolisKoch Brothers Builders
815-453-2442	618-524-4565
s & Service, Inc.	Monmouth Phil Britt • 309-734-6458
309-663-0331	Paris Wilson Contracting • 217-275-3411
• 217-627-2297	Princeville Paul Steitmatter • 309-385-4848
 618-576-2287 	Quincy Thompson Builders • 217-223-4060
s & Service, Inc.	Royalton Robert Smith • 618-984-4470
815-457-2134	Spring Valley Malooley Brothers
• 217-776-2462	815-664-2353
• 217-342-2159	Taylorville Melvin Krutsinger • 217-543-3609
• 309-467-4527	Wataga Harold Bramlett • 309-375-6470
• 618-576-2287	Waterman Little Enterprises • 815-264-3302
• 618-654-9807	West Salem George's Farm Supply
 815-563-4211 	618-456-8461
312-356-10004	WISCONSIN
- 015 770 4400	

Genoa City Chuck Schuren 414-279-5424 or 312-426-5040

Selected dealer territories available. Contact: Wick Buildings, Mazomanie, WI 53560



Tankless water heaters

They may not be such a bargain after all

The National Rural Electric Coop- very unusual circumstances; erative Association has been advised that tankless electric waters heaters are being promoted in rural areas throughout the country as energy conservation devices - a way to "cut hot water bills in half!" The argument is that storage water heaters are inefficient because of standby or storage and line losses, while tankless water heaters heat only the water you use. The argument sounds reasonable until facts are examined.

What is a tankless water heater? Such water heaters, which have been in use in Europe for years, are simply heat exchangers that permit the water to be heated as it flows through the heating unit to the point of use. Pointof-use installations, such as at a dishwasher, where high temperature water is needed, would theoretically allow the consumer to reduce the storage tank temperature to 120 degrees Fahrenheit and still maintain acceptable temperatures for dishwashing.

There are some logical and practical uses of the lower wattage devices such as instant-hot units in kitchens where only a cup or two of hot water is desired, but there are serious problems in trying to provide all hot water needs with tankless water heaters, and the claimed savings appear to be grossly overstated.

The following can help the consumer assess the value of such devices:

• The average storage water heater (counting storage losses of about two kilowatt-hours per day) delivers at least 85 percent of the energy used in the form of hot water at the point of use. In other words, it is 85 percent efficient, therefore, the 50 percent savings claimed for tankless water heaters is extremely unlikely except in

• The electrical (capacity) requirements of tankless water heaters are extremely high for short periods of time. A nine-kilowatt unit will heat one gallon per minute 60 degrees Fahrenheit above the incoming water temperature. A faucet could easily flow two to three gallons per minute, and consumers will probably have to adjust to lower water-flow rates and watersaving heads on showers to maintain adequate temperatures;

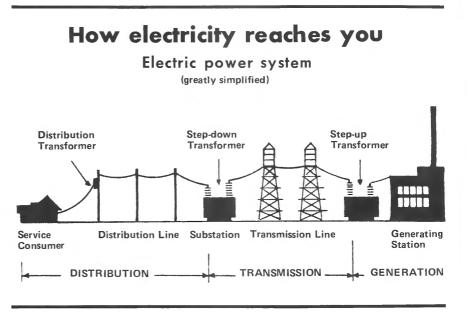
• To supply normal use, two or three nine-kilowatt units would probably be required (at least four times the capacity requirements of a storage water heater). Many homes are totally heated with less than 18 kilowatts of connected baseboard units;

• Utilities are trying to reduce

demand or capacity requirements and frequently provide incentive rates for storage water heaters that can be controlled. Meanwhile, the tankless water heater can impose two to four or more times the demand of a conventional water heater:

• In the event of a power failure, there is no reserve supply of hot water as with a conventional heater. As one utility executive expressed it, "We shudder (literally) to think how our shower comfort would be affected by a 30-second electronic recloser operation," and

• Tankless water heaters carry price tags ranging to \$270 per unit, and if two units are needed per house, the \$540 total would far exceed the cost of the most expensive storage water heaters.



Electricity cannot be stored, in fact it is the only product that is manufactured, transported, delivered, measured and used at the same instant. Travelling at the speed of light, electricity is produced the instant you flip a switch. In the diagram above, the new subs would be the step-down transformer. As you can see, this is only a small part of what it takes to get electricity to you.

> INOIS BURAL ELECTRIC NEWS



A two-year building project was completed in September when Walter R. Smith, foreground, and members of the board of directors switched into service two new substations in the Garrett and Longview areas.

Energizing of two new substations marks completion of two-year program

On Sept. 16, the new Garrett and Longview substations were officially completed. To commemorate the grand opening, or as the trade phrase says - energize the sub - a group of the board of directors were present for this historic event.

Not since 1938, when the first substation was energized, has such an energetic building program been initiated. In addition to the two substations, and eight miles of transmission line plus the necessary three-phase feeder lines, a third substation north of Mahomet will be completed around the end of the year.

Previously, all 4,500 meters were served from six substations. Due to a steady growth in load, the existing substations have reached their capacities. These new subs will reduce the demand on the Sidney, West Ridge, and Parkville subs and provide a backup in case of transformer failure at any one of these subs.

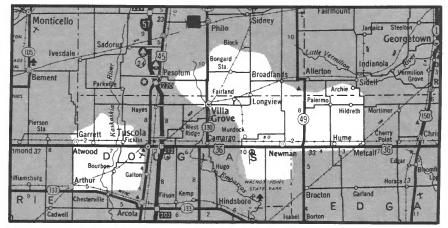
Both subs have been in the planning and building phases for nearly two years, thus their completion is the end of a major project. Attention will now be placed on completion of the Mahomet sub.

In addition to the substation itself, the Garrett sub required the building of $3\frac{1}{2}$ miles of 69,000-volt transmission line to a source of high voltage power. The Longview sub required $4\frac{1}{2}$ miles of transmission line.

Each sub has a transformer capacity of 5,000 KVA. This transformer

lowers the voltage from 69,000 to 7,200. It is at this lower voltage that electricity arrives in front of your house. The distribution transformer in your yard then lowers the voltage to the 120- and 240-volt level used in your house.

We apologize for the inconvenience of power interruptions during construction and appreciate your patience and understanding during this construction project.



Unshaded areas now served by new substations

11/2	lhs	ground	beef	
72	103.	groonu	Neel I	

1 onion (I use dried onion) 1 can mushroom soup 1 can cream of chicken soup

9 oz. taco sauce (mild) 12 soft corn tortillas 1 lb. grated Cheddar cheese Salt and pepper to taste

Brown meat and onions. Drain off excess fat and add soups and taco sauce. Simmer a few minutes. Grease large pan and line

with half of the tortillas. Layer cheese and meat and tortillas. Top with cheese and bake at 350 degrees. Serves 6-8. PATIO FREEZE .

1 cup sugar	2 tablespoons lemon juice
1 No. 2 can crushed pineapple and	Dash salt
juice	2 cups orange juice

2 cups mashed bananas

Combine all ingredients in blender and freeze in oblong pan, muffin cups or travs. IP

TOUCHDOWN	CHILI	D
	-	

onion, chopped	1 can cream of mushroom soup
green pepper, chopped	3/4 lb. cubed sharp Cheddar cheese

1 green pepper, chopped 2 tablespoons butter, melted 1 can chili without beans

Corn chips Saute onion and green pepper in butter until onion is clear. Stir in

chili and soup. Blend well. Add cheese, heat until partially melted. Pour into chafing dish; serve with corn chips. 12 servings. COCKTAIL MEATBALLS

3 lbs. hamburger

3 eggs 1½ teaspoons red pepper 1 tablespoon garlic powder

1/2 cup Worcestershire
 1 long, narrow pkg. soda crackers
 1 bottle Kraft hot barbeque sauce
 1 bottle Kraft hickory smoke sauce

Beat eggs with mixer, add spices. Crush crackers with rolling pin and add to eggs and spices. Add hamburger and mix with hands until well blended. Shape into small balls. Brown in oil. Drain and freeze in tightly-covered container until ready to use. Pour both bottles of sauce over and heat in oven. Can be used immediately instead of freezing.

100	indicity moreura			
		CHICKEN	SAUSAC	E GUMBO
	chickens, skinned,	cut-up		bell pepper
	or 3 lbs. sausage		1	cup flour
1	whole stalk celery		1	cup oil
4	onions			

Make a roux of flour and oil by putting in microwave 3 minutes or until it turns brown. Saute vegetables in roux 15 minutes. Put into pot with chicken and sausage. Add 1 quart water or more. Cook $1\frac{1}{2}$ to 2 hours, skimming off excess grease. Season with salt, pepper, red pepper and garlic before putting in pot. When chicken falls off bone, it's done. Serve over rice with garlic bread to 8.

LA	S	A	G	N	A

1 pkg. lasagna noodles	1 large jar Italian sauce flavored with
Cheeses: mild Cheddar, sharp	meat
Cheddar, Parmesan, Mozzarella	1 chopped onion
(1/2 to 3/4 lb. each)	1 lb. ground beef
2 jars Italian Ragu (mild) cooking	

sauce Brown meat with chopped onion. Put garlic powder, salt and pepper on this while browning. Add sauces to mixture. Cook noodles. In large pan put a layer of sauce on bottom. Then layer with noodles and cheese, add ½ sauce and then repeat. Bake at 350 degrees for 30 to 45 minutes.

220	uegrees for	30 10 43 1111101			
		BUTTERMILK	PECAN	I CHICKEN	
	fryers, cut up			ablespoon paprika	
	cup margarine			ablespoon salt	
	cup buttermilk			easpoon pepper	
	egg, beaten			up sesame seeds	
	cup flour		1/4 C	up pecan halves (optional)	
- 1	cup ground pec	ans			

Melt margarine in large shallow pan. Mix buttermilk with egg in small bowl. Mix together flour, pecans, paprika, salt, pepper and sesame seeds in another. Dip chicken in buttermilk mixture, then in flour mixture. Place skin side down in melted margarine in pan; then turn to coat with margarine and leave skin side up. Place pecan halves on each piece if desired. Bake at 350 degrees for 11/4 hours, or until done and golden brown. Serves 8.

SPANISH CHICKEN

	large pkg. taco-flavor Doritos	1 can mushroom soup	
	large boned chicken (chopped)	1 can cream of chicken sou	p
	small onion	1 can chicken broth	
1	small can chopped chilies (opt.)	1 can Rotel tomatoes	
1.1	nka Chaddar chaose		

pkg. Cheddar cheese

Bring to a boil: soups, broth and tomatoes. Add onion, chicken and crumbled Doritos. Cover dish and bake 30 to 40 minutes at 350 degrees. Remove cover and top with grated sharp Cheddar cheese. Return to oven until cheese melts.

TUNA CASSEROLE

small pkg. shortcut elbow macaroni			
(8 oz.), cooked	1/2 bell pepper, g	rated	
small can tuna			e
can cream of mushroom soup	Grated cheese	e (quite a bit)	
can milk (use soup can)	Salt to taste		
	(8 oz.), cooked small can tuna can cream of mushroom soup	(8 oz.), cooked 1/2 bell pepper, g small can tuna 3 or 4 green on can cream of mushroom soup Grated cheese	(8 oz.), cooked 1/2 bell pepper, grated small can tuna 3 or 4 green onions, chopped fin can cream of mushroom soup Grated cheese (quite a bit)

V2 red onion (grated) Cook macaroni as directed on package. Toss together all other ingredients while macaroni is cooking. (Leave cheese until last.) Add macaroni to mixture and top with grated cheese. Bake in oven at 350 degrees for 30 minutes. ST

EAK	MAR	INATE
		tablespoons Accent or M.S.G.
	1	tablespoon black pepper
		cup vinegar
	1	cup salad oil

1	tablespoon garlic salt
2	tablespoons celery salt
τ.	tablesnoon dry mustard

tablespoon dry mustard dehydrated horse radish tablespoon onion salt Combine ingredients.

meat chopped onion lb. ground beef		

1 med. cabbage

1 lb. ground lean meat 1/4 cup green onions (chopped) 1 med. onion (chopped)

2 cloves garlic (minced)

1 10/2-02. can mushroom soup 1 cup boiled rice 1/4 cup bread crumbs 1/2 stick butter or margarine salt and pepper to taste

Cut cabbage as you would to smother and boil in salted water until tender, but still green. Drain and reserve the liquid. Melt the butter in a deep skillet and fry meat with onion, garlic and seasonings until brow. Mix cabbage with meat. Add green onion, mushroom soup and boiled rice. Pour into greased flat pyrex dish. Top with bread crumbs and bake 20 to 30 minutes at 300 degrees. (Before baking if mixture appears dry add some of the water reserved from boiled cabbage.) Yield: 6-8 servings.

CABBAGE CASSEROLE

PENNSYLVANIA	DUTCH PIE	CRUST

3 cups flour 1 teaspoon salt 11/4 cups shortening 5 tablespoons water 1 egg 1 teaspoon vinegar

Sift flour and salt; cut in shortening until mixture resembles coarse cornmeal. Beat water, egg and vinegar together; stir in flour mix-ture. Shape into ball. Chill. Turn out on floured board, roll to fit pie pan. Bake for 10 to 12 minutes in 425 degree oven. Yield: pastry for two 2-crust pies.

FUDGE CHESS PIE

			DIXIE
6	CUDS	sugar	

1½ cups sugar 1 stick butter 3 eggs (slightly beaten) 4 tablespoons cocoa 1 teaspoon vanilla pinch of salt Mix sugar and butter. Add other ingredients. Pour in uncooked pie shell. Bake at 425 degrees for 10 minutes. Turn down to 350 degrees for 30 minutes. -----

			VEGET	ABLE F	PIE			
1 pie shell 2-3 small squash			fr	esh mu	shroom	is—as des	ired	
			1 sli	iced to	mato			
1	bell pepper			1 cu	p may	onnaise	•	
1	med. onion			1 cu	p moz	zarella	cheese	
Cho	op or slice	squash,	pepper,	onion	and	mush	rooms.	Sau
but	ter and dra	ain. Set	mixture	aside.	Cor	nbine	mayon	nais

C Saute in b onnaise and mozzarella cheese together. Line pie shell with tomatoes; top with vegetables; then top with mayonnaise and cheese mixture. Bake at 350 degrees for one hour or until brown.

		STIR-'N-DROP	OATM	EAL COOKIES
1	cup flour		1	cup rolled oats
1	teaspoon bal	king powder	1/2	cup vegetable oil
1/2	teaspoon sal	ł	2	tablespoons milk
1/2	teaspoon cin	inamon	1	egg
1/2	teaspoon gin	ger	3/4	cup chopped walnuts

1/2 teaspoon cinnan 1/2 teaspoon ginger

1 cup brown sugar, packed Pre-heat oven to 375 degrees. Lightly grease baking sheet. Mix first 5 ingredients together. Add brown sugar and oats. Mix well. Combine vegetable oil, milk and egg together and add to mixture. Stir in walnuts and drop dough by rounded teaspoons about 2 inches apart on baking sheet. Bake about 10 minutes. Cool on wire rack. Yield: 3 dozen.

GRAHAM CRACKER COOKIES

FILLING:	
2 sticks oleo	1 cup nuts
1¼ cups sugar	11/2 cups coconut
1 egg	2 cups crushed graham crackers
1/2 cup Carnation milk	

4 tablespoons Carnation milk 1 teaspoon vanilla

1/2 cup ICING: 11/2 sticks oleo 1 box powdered sugar arge cookie Take a large cookie sheet and place graham crackers on it all going same way. Then prepare filling. Melt oleo and add sugar, egg and milk. Bring to a boil, take off heat and add coconut, nuts and crushed graham cracker crumbs. Mix all together and spread on crackers on cookie sheet, then add another layer of graham crackers (same way as first). For icing, mix together ingredients and spread on top of crackers, cover and refrigerate for several hours. Then cut into squares.

YUMMY	CHOCOLATE SHEET	T CAKE
1 stick margarine 1/2 cup oil	1 teaspoo 4 tablespo	n cinnamon oons cocoa
1 cup water 2 cups flour (self-rising)	2 eggs 1/2 cup but	
2 cups sugar	1 teaspoo	n vanilla
Melt margarine, oil and	water. Bring to a	boil. Add flour, sug
cinnamon and cocoa A	iv wall than add	remaining ingredien

ar. innamon and cocoa. Mix well then add remaining ingredients. Stir and pour into pan. Bake at 400 degrees for 20 minutes. ICING

1/2 stick margarine 1/4 cup water 1 lb. box powdered sugar

Melt margarine and water. Bring to a boil and add remaining ingredients. Spread on top of hot cake.

0A	TM	EAL	CAN	Œ

UAIMEAL	U
	e
11/3	C

	cups flour	
1	teaspoon soda	

4 tablespoons cocoa 1 cup nuts

- 1½ cups hot water 1 cup minute oats 1 cup minute oats 1 cup white sugar 1 cup white sugar 1 cup brown sugar 2 cup shortening 1 cup shortening 1 cup shortening 2 cup Bake at 350 degrees for 35 minutes.
 - INOIS RUE

Hot Line School

(Continued from page 5.) Distance is safety."

Safety is always in mind at the school, and one man's hard hat sported a sticker proclaiming, "If you love life, live safety." and Dave Deiderich and Jim Nevel of the AIEC Job Training and Safety Department made the rounds of the various work groups several times, making sure the trainees did not pick up any unsafe habits.

While Diederich and Nevel were in overall charge of the school, several instructors from different cooperatives helped with hands-on work sessions, and Don Greene, job training and safety instructor from the Iowa Association of Electric Cooperatives, lent his expertise, too.

Cooperative instructors were: Al Becker and Delbert Boston, Rural Electric Convenience Cooperative Co., Auburn; Fred Boston, Western Illinois Power Cooperative, Jacksonville; Larry

Carter, Illini Electric Cooperative, Champaign; Meredith Chrisman and Wendell Lettner, Coles-Moultrie Electric Cooperative, Mattoon; George Claus and Don Long, Illinois Rural Electric Co., Winchester; Daryl Douglas, Adams Electircal Co-Operative, Camp Point; Bruce Hill and Chuck West, Corn Belt Electric Coop-Bloomington; erative. Richard Hilligoss, Lyle Kofoot and Larry Niccum, Eastern Illinois Power Cooperative, Paxton; and Gary Hissong, Southwestern Electric Cooperative, Greenville.



Selected dealer territories available. Contact: Wick Buildings, Mazomanie, WI 53560



<u>An economical combination</u> Save by adding a heat pump to your gas or oil furnace!

There's a winning combination that promises more heat for homeowners at less cost this year and for years to come, despite the threats of soaring fuel costs.

The combination teams your existing home furnace, that's geared to deal with the coldest outdoor temperatures, with an electric heat pump, a system that works most efficiently at relatively warmer temperatures.

When both the heat pump and furnace are used together, the system itself automatically selects the most economical operating mode to meet your comfort needs.

When outdoor temperatures are near or above the freezing point, the heat pump works more economically than the oil or propane furnace, which does its most effective work on the very coldest days.

Heat pumps, as many homeowners have already found, offer warmer homes and savings in fuel, thanks to a scientific concept discovered more than 150 years ago.

It's based on the fact that there is heat in the air, even at cold temperatures. The heat pump captures this heat, concentrates it and moves it indoors at far less cost than your oil burner can provide heat. There's an added bonus in the fact that in the sweltering days of summer, your heat pump can reverse itself, move the heat out of the house and leave you with comfortable central air conditioning.

It's a winning combination.

Fans can pull down grain bins

It's not likely that many of our member-owners will ever have to worry about six feet of snow piling up on the roofs of their grain bins.

But under certain conditions, aeration fans in a bin can produce pressures on the roof which are equal to six feet of snow.

If the formation of frost on the screened intakes at the top of the bin closes off the openings, aeration fans can literally suck the roof of the bin down, according to University of Illinois Extension Agriculture Engineer Bill Peterson. Even propellor-type fans can produce half that much pressure, Peterson said.

A pressure-sensitive shutoff switch on the fan would be one solution, but Peterson suggests that owner-operators should just keep tabs on weather conditions. When frost is likely to form they should either cut off the fans or open up the bin hatches.

Reversing the fans to blow air up through the grain would also work. But Peterson notes that airflows in these cases should be on the order of one-tenth cfm or more per bushel.

Creating a 'comfort center' in your home

There is a way to reduce the amount of heating energy you use and still stay warm. You can do it by creating a "comfort center" in an area of



Where families concentrate their energies

your home.

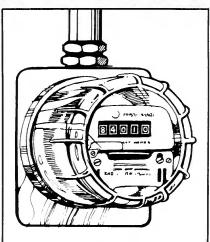
By closing off other rooms and by turning back your furnace thermostat, you can reduce your energy consumption dramatically. Then by adding an electric space heater to the "comfort center" you have selected, you can still be warm and comfortable – even in the coldest weather.

You will want as your "comfort center" a room or area of your house where most of your wintertime activities occur. Isolate that area from the rest of the house as much as possible. For any outside walls, seal out the cold by insulating, weatherstripping and caulking, if you haven't already done so.

Electric space heaters are attractive, convenient and safe. They allow you to heat only the area you have selected as your "comfort center," so there's no wasted energy. Of course, you will want to be sure you have chosen the right model for your particular needs.

Now is still a good time to consider creating a "comfort center" and purchasing an electric space heater.

ILLINOIS RURAL ELECTRIC NEWS



28

Is the meter accurate?

The electric meter is often accused of inaccuracy, but it's seldom the culprit. The meter is a finely calibrated, highly accurate device used to measure electric power use. Your cooperative has a continuing program to test the accuracy of all its meters to assure you that you are being billed for the exact number of kilowatthours used. Historical data bear out the fact that in more than 99 percent of the time, the electric meter is accurate. High bills are almost always traced to other causes.

You may request a special meter test by contacting your cooperative's member service department, or you may wish to call an electrician to check your wiring and appliances for grounds, shorts, and other malfunctions.

Meter reading dates

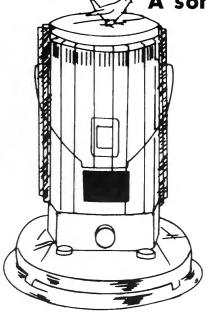
Another factor that enters into higher than normal electric bills is the number of days between meter readings. Check the number of days in your billing cycle to make accurate comparisons. You will use more kilowatt-hours in 40 days than you would in 20. Many people seem to overlook this important consideration.

It's important to read your meter on the same day each month. If you notice that your use has increased substantially from one month to the next for no apparent reason, you will be able to diagnose an equipment fault sooner.

Why is our phone line busy?

Occasionally, our members express concern about when they call to report a power outage and the line is busy. It is very frustrating to experience this, and thoughts run through our minds that the phone is off the hook or the line has somehow been placed in the busy signal position. After an hour of calling your frustration level has increased and probably turned to anger. You're in need of help, you're calling to report a power outage and no one is helping you! Why?

Your call goes to one of four incoming phone lines. If a line of 30 members or more is out, the line may be busy as everyone who is at home attempts to notify the cooperative. When a major line or substation that serves anywhere from 100 to 1,000 people is out, the problem is compounded and you receive a busy signal



Not so many people have canaries any more. Remember when the shroud was removed from over the cage each morning - how that bird would sing and sing? It was a marvel how such beautiful sounds could come from that little ball of yellow fluff. Few people more than likely due to the volume of calls received.

Power outages in the rural area due to various causes – storms, cars hitting poles, animals getting into equipment – are a way of life. Your cooperative is constantly monitoring ways in which service can be improved without causing our rates to increase.

Remember the busy signal the next time you and your neighbors are out of power. Don't give up calling. We want to hear from you. We have had instances where everyone on the line thought their neighbor had called in and no one had.

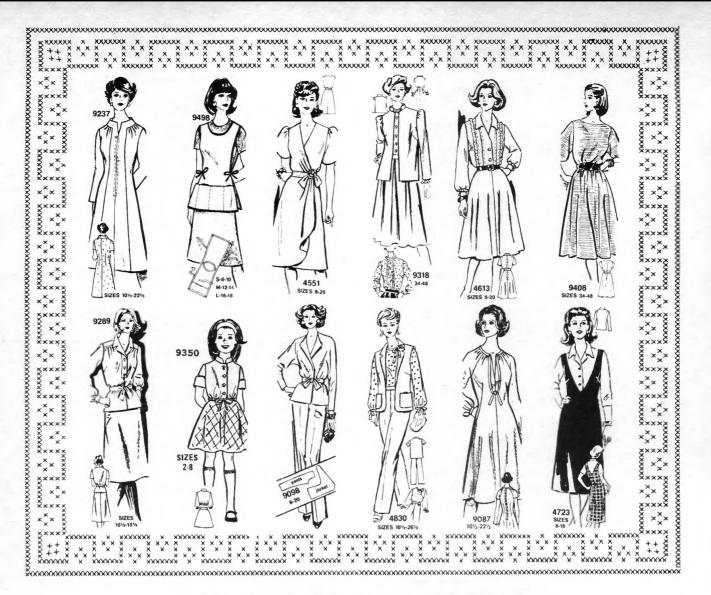
Your cooperative apologizes for the inconvenience you may experience from a power outage. We are at the other end of the phone doing everything possible to restore your power in the safest and quickest manner possible.

A song bird with every kerosene heater?

could imagine that little bird could be useful for any other purpose. But it was. It could save lives – and many did. How?

Prior to development of dependable gas-testing equipment, coal mines kept a supply of canaries. Whenever new sections of a coal mine were opened or when an older area was to be reactivated, a caged canary was carried into the area. Canaries react to the presence of carbon monoxide gas much quicker than humans. The miners closely observed the canary's reactions. In many, many instances, this reaction caused the miners to vacate the area in question. Although the canary usually died, the miners' lives were saved and a noble little song bird got the credit.

So, if you have an unvented kerosene heater, or any other type of unvented fossil fuel heater, you should have a canary. It could save your life.



XXXXXXX	×	XX	XXXXXXXXX	KX.	XXXXXX	XXX	XXXXXX	XXX	XXXX	OOK -	XXXX	XXXX	XX	XX
XX XX	(XX	XXX	XX XX 3	XX.	XX XX	XX	XX	XX	XX			XXC)	XX	XX
XX XX	(X)	XX	XX		XX		XX			XX		(XX)		
XXXXX	XX	XXX	XX		XX		- XXX	X	- XXX	XXX	X	XXXX	XX	XX
XX	×	XX	XX		XX		XX				×	XXXX		XX
XX	×	XX	XX		XX		XX	XX		XX	×	XX	XX	XX
XXXXX	XX	XXX	XXXXX		XXX	X	XXXXX	XXXX	XXX	XXXX	XXXX	XXXX	XX	XX

No. 9237 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½, 22½.
 Size 14½ (bust 37) takes 2-3/8 yards 60-inch.

• No. 9498 is cut in Small (8-10); Medium (12-14); Large (16-18). Medium takes 1-1/8 yards 45-inch fabric.

• No. 4551 is cut in sizes 8, 10, 12, 14, 16, 18, 20. See pattern for yardages.

No. 9318 is cut in Women's Sizes 34, 36, 38, 40, 42, 44, 46, 48.
 Yardages given in pattern.

• No. 4613 is cut in sizes 8, 10, 12, 14, 16, 18, 20. Size 12 (bust 34) takes 3-7/8 yards 45-inch fabric.

• No. 9408 is cut in Women's Sizes 34, 36, 38, 40, 42, 44, 46, 48. See pattern for yardages.

 No. 9289 is cut in sizes 10½, 12½, 14½, 16½, 18½. Size 14½ (bust 37) takes 3-3/4 yards 45-inch fabric.

• No. 9350 is cut in Child's Sizes (2, 4, 6, 8) are all included in pattern.

• No. 9098 is cut in sizes (6, 8, 10, 12), (14, 16, 18, 20). Order your regular size.

No. 4830 is cut in sizes 10½, 12½, 14½, 16½, 18½, 20½, 22½, 24½, 26½. Size 14½ (bust 37) vest 1¼ yards 60-inch; blouse 1½; pants 1-3/8.

No. 9087 is cut in sizes 10½, 12½, 14½. 16½, 18½. 20½. 22½.
 Size 14½ (bust 37) takes 3-3/8 yards 45-inch.

• 4723 is cut in sizes 8, 10, 12, 14, 16, 18. Size 12 (bust 34) jumper takes 1-7/8 yards 60"; blouse 1-3/8 yards.

TO: PATTERNS Illinois Rural Electric News P.O. Box 3787

Springfield, IL 62708

I have enclosed \$ (\$2.25 per pattern - cash, check or money order accepted) for the following patterns:

Pattern No.	Size	Pattern No.	Size
Print Name			
Address			
City			
State		Zip	

ILLINOIS RURAL ELECTRIC NEWS

XX

Š

×.



Illini Electric News

ILLINI ELECTRIC COOPERATIVE 217-352-5241 CHAMPAIGN, ILLINOIS

Is the wind generator for you?

By RAY WEISS, Member Service Adviser

Have you seen the flashy ads for wind generators? Have you ever wondered whether one would be right for you?

I'm sure some of you have or will in the near future. I'm not going to tell you there have been a flood of inquiries, however enough questions and comments have surfaced to indicate to me that there is some confusion or incomplete information being spread over that friendly cup of coffee.

I want you to realize that I'm not going to say you should or shouldn't purchase a wind generator. I only want to point out your responsibilities should you decide one is right for you.

The Public Utilities Regulatory Policy Act (PURPA), which legalized their interconnection with our system, also set down very strict rules covering your responsibilities. Many salesmen and news stories only point out the apparent advantages, not the rules and regulations that the small power producer must follow.

* * * * * * *

Interconnection and costs Most wind generators require utility power to start. Because this generator is interconnected with our system, it then becomes a power generator. Whether you wish to sell power back or not, interconnection with our system requires the small producer to follow all the rules and regulations.

To begin with, a written annual contract must be entered into, setting forth the rights as well as the responsibilities of both parties. This is a binding agreement, generally with a 30-day cancellation notice by either party.

The PURPA law states that the member must pay for all interconnection cost, including: (1) connecting, (2) switching, (3) metering, (4) transmitting, (5) distributing, (6) safety, (7) reliability of electric service, (8) administrating, (9) operating, (10) maintaining, (11) installing equipment on the Cooperative's system necessitated by the interconnection and, (12) insurance costs.

The law also states that the wind generator facility must not be subsidized by increased rates to the other members. In other words, all costs, even engineering and meter reading cost must be paid for by the wind generator owner. For once, Congress has passed a law that looks out for the interest of the average consumer, protecting him from any additional costs caused by the wind generator owner.

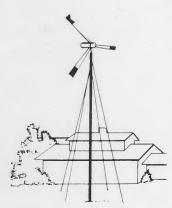
Your Cooperative will, upon request and provided certain legal, safety and reliability tests are met, interconnect the Cooperative's lines with the wind generator.

For those who might be interested, there are a number of requirements concerning the changes needed in metering, switches, etc. that need to be discussed. For now I'm just going to suggest we discuss these on an individual basis.

Insurance requirements seem to catch many people off guard, including the insurance companies. As a power producer, the wind generator now sets up certain risks that require insurance coverage. Power can now flow backwards across our lines allowing for potential hazardous situations. The generator owner must provide a certificate of insurance in the amount of \$1,000,000 to cover injury or death and \$300,000 coverage for damage to property.

* * * * * * *

Most sales pitches refer to the fact that we will purchase excess power from a wind generator. They almost always imply a high price will be paid.

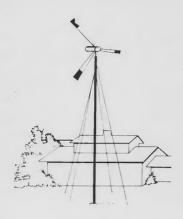


Can you sell your excess power?

December 1983

The PURPA law states we must pay the "avoided cost." This includes energy cost as

28



Can this be used as stand-by power?

Talk to Illini before you act

Mail bill payments early

Winter hazard for the elderly

well as capacity cost when it applies.

Energy produced by a wind generator will reduce the energy cost but, since it does not operate around the clock, capacity cost of the wholesale power contract would not be avoided.

Wind generators thus qualify for the energy cost of 1.22 cents per kilowatt-hour, plus any applicable power cost adjustment. The Cooperative will then deduct any transmission and distribution line losses (generally in the 8-10 percent range) as well as a charge for time and mileage to read the meter in addition to a small charge to figure the billing.

If the energy sold did not equal the overall cost to the Cooperative, the generator owner would thus get a bill instead of a check. I'm not trying to scare anyone, however there could in fact be months when this would happen. It may then be wise to set this reading day up on an annual basis or forget entirely about selling any power. We believe the amount delivered to the Cooperative will be a small amount at best.

No! As mentioned earlier, most wind generators start and in fact maintain their frequency and voltage from the Cooperatives lines. One of the safety tests we will conduct is to make sure the generator does stop when our power is disconnected. Any attempt to install such a self-excited generator would be a violation of our safety rules.

In order to more fully understand and evaluate the advantages and disadvantages of installing a wind-turbine generator, you should discuss this in detail with the Member Service Department of your Cooperative. We would be happy to provide you with the information necessary to help you make your evaluation.

To get a more accurate figure on the total costs, I urge you to contact the Cooperative office before you make any committment.

As noted on your monthly electric bill, payments are due in the Cooperative office by the 24th of the month. If you send the payment by mail, be sure to allow sufficient time for the post office to deliver the payment before the 24th.

Electric bills are sent to members on or about the 3rd of the month and all members should receive the bill by the 6th or 7th.

Each member has more than two weeks after receipt to pay his or her bill before a late payment charge is assessed, but even with this lengthy period a small percentage of members pay their bills late. This results in extra labor, administrative paperwork and accounting procedures, which mean additional costs.

For that reason a 5 percent penalty is added to your account if payment is received after the due date. Of course, oversights do occur, thus the board of directors established a policy many years ago to allow one such late payment without a penalty charge provided there was no late payment in the previous six months.

Remember, bill payments made before the 24th of the month save you money and avoid additional costs for your Cooperative.

Winter's low temperatures pose a special danger to the elderly: accidental hypothermia. Even relatively mild cold can cause some older people to develop accidental hypothermia, a drop in internal body temperature to 95 degrees Fahrenheit (35 degrees centigrade) or below that can be fatal if not detected and treated promptly.

Those elderly most likely to develop accidental hypothermia are the chronically ill, those who do not take normal steps to keep warm and those unable to afford to adequately heat their homes.

Setting the heat at 65 degrees Fahrenheit (18.3 degrees centigrade) in living and sleeping areas should be adequate to prevent hypothermia, though sick people may need more heat.

Anyone trying to save on fuel costs can protect against hypothermia by dressing warmly and heating only one or two rooms of the home.

Those who believe they cannot afford to heat their homes adequately should contact their local community action agency or area agency on aging. There are government-

Illini Electric News Illini Electric News Illini Electric News Illini Electric News Illini Elec

funded programs to help low-income families pay high energy bills, weatherize their homes or even get emergency repairs of heating units, and local agencies can direct interested persons to the proper source of assistance.

The symptoms

Use caution and common sense

How to

cook with

less energy

* * * * * *

Hypothermia symptoms include: an unusual change in appearance or behavior during cold weather; slow, and sometimes irregular, heartbeat; slurred speech; shallow, very slow breathing; sluggishness; and confusion.

Treatment consists of warming the person under a doctor's supervision, preferably in a hospital. Persons whose temperatures drop below 95 degrees Fahrenheit should seek emergency help.

Prevention measures include caution and common sense.

• Dress warmly even when indoors, eat enough food, and stay as active as possible.

• Because hypothermia may start during sleep, keep warm in bed by wearing enough clothing and using blankets.

• If you take medicine to treat anxiety, depression, nervousness or nausea, ask your doctor whether the medication might affect the control of body temperature.

• Ask friends or neighbors to look in on you once or twice a day, particularly during a cold spell. See if your community has a telephone check-in or personal visit service for the elderly or homebound.

For the brochure "A Winter Hazard for the Old: Accidental Hypothermia," check your supermarket information rack or write to: NIA/AH, Expand Associates, 8630 Fenton Street, Suite 508, Silver Spring, MD 20910.

Americans use more energy to prepare their food than farmers use to produce it. A surprising fact, but a look at how you cook helps explain why.

If you are in the habit of leaving the lid off pots and pans while cooking, you are losing a lot of heat and speed in cooking. If you have not tried a pressure cooker, you have missed out on a way to cut cooking by two-thirds.

When you can, use a portable fry pan, grill or toaster/broiler instead of the oven for small meals. You will use about half as much energy for that meal.

If you move food directly from the freezer to the oven, especially roasts, you waste one-third of the cooking energy. Let the food thaw before placing it in the oven.

Match the size of the pots and pans with the size of the stove burner to get maximum and even heating, and make sure the bottoms of the pots and pans are flat. A pan that is not flat on the bottom not only wastes energy, it also jiggles and makes annoying sounds.

Every time you open the oven door to sneak a peek when you are baking something, you lose up to 20 percent of the heat. Besides, who wants that blast of hot air in the face?

If you have a microwave oven, you are on the right track to saving energy. They draw only half the power of an ordinary electric range, and for a much shorter time.

But cooking is just part of the energy waste story. Think of all the other ways you can save electricity around the house, just by taking a little time to think about it.

Undersized wiring wastes electricity

• Undersized wiring overheats. When wires overheat, electricity is wasted.

•• Not only do overloaded circuits waste electricity, they also create safety hazards.

. Inadequate wiring could be to blame if lights flicker and dim, if appliances



don't operate properly, or if there's a voltage drop.

Wiring needs should be determined by a qualified electrician.
Don't let undersized wiring waste electricity in your home.

ews Illini Electric News Illini Electric News Illini Electric News Illini Electric News Illini Electric

Acid rain 'scare' threatens midwest

By RICHARD L. TRUMKA, President, United Mine Workers

Five hundred years ago everyone knew that the sun circled the earth. Galileo even faced excommunication for expressing his theory that the sun was the center of the solar system. A few years later, people began to question the fact that the earth was the hub of the universe. Then we learned the truth.

That is the nature of scientific progress – from false certainty to questioning, to new and more accurate knowledge. On the subject of acid rain, the U.S. Environmental Protection Agency (EPA) and a number of reputable atmospheric scientists have moved from the first stage to the second, and all of us should be grateful.

Current scientific knowledge is overwhelmingly uncertain. We do not know the cause of increasing acidity. We do not even know that acidity is increasing. We do not know what level of acidity is "normal." We do not fully understand the relative contribution of natural and man-made sources of acidity. And despite propaganda, we do not know if local or long distance sources of pollution are more important. Significantly a study released in April by The Massachusetts Institute of Technology and one by a Washington University professor issued in May stress the relative importance of local sources.

There are many other things that we know. We know that there is no evidence that acid rain affects human health. We know that the same New Englanders who want to tighten pollution controls in the Midwest want to ease them at home. We know that American pollution controls are stricter than those in Canada. We know that the worst single polluter in North America is Canada's Sudbury smelter. And we know that the area most affected by excess acidity in North America surrounds that Sudbury installation.

* * * * * * *

Acidity has varied over time

And that is only part of our knowledge. We know that the level of acidity historically has varied. Ages-old icebergs reveal higher acid content than we now have. The same was true of seventeenth century Paris. We know that acid levels never have been measured consistently over a long enough period to determine if significant changes have taken place. We know that if -a very big if - utility emissions are a major cause of rainfall acidity, the problem is self-correcting because of provisions in the Clean Air Act. The EPA recently reported that emissions of sulfur dioxide declined by 27 percent from 1975 to 1981. And as new power plants - which must meet even more stringent standards replace older ones, that process will accelerate.

Most of all, we know that acid rain controls will have severe economic and employment impacts in the Midwest and parts of Appalachia. The U.S. Department of Energy recently estimated that 50 to 75 percent of the emissions reductions mandated by the proposals would be achieved by substituting low sulfur coal for high sulfur coal. If this fuel switching occurs, 40,000-80,000 coal industry employees could lose their jobs. In addition to the direct mining job losses, many thousand more workers in related industries and in the service sector would be affected. These job losses would occur in areas of the country that already suffer from near depression-level unemployment rates.

* * * * * * *

The total economic cost to the coal mining states that would be affected would be between three and six billion dollars. The social costs would be incalculable. Morevoer, the problems created would not be short term. Many mining communities would never recover; they would become ghost towns. Meanwhile, the energy independence that is within our grasp never would occur. Instead, we would continue to mortgage our future to unstable and expensive foreign sources of energy.

Finally, we know that the propaganda being issued by organizations devoted to acid rain controls have been a disservice to the people of the United States. The people and organizations that have issued this propaganda are using unjustifiable scare tactics. These are reminiscent of the claims some years that Lake Erie already was dead and gone, irretrievable, because of pollution. Tell that to the people enjoying Lake Erie's many beautiful beaches today.

More than enough heat has been shed. Now it's time to spread some light.

The economic cost is high

2d