

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



SURGE PROTECTION

Almost every home today has some kind of electric appliance or electronic equipment in it and this equipment, like everything else, is subject to failure for various reasons. However, whenever an appliance does fail, the favorite villain seems to be power surges, especially if the failure occurs after a momentary interruption of the power supply or an actual outage on the power line. Since the owner of the equipment already has decided that the failure was due to power surges, it naturally follows that the electric utility is to blame for the damage.

Frankly, we have difficulty believing that interruption of electric service on a 7,200 volt distribution is going to create any power surges of the kind of magnitude and duration that would cause damage to electrical equipment. If damage causing surges were being produced by either momentary interruptions due to breaker operations or by sustained outages, it would be virtually impossible for anyone to have any electrical appliances or equipment. During the course of a year, the system experiences thousands of breaker operations primarily caused by lightning strikes on the line or tree limb contacts during wind storms. The system also experiences a number of sustained outages during the course of the year due to storms, vehicle accidents, animal contacts and any number of other reasons. In addition, we do have a number of planned outages for the purpose of performing maintenance on the system. All these interruptions added together would be cause for tremendous damage to members' equipment if damaging surges were in fact being generated. We all know, however, that such damage does not occur, so either the surges are not occurring or the equipment is designed for the normal operation of

a power supply system.

We do know that high-energy surges caused by lightning can occur on electrical systems and can cause damage to a member's equipment. A couple of years ago we had a severe lightning storm in Steeleville and I continued to watch television on the assumption that lightning would not get into my underground electrical service and underground cable TV service. However, there was a bolt of lightning that struck close to the neighborhood and my TV set immediately went dark. That turned out to be an \$80 lesson about not watching television when the lightning is flashing. In my case, the TV set failed immediately when the surge occurred, but sometimes the surge may only slightly damage a component or weaken insulation levels and failure occurs later when it is difficult to relate it to specific cause.

When a member has a piece of equipment fail and believes that it was caused by a power surge, our basic recommendation is that a claim be submitted to the member's homeowner's insurance company. If that company believes that we were negligent, it can submit a claim to us and we will turn it over to our insurance carrier. Our insurance company will pay the claim if it believes the damage was caused by negligence on our part, but will not pay if the damage was claimed to have been caused by what is considered to be normal operation of a power supply system or by what are termed "acts of God" and are beyond our control.

How can you protect your equipment against surges on an electrical system? There are really two ways. You can buy surge suppressors that you plug into outlets for the purpose of protecting individual pieces of equipment, or you can buy whole-house protection that you have an electrician install in your home's main service panel. There are some manufacturers of surge protection equipment that will insure you against loss if you use their individual protectors in conjunction with the whole-house protector. If you have expensive home entertainment equipment or computer equipment, you should consider investing in some form of protection. It may save your equipment and avoid your getting upset with us because we will not pay your damage claim.

\$\$\$ \$ The Energy Page \$\$\$ \$

By Bruce Cramer

Within the last week, (in November, when this was written) I have received two phone calls from distressed home owners who were experiencing condensation on their windows. What especially distressed both of these individuals is that they had recently installed new windows, which as you know is a major investment, in the hopes of eliminating these types of problems. Neither of these people were members of the cooperative, although I am sure some of you have probably experienced the same problem. Last month, I discussed moisture problems that can result from crawlspaces. But many times window condensation and other moisture problems occur in homes that do not have a crawlspace.

Warm air can hold more moisture than cold air. This is why the measure of humidity in the air is called relative humidity; it is relative to the temperature of the air. Although 40 degree air and 80 degree air both can have 90 percent relative humidity, the 80 degree air will actually contain more moisture. If the warm air is cooled or comes into contact with a cold surface, it must give up some of the moisture that it carries, hence the condensation on cold glass.

Where does this moisture come from if there is no crawlspace? Depending on your home, it can come from a myriad of places. During the fall, we left a period of warm temperatures and high relative humidity. The summer air in Southern Illinois contains a lot of moisture, as do the fall rains. Homes are made of materials that absorb moisture. If the air around these materials is of high moisture content, they too will eventually hold relatively high levels of moisture. As the air dries out, they will give up their moisture to the air. If we have an early cold spell before the home has a chance to dry out, there will be plenty of moisture for condensation on any cold surface (if walls or ceilings have places that are uninsulated, they too can become cold enough to cause condensation).

We also create much of the moisture in our homes ourselves. In fact, it is not unusual for 10-50 liters (2-10 gallons) of water vapor to be produced daily in our homes. Where does it come from?

- 1 liter per day is produced by cooking three meals
- washing dishes in a sink produces .5 liters
- a shower will produce .5 liter
- house plants can produce up to .5 liter per day.

* (1 liter is slightly more than 1 quart)

This does not include moisture from washing clothes, body perspiration, standing water in toilets and sinks, etc. As you can see, every home is different, depending on the lifestyles of the inhabitants.

How do you eliminate condensation and moisture problems? If cold surfaces cause condensation, then get rid of them first. Through new construction techniques, better insulation and close attention to details when insulating, you can eliminate cold surfaces on walls and ceilings. You can use better windows (triple pane windows allow the relative humidity to be 10-15 percent higher). You also could raise the temperature that you maintain in your home. This however uses more energy and flies in the face of everything that we are trying to achieve today through energy efficiency.

After you have achieved the maximum benefit from raising surface temperatures, you need to look for ways to lower the relative humidity in your home. In older homes, this is not a problem as they normally have low relative humidity anyway. Older models of fossil-fueled heating systems use warm inside air (that you paid to make warm) for combustion, send it up the flue and replace it with cold, dry air from outside. As this is a very inefficient way to make heat, new heating equipment uses outside air for combustion (electric heat of all types, absent the need for combustion, does not have this problem). However, many home owners still have contractors install humidifiers on their new heating equipment. One way to lower the humidity then would be to get rid of the humidifier. In fact, with the fall rainy season and sponge effect of building materials, many home owners should use a de-humidifier for a period of time in the fall.

You also should look around the home for sources of excess moisture. Some homeowners, in an attempt to retain the heat from the clothes dryer, have installed bypasses on the dryer vent hose that dump the air back into the house. Although there is considerable heat to be gained by doing this (especially in large families with a lot of laundry), it can be a large source of moisture in the home. You also should ensure that vent fans are used during showers and cooking (range hoods that recirculate the air do not remove moisture). The number of indoor plants also should be kept within reason.

Older, drafty homes are generally drier as the

warm indoor air leaking to the outside is replaced with cold, dry air. With better materials and new construction techniques, newer homes are much tighter and draft free, making them more comfortable to live in. However, depending on the living habits of the occupants, this can cause the level of moisture to be high enough for condensation to occur. Again, new homes generally do not need humidifiers on the heating system. You also may need to use a dehumidifier in the fall to remove excess moisture before extreme cold temperatures arrive for the winter. If this does not eliminate the problem, you may need to consider using a heat recovery ventilation system (HRV).

An HRV system brings in cold dry air from the outside to supply fresh air to the home and to help lower the moisture level in the home. While it does this, it removes the same quantity of warm, moist air from inside and sends it to the outside. But before the warm air exits the house, the HRV passes it across a heat exchanger, allowing the warm air to transmit some of its heat to the cold air. Most HRV's can recover 60 percent of the heat that is in the warm air, and some models reach efficiencies of 80 percent.

Does your home have a moisture problem? Many times the signs of moisture problems are easy to detect. There are damp spots or stains on the ceiling or in the corners of the walls. Or maybe you can smell the mold and mildew in the basement. Or the easiest to notice, condensation. Sometimes, however, the signs and results are not very obvious. Because excessive moisture can lead to mold and other strains of bacterial growth, health problems are the result. And many times these only show up in the young and the elderly.


What is the right level of moisture for your home? The easiest and safest answer for me to give is "the level that does not cause condensation or health-related problems." This however does not give you the answer that you need. As hopefully you understand by now, each home and its occupants are different, and the correct level of relative humidity for each will be correspondingly different. As a general rule, the relative humidity in a home should be between 40 and 45 percent. However, as the outdoor temperature drops over the course of winter, you may need even a lower level to prevent condensation.

If you suspect that you are having moisture-related problems at your home, do not let them go unchecked. The results of moisture problems are generally very destructive, not only to the structure of your home, but quite possibly your health.

Statement of nondiscrimination

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

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



Office closing

Our offices will be closed on Monday, Jan. 20
for Martin Luther King Jr. Day.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1975. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members.

If you have information pertaining to these people, or their heirs, have them contact Diane at 618-965-3434.

Alms, Evert R.	Fishco, Daniel T.	Lobb, C. Gary	Root, Randy
Anderson, Paul M.	Fogell, William E.	Lodge, William D.	Rushing, William H.
Arlington, Daniel B.	Gabel, Medard	& Pamela	Russell, Minnie
Augustine, A. L.	Gearhart, Edward J.	Lohmeier, David	Santschi, H. Dale
Ballantine, Apul R.	Gegel, Rudolph	Low, Glen B.	Schuster, James B.
Barnett, Albert	Gilmore, Louis J.	Malone, Howard	Senger, James G.
Bechtel, Clifford	Gist, Billy	Marks, Dewey	Smith, James L.
Beimfohr, John O.	Goddard, Amos	Martin, Gaylon	& Francine
Beitel, Douglas	Graff, Larry	Martin, Malcolm	Smith, Ralph & Barbara
Belton, Robert	Graff, Richard A.	Maxton, Frank	Smith, William D.
Benson, Brent W.	Granberry, Henry	May, Frieda	Snyder, John
Bernard, Loretta Vevis	Griffith, Donald F.	Maynes Construction Co.	Snyder, Leonard Jr.
Billington, David	Grob of Illinois	McCoy, Hughes Jr.	Stocker, Alexander
Brand, Robert	Grogan, Lindell	McDaniel, Richard M.	Stumpf, James R. H.
Brantley, C. Edgar	Haloftis, John	McDaniel, Robert	Sutula, Philip
Brantley, Robert	Hanson, Melvin A.	McGee, Carley	Tarr, Robert L.
Brown, Harold T.	Hartline, Gerald M.	McMurray, Russel	Tellor, Dave A.
Bruce, Danny F.	Hawn, Robert J.	Mollet, Gilbert	Thomas, Ralph F. Rev.
Bunn, William	Hess, Thomas E.	Morris, Donald P.	Timmerman, M. F.
Burnside, John	Hester, John	Mortz, Russel	Toney, Nora L.
Butler, Merle E.	Hoffman, Donald	Muckensturm, Donald	Trammill, Jarl V.
Case, Barbara Ann	Holder, William	Murphy, Charles	Trowbridge, Donald
Casey, Richard	Hopkins, Billy L.	Neseman, David C.	Ullman, Rosie
Cathey, Jerry W.	Hughes, David M.	Newberry, Francis	Varner, Gerald L.
Cernkovich, Stephen	Jim Kathman Co.	Newbold, Lowell	Vaughn, Walter H.
Chaitkin, William	Johnson, Darwin	Noakes, P. D.	Venus, Robert
Christ, Donald	Jones, James E.	Nopar, Richard	Vergennes, State Bank
Christian, Roy J.	Jones, Lewis Dale	Oakley, Thomas E.	Vincent, William
Chu, Joe	Jones, Virginia	ONEal, Mike	Vogt, Alfred J.
Cohen, Murray	Kaufman, Ralph O.	Owens, Geneva	Volden, Richard
Colbert, Perry	Keene, Norman E.	Panayoterch, Sam	Vought, Robert E. Jr.
Conn, Dennis E.	Keller, Donald	Pausgrove, Betty F.	Walker, Malcolm
Conway, James	Keller, John	Payne, Charles	Warren, Ralph A.
Cothorn, Steve B.	Kelley, J. Charles	Peck, Robert	Webb, Sue
Coulter, Marvin A.	Kerley, Carlos	Pendleton, David	Wemmer, Bennie
Craft, Madeline	Kerr, Ronald M.	Peters, Walter E.	Wendling, Amanda
Crowder, Thomas A.	Kimble, Peter S.	Popp, Charles M.	White, Charles A.
Cusker, Joseph	King, Dee W.	Quick, Silas	Williamson, Garee
Damron, David	Kirby, Vernon L.	Ramsey, Frances	Wilson, Lonny L.
Davis, Michael C.	Knop, Robert	Rea, Vernon	Wimberly, Harry J.
Davis, Theodore	Kohring, Ronald	Rector, Alice	Wittenborn, Dean
Denbow, Monroe	Kollier, Tony	Reynolds, Henry	Wittenborn, Larry
Doruff, Don	Kraft, Gerald L.	Richards, Camilla	Wittenborn, Mary L.
Dougherty, Donald	Langkamp, Thomas	Richardson, Benjamin C.	Xanders, Ray
Dusenberry, Miriam C.	Levin, Bruce A.	Risley, Randall K.	Zirlin, Scott
Eisele, Gordon A.	Lindsey, Gerald	Roach, David F.	
Fann, Jimmie D.	Link, John	Rogers, Roy W.	

If you contact Diane about a deceased member who received electric service from our cooperative after 1975, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m. - 4 p.m., Monday through Friday) **call the office number nearest you:** Steeleville

965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. Please give the person who answers your map, section and house (or locat.) number as found on your billing statement.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



ELECTRIC CREDITS

By now, everyone should be aware that we issued an electric credit to everyone that received service during the first nine months of 1996. Everyone should have received a card from us telling them of the amount of the credit. If you read your own meter and did not subtract the credit, you should have received an error notice from us. As I reported in last month's column, Southern Illinois Power Cooperative's sales to the three member cooperatives were considerably above projections for the year and it was decided to rebate a portion of the wholesale power costs to the member cooperatives. Your cooperative's share was approximately \$450,000 and your board of directors decided to pass the total amount along to the members of this cooperative. Each member's share was computed to be approximately 3.7 percent of their dollar purchases through the first nine months of this year.

Sending out the cards went well, but we had to send approximately 3,000 more error notices this month for a variety of reasons. Some self-billed members pitched the card without reading it, some forgot to deduct the credit from the next bill, some said they were saving the credit for the bill after Christmas and some made math errors in subtracting the credit. We also had a few errors on the billed accounts because some members deducted the credit from their bill after we had already taken it off their bill. Hopefully, we will get it all ironed out in the next couple of bills. We had the cards prepared by an outside firm so we did not know just how much space we were going to have for the message and we kept it as brief as possible. Had we known we had as much space as we did, we would have expanded on the instructions.

We have received a number of notes and cards from the members in regard to the credits and we thank you for them. I have looked at all of them and have shared them with the board of directors. I personally really appreciate some of the nice comments that were made about the good service that the cooperative furnishes. We try our best and it is nice to know that we are successful some of the time.

RETAIL WHEELING

This is something that probably will not go away unless it falls flat in some of the states that will be trying it on a limited basis in the next couple of years. We do not know just what the future holds in the way of retail wheeling, but there are a lot of unanswered questions. Aside from the question as to who will be willing to risk huge sums to build future power plants when no one can be assured they will have any customers to buy the power, there are a lot of technical and operational questions that no one has the answers for.

I believe all farm and residential customers should be concerned about retail wheeling because of who is really promoting it. Commercial and industrial customers are pushing for retail wheeling because they expect to be in a position to bargain for lower rates. If you look at the revenue figures for most large public utilities, you will find that 60 percent to 70 percent of their revenue comes from the commercial and industrial class. If those customers all expect to see their rates go down under retail wheeling, you have to wonder who is going to make up the revenue loss. I think if you will look at what you paid for basic telephone service before deregulation and what you received for that basic charge and what you pay and get today, you may get a clue as to what the future may hold.

The natural gas business has been deregulated for a number of years whereby your local utility is rate regulated, but the producers are not. It is interesting to see what has happened to gas prices recently and the excuses being offered as to why prices have gone up. I think the most interesting excuse is that inventories were drawn

(Continued on page 12b)

(Continued from page 12a)

down more than usual last winter. If that is the case, did it not occur to anyone to replenish the inventories before this winter? If they are going to tell us the gas was not available to replenish inventories, then why are they out there really pushing to put more and more homes and businesses on natural gas. It would appear that all they have to do to raise the price of gas is not keep enough in inventory. My concern is that if we turn the electric industry over to the power marketers and the independent power producers, what you see going on in the gas business right now may be in your future in the electric business.

Everyone in favor of retail wheeling wants to point to the telephone industry. It should be kept in mind, however, that telephone companies only

install wires of a set capacity and they regulate their peak with a busy signal. I do not think you would accept our telling you to try again later if it was freezing outside and we did not have enough capacity available to supply all of the load. Thus far, we have not had busy signals or rain checks in the electric industry and I do not think we want to start now. All that aside, you are probably too busy during your dinner hour taking calls from the telephone marketers to be able to work in all the calls you are going to get from every power marketer in the country.

Office closing

Our offices will be closed on Monday, Feb. 17, for President's Day.

\$ \$

Egyptian Electric Cooperative Association

**1005 W. Broadway
Steeleville, IL 62288
965-3434**

**10169 Old Highway 13
Murphysboro, IL 62966
684-2143**

Did you know that 6 high school students can win an all-expense paid trip to Washington D.C.? Call Bryce at (618) 684-2143 for details.



Willie Wirehand

Payment accepted with bills at these banks

Carbondale

**Bank of Carbondale
216 E. Main**

**First Bank
1500 W. Main**

**First National Bank & Trust
509 S. University**

Murphysboro

**Magna Bank
1301 Walnut**

**First National Bank & Trust
1709 Walnut**

\$ \$

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest you:**

Steeleville 965-3434 or Murphysboro 684-2143.

After office hours:— Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. **Please give the person who answers your map, section and house (or locat.) number as found on your billing statement.**

The Energy Page

By Bryce Cramer

Did you feel like the propane and gas companies had you where they wanted to this winter with their high prices? Or maybe it had you steamed up? Well, don't let it happen to you next winter. Install an add-on heat pump to your existing gas furnace and save \$\$\$\$ all winter long. And, we'll send you a \$300.00 check for installing one.

For additional information and details, see the July, 1996 issue of *Illinois Country Living* or contact your nearest Cooperative office.

As I look out my office window, I can still see much of the remnants of the snow that fell on December 16. The first snow of the year is always a pretty sight. The trees still have a cap of snow on their limbs and the evergreens are covered by a coat of snow.

Rooftops are covered with a blanket of snow and have icicles hanging from their eaves. Hold it!!! Icicles from the eaves? As pretty as they look, with the sun reflecting from them and all, that's not a good sign. And not every roof has them. I wonder what causes them and why some roofs have them and others don't?

Actually, the icicles themselves are not a problem (until one lets go and falls on someone), but they are an indicator of something that is a problem. If you look beyond the icicles, you will probably see a layer of ice at the roof edge, called an ice dam.

Ice dams are a problem. As the snow melts further up the roof, the water is trapped on the roof by the ice dam and is forced under the shingles, causing considerable damage to ceilings, attic insulation and other parts of the building.

Ice dams are an indicator that not all is well with the home's attic insulation. They are formed when heat and warm air leak from the living space below to the attic. This causes the snow next to the roof to melt and run down the roof.

If the temperature is above freezing, the water will run off the roof or into the gutters where it runs away. But if the temperature is below freezing, the melted snow hits the cold roof edge above the eave and refreezes.

The more frigid the temperature, the deeper the freeze and bigger the problem. The theory of ridding a home of ice dams is to make the attic temperature as near the outside temperature as possible.

In other words, stop the heat and warm air from leaking out of the living area into the attic and provide proper ventilation for the attic.

Make sure that you have at least an R-30 insulation level in your attic (we recommend R-38 for new homes). Look in the attic for sources of

air leaks from the living space below; attic access holes and vent stacks are prime candidates. Many enclosed tub and shower units have no ceiling above the fiberglass ceiling and have a large hole in the floor for the drain assembly. This allows air from the floor or basement below to flow directly into the attic.

Recessed lights allow air to leak from the living space that is very warm when the light is on. Ceilings that are at different heights can cause framing problems that leave open cavities to the walls below, allowing warm air from the cavity to rise into the attic. Proper ventilation should also be provided at the eaves. Vents and perforated soffit allow fresh cold air to be drawn into the attic at the eaves. However, styrofoam insulation channels need to be provided so that the insulation does not 'pinch' the air flow at the eave. This cold air in the attic keeps the snow from melting until the outside temperature is warm enough to cause the snow to melt (in this case it will not refreeze at the roof edge).

Some houses may be such that the problem cannot be fixed but instead the symptoms may need to be treated. For instance, vaulted ceilings may prevent you from installing additional insulation. In these cases, you will need to provide a means to get rid of the snow before it can melt and form dams. If the roof pitch is steep enough, you may be able to install a metal band at the edge of the roof that will allow the snow to slip off the roof before it can melt and cause a problem. Some situations may require that a rubber membrane be installed under the lower rows of shingles so that even if the melted snow runs under the shingles, it will not cause damage to the home.

One method of treating the symptom that should not be used is the electric heat tapes or wires that are sold for this purpose. They are designed to zigzag along the roof edge, keeping the snow and ice melted away. As the wires are exposed to the elements year round, they are easily damaged by tree limbs, high winds and other things that can cause them to malfunction. A malfunction could lead to a fire or electric shock hazard. Roof heat tapes can also compound the problem. During extreme cold spells, they may cause snow to melt but not stop it from refreezing before it can drip from the roof. In this case, the home would have been better without the tapes at all.

The next time you see those icicles, hopefully they'll not be on your home and you will be able to enjoy their view knowing they are not causing harm to **your** home.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at 618-965-3434.

- Achilli, Dennis & Susan
 Alderson, Kenneth
 A. & Judith
 Allen, David W. & Marcia
 Amdor, Lowell
 Arnett, John K. & Peggy
 Arrison, Charles
 Asp, Alan D.
 Austin, Thomas E.
 Baewer, Phillip A.
 Baker, William & Mabel
 Balgemann, Dennis E.
 Ballee, Michael & Judy
 Bandy, Patricia M.
 Barton, G. William
 Becker, William J. & Zelma
 Behm, Arthur
 Benveniste, Sam
 Berchem, Thomas E.
 & Wanda
 Beyer, Victoria M.
 Bhattacharyya, Jnanabrota
 Bittle, Donald & Karen
 Bleem, John J.
 Boehmer, Gerald L. & Dinah
 Bohn, Ronald
 Bradley, Edward & Lillian
 Brands, Dean
 Brant, Paul
 Brooks, Nelson G. & Judith
 Brown, Willard A. & Alice
 Camp, Gary
 Canady, Leonard
 Carr, Abraham F.
 & Ruth Ellen
 Cash, Seaton & Catherine
 Cassoutt, Charles
 Chapon, Ronald S.
 Cherry Bldg. Corp.
 Cissell, Richard I.
 Colp, Troy E. & Ruth
 Conway, Jesse E. & Glenda
 Copeland, M. Keith & Alice
 Corcoran, Tom & Connie
 County Line Trailer Court
 Cox, Bill W. & Juanita
 Cox, Raymond & Charlene
 Crawford, W. K.
 Crawshaw, Floyd
 & Shirley Ann
 Dardis, Thomas W.
 & Marianne
 Davidson, Elleva
 Davis, James H.
 & Delores M.
 Davis, L. Eugene & Jean
 Davis, Robert L.
 Deener, Robert E.
 Defrank, Dan
 Delaney, Howard & Jane
 Denise, Paul S.
 Dennis, Lyman C. & Yvonne
 Desoto, Jerry
 Diel, Daniel L. & Barbara
 Dillard & Ingram Farms
 Donaldson, Bill & Susan
 Dooley, Aubrey C. & Patsy
 Downen, Roy T.
 Durrer, Alvah B.
 Duvall, Homer
 Eckert, Robert W.
 Eddins, John & Alice
 Eden Homes of America
 Egolf, Roward
 Emery, Delmar
 Eriksen, Douglas & Carol
 Etherton, Timothy J.
 Evans, Robert J. & Ruth C.
 Evers, James L. & Jane
 Favier, Joseph & Shirley
 Flach, Mark J. & Betty
 Folkman, David E.
 Foster, Ellis
 Foster, George Thomas
 Fuller, Robert L.
 Gass, G. H. & Dorothy
 Geaschel, Ervin
 Gonzalez, Melba
 Greenville High FFA
 Greenwell, George
 & Dorothy
 Grismore, Fred L.
 Guynn, David & Sonna
 Hagene, Thomas J.
 & Mary Lou
 Hansil, Joe
 Happel, Clyde
 Harris, Paul & Kathleen E.
 Harrison, Noble
 Hebel, Richard H., Jr.
 & Mary Ann
 Heinrich, Raymond L.
 & Crystal J.
 Helton, Fred
 Hendricks, Roger C.
 Highum, Clayton & Marlene
 Hill, James & Gail
 Hine, Michael & Madeline
 Hinneman, Craig
 Hoeffken, Thomas
 Hofferkamp, Edward
 Hollis, Charles J. & Sally
 Howard, Raymond
 & Ruth Ann
 Hunter, Leo R.
 Huppert, Darryl & Paula
 Irvin, Eddie & Judy
 Isbell, Thomas & Joan
 Jackson, John S. & Nancy
 Jacobs, Peter
 Jacquot, Gene A.
 Jausel, Virgil W. & Betty
 Joles, Hubert & Janet
 Jones, Cynthia L.
 Jones, John W.
 Jones, Robert J.
 Jones, Vancile & Ivan
 Kasmarzik, Paul & Margaret
 Keebler, Rick
 Keller, Tim & Diane
 Kelley, C. M. & Wilma
 Kempfer, Arthur L.
 Kempfer, Ronald & Ruth Ann
 Keys, David & Joan
 King, W. W.
 Kirk, Ronald B. & Rosa
 Kraft, Norman N.
 & T. Kathleen
 Krause, Bonnie
 Kunce, George & Juanita
 Lance, Edgar R. & Sharon
 Lata, Mike & Raylene
 Laughhunn, Dan J.
 Laybourn, John E. & Lauvene
 Lewis, Thomas E. & Maxine
 Liotta, James F. & Jane
 Little Egypt Coon Hunters
 Lowry, Jerald & Geary
 MacDonald, David & Pat
 Mahan, Keith & Wilma
 Maloney, W. Robert & Carole
 Manering, E. L.
 Maring, Joel M. & Ester
 Marion G. B.
 Maruska, Paul J.
 Masaki, Mark
 Maxwell, Jerry & Karen
 McCarty, Margaret A.
 McComb, David & Louella
 McCormick, Clifford
 McFarland, William H.
 & Ann
 McGarrigle, Robert
 McGee, Larry L.
 McHargue, Judy
 McIntire, Robert & Jean
 McKinney, George & Sarah
 McLean, Roger & Susan
 Meentemeyer, Vernon
 & Suzan
 Mertz, William C. & Audrea
 Messer, Ada
 Miller, John
 Miller, John F., Jr.
 Miller, Ronald H.
 & Margaret
 Minch, Michael
 Mines, John N. & Betty
 Moore, Monte Bruce
 & Julia
 Moore, Viloet
 Moran, Robert L.
 & Susan S.
 Moritz, Ronald A. & Mary S.
 Muskopf, James & Marilyn
 Myers, George B. & Dorothy
 Myers, William F. & Marie
 Newbold, Gary
 Newman, Isadore & Carol
 Nickle, Harry H. & Bonnie
 Novak, Gilbert & Doris
 Nowak, Paul
 Oasis Enterprises
 O'Dell, Darrell R. & Rosetta
 O'Dell, James R. & Sharon
 Oller, Donald R. & Ann
 Olszewski, David L.
 Onken, Michael
 Orloff, Michael & Helene
 Overturf, Henry
 Owens, John & Chola
 Pasco, Charles A.
 Payne, Charles
 Perry, Letta
 Pierce, Ronald R. & Linda
 Piper, Robert Lee
 Pittman, Edwin & Candace
 Podolac, Andrew F.
 & Barbara A.
 Pollard Elmer
 Powell, David & Maria
 Powell, Dennis
 Powell, Wayne
 Price, Jack L.
 Purdy, D. A.
 Quandt, John
 Rader, Gordon E. & Inge
 Rader, John
 Rainey, Michael L.
 & Lynn K.
 Ramey, Jesse M. & Marcha
 Rathert, Michael & Sondra
 Reed, James E. & Janice K.
 Reese, Carl D.
 Reichling, George H.
 & Norma
 Reynolds, Ricky
 Richardson, John A. & Mary
 Ridgeway, Kathy
 Ridinger, William H.
 Rieff, Melvyn A. & Marge
 Roberts, Cecil G. & Donna
 Robinson, Donald & Janet
 Rodgers, Andrew H., Sr.
 & Eva
 Roeder, Michael & Ruth
 Rohlfing, Richard H.
 & Sandra
 Saldeen, Marvin
 Sanders, Ronald
 Sauer, Louis F.
 Schloetzer, George
 Schmutde, Theodore
 Schock, J. Tedd
 Schroeder, Duane
 Schwebel, Oscar
 Shaw, Joanne C.
 Sherman, A., Kimbrough
 & Jane
 Shock, Robert & Vicky
 Smith, Gary & Lois
 Smith, Jay A., Jr. & Judy
 Smrt, Frank J. & Carolyn
 Solsman, Paul W.
 Spier, Erhardt & Carol J.
 Stallman, Larry & Cynthia
 Stellhorn, Alvin
 Stubbs, Walter R. & Bonnie
 Thompson, W. R.
 Throgmorton, Bobby
 Trapp, David & Diann
 Triver, Howard & Mildred
 Tyler, Thomas A. & Carolyn
 Uppinghouse, Gary & Lois
 Vought, Robert E.
 Waldman, Marilyn
 Ward, George L.
 Weakly, Thomas
 Weiss, Ronald & Linda
 Welge, Louis M. & Joan
 White Advertising Co.
 White, Donald R.
 & Margaret
 White, Tyrone & Deborah
 Whitley, Herbert
 Widdows, Michael & Marsha
 Wigley, Richard & Mary L.
 Wiley, J.R. & Fay
 Williams, Carl
 Williams, Ronald & Tony
 Wink, James S.
 Winters, Ollie J. & Billy M.
 Wittenborn, John
 Wolff, Darrel R.
 Wolffe, Sammy & Betty
 Zerban, Charles

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



CONDUCTOR ICING

I discussed conductor galloping in a previous column, but since we had another occurrence of the problem on Thursday, Jan. 16, perhaps it is a good time to talk about it again. As you may recall, on Wednesday we had rain over the entire service area and around the middle of the day we started to get an ice build-up on trees, utility lines and roads. Around 4 p.m., the sun did come out in the Steeleville area and most of the ice on the power lines dropped off, but that was not the case farther south. During the night the wind came up and at approximately 5 a.m. we started to experience blinking problems on the system. When we determined that the blinking was being caused by conductor galloping and we narrowed it down as to what area it was occurring in, we were able to open some transmission ties to confine the blinking problem to three substation areas. At that point our only choices were to take lines out of service and have members without electrical service or to just simply let the lines blink and hope that they did not burn down when they made contact. Since the temperatures were rather low and it appeared that the galloping would go on all day, we opted to let the lines in service and keep members' heating systems operating.

What causes conductor galloping? Basically, it is the same principle that allows airplanes to fly. Dry conductors are round and air flow over them does not create any motion other than blowing them from side to side a small amount. If you have ever looked at ice on a wire, you probably noticed that the conductor with its ice covering no longer has a uniform round shape and therein lies the problem. Air flowing over the distorted conductor shape tends to give the wire the same lift that air flowing over an airplane wing provides. Thus, under the right ice and wind conditions, the conductor literally

tries to fly. Since each span of wire is tied at each end of the span, the only direction it can fly is up and down and that is what it does. Unfortunately, they all do not fly in the same direction at the same time, so we have conductors slapping each other and that results in short circuits and breaker operations. Those breaker operations are the blinks you see.

We can not stop the blinks, but if you are concerned about your appliances, such as refrigerators and freezers, you could unplug them until the galloping stops. Frozen food will be okay for a day if you do not open the freezer door, so you can safely unplug a freezer until the wind dies down. Usually that occurs by evening, so we are not talking about an extended period of time.

SATELLITE DISHES

With the lowering of equipment prices, the small dish satellite systems are becoming increasingly popular. As I discussed in a previous column, I think Direct TV is great for those who do not have access to cable and I would have a system if I lived in a rural area. The fact that I think they are great does not mean, however, that we want to see the dishes mounted on our power poles! I know that our poles might appear to be an ideal location for a small dish, but for your safety and the safety of our linemen, we do not want any member's equipment on our power poles. Our primary lines are energized at 7,200 volts and physical contact usually results in serious injury as a minimum and, in many cases, is fatal. For that reason, we do not want our members to have any reason to climb our poles and we prohibit any member's equipment on them.

From the standpoint of the safety of our linemen, any member's equipment placed on the pole has the potential to cause them to slip and fall while climbing the pole. We do not want them to have to climb around or over a satellite dish, nor do we want them to fall into one should they slip on the pole. So, if you have been thinking about getting a satellite dish and have been eyeing our pole as a good spot to locate it, please do yourself and us a big favor and locate it on your own structure or pole.

(Continued on page 16b)

(Continued from page 16a)

WINTER BILLS

We have had some pretty nasty weather this winter thus far and I assume that your utility bills will reflect that. If you have trouble dealing with bills that are unexpectedly high at times, I would again encourage you to consider budget billing. By the time you read this, the coldest weather should be behind us and that is the time to be making plans to go on budget billing. Our budget-billing year ends in May and that is the ideal time to start on the levelized payment plan because it will result in the lowest average monthly amount for the year.

If you had some really big bills and are behind in your payments, please do not ignore

the reminder notice and disconnect notices we may have sent you. Disregarding the reminder and disconnect notice will result in disconnection for nonpayment without further notice. We would much rather work with a member than have to disconnect for nonpayment, but the member has to take the initiative to contact the billing department to make suitable arrangements.

OFFICE CLOSING

Our offices will be closed
on Friday, March 28, in
observance of Good Friday.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members.

If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Adams, Gary Edward
Adams, Kathleen
Admire, William J.
Allen, Ronald
Austin, James R.
Babbs, David
Badgett, Larry G.
Badgley, Cletus
Bahr, Jack L.
Baird, Dennis
Barbay, J. E. & Sylvia
Barker, Robert L.
Barmantje, Paul
Barnes, John K.
Barnett, Dorsal
Barnstable, Richard
Bauman, Ruth
Baumann, Duane
Beck Harvey
Beck, Mary C.
Beightol, Charles
Bellew, Charles
Bergeson, John A.
Bermet, William
Bittner, Dale E.
Bittner, Joseph
Botts, Roderic
Bower, Paul
Brewer, Dave
Browder, Donald
Brubaker, Jim L.
Burnett, Herbert Roy
Call, Stanley
Callahan, Viola
Carter, Charles
Casey, Robert
Casteel, Michael
Catalano, Anthony
Champion, Kenneth
Chandler, Eugene
Chandler, Kenneth D.
Chapman, Charles
Christie, Robert M.
Cieslak, Thomas J.
Cima, Charles
Clark, Larry W.
Coombs, Paul
Coates, David E.
Cockrum, Frankie G.
Collins, Merrill H.
Coons, Donald
Coplan, Martin
Costello, Henry
Courier, Charles D. &
Carolyn
Cover, Sandy

Crannage, Donald
Dahlquist, Stephen
Dailey, Wayne H.
Daniels, Claude J., Jr.
Davis, Ernest, Sr.
Dees, Harold
Devantier, Larry
Devries, Larry
Dobyns, Cletus R.
Doughty, Dean F.
Downs, Henry B. & Elsie
Drinkwine, Richard
Duckworth, Clifton
Duncan, Maxine
Dunlap, Darrell G.
Dunmyer, James
Eastwood, Larry
Eckert, James A.
Eisenhauer, Bill
Eldridge, Charles Alfred
Elkins, Donald M.
Ellis, Eldon D.
Ellis, Virginia
Fantzzo, William
Favrot, Bonnie
Fehrenkamp, Leroy
Filzen, Ted W.
Finn, Richard L.
Fleming, Allen R.
Fligor, Gaylin D.
Garsky, Victor
Gerhardt, Floyd
Gould, William S.
Graper, Fred E.
Green, Roger L.
Greer, Carolyn M.
Gregory, Richard
Grenda, James C.
Gushwa, Ronald D.
Haar, Patrick D.
Hamlin, Van E.
Happel, William
Hartman, Francis &
Jeanne
Helleny, Taffie
Henson, William
Henson, William R.
Herring, James A.
Higham, Timothy W.
Hill, Lloyd W.
Hill, Raymond L.
Hiller, Jack
Hodge, Robert M.
Hogrefe, Harold
Holbrook, Earl L.
Hollenhorst, Jerry

Holman, Emery W.
Horn, Rosemary
Hurt, Kenneth
Integlia, Anthony
Ivester, Harry
Jackson, Phillip
James, Norman L.
Jennetten, John
Jetton, James E.
Johnson, David R. &
Barbara
Jones, Joseph H.
Jones, Richard D.
Jurgemeyer, Fred H.
Kadlec, Joseph
Kammner, Richard
Kamykowski, Daniel
Kapelski, William Edward
Kaufmann, Gerald
Kay, Walter A., Jr.
Kennelly, John Thomas
Kloepfer, Lenny
Kloever, Mark
Knapp, Vernon C.
Knight, James W.
Kopaczewski, Timothy
Louis
Kopplin, Arnold E.
Koschitzki, Jorgan
Krug, Raymond E.
Krumrey, William
Larimore, Harry
Leavitt, Marc L.
Lech, Raymond
Lecocq, Jerry A.
Levanowitz, Gerald S.
Lin, Stephen
Lindsey, Kenneth M.
Long, Samuel
Long, Stephen C.
Lounsbury, David &
Rosalyn
Lusk, Wilbert
Lybecker, Donald
Maher, John D.
Mantel, Han F.
Marshall, Leonard E.
Mason, Charles W. &
Pamela
Mathena, Jack
Matlin, Steven M.
Maurer, Virgil D.
McClure, Charles D.
McCoy, Leon
McLaughlin, James
Meinhardt, W. L. & Joan

Meyer, William
Miller, Hollie
Miller, Jean
Mizialko, Jerry
Moreland, Tommy
Morris, Milton
Murray, James R.
Needham, William
Nesbit, Charles E.
Nevois, Don
Nipper, O. H., Jr. &
Theresa
Obeoheide, Robert W.
Olsen, Arthur J.
O'Neill, F. Furman
Parrish, L. E.
Patton, Clyde E.
Payne, William H.
Peterson, Joann
Phillippe, John
Pickett, Edward L. &
Marilyn
Pierce, Keith
Piersol, James R.
Pierson, Norman & Elsie
Pinkard, Terry
Poyneer, William C.
Quisenbury, Will
Ralston, William
Rebouche, Jeanez, Jr.
Reese, David E.
Richmond, Michael
Rodhouse, Lawrence W.
Roscoe, Philip T.
Rothchild, Diane
Rude, R. J.
Sargent, John
Scafe, J. Bruce
Schicker, Lyle, Sr.
Schlecht, R. G.
Schmidt, Dale
Schwimmer, Jerrold L.
Segal, William R.
Severs, Bennie

Sheppard, James P. &
Judith
Sheridan, Gerald L.
Shiflett, George
Shouse, David B.
Sims, D. Vincent
Soltwedel, George L.
Spoon, Gerald
Stearns, Benjamin
Stinson, Bobbie
Stoll, Joseph
Stover, David R.
Stroman, Dorothy
Stultz, Jerome
Sugarman, Daniel I.
Tate, Larry E.
Thompson, David & Linda
Throop, Bill
Tomlinson, Richard
Trospier, Ronald
Valentine, Orvill J.
Vanderploeg, Richard A.
VanHorn, Billie
Varonauski, Donald
Wackler, Joseph
Wagner, Paul R. &
Roseanne
Walker, Lamonte
Warren, James T.
Watkins, Jack D.
Weeks, Douglas
Wessel, Maurice F.
White, Barbara
Williams, Lowell
Williams, Reed G.
Williams, Richard L.
Williams, Roger
Williams, Tommy
Wilson, Edward L.
Wilson, Jewell E.
Winters, Michael
Wright, Vernon
Segal, Paul A.
Youngman, Richard

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

The Energy Page

If you are thinking about building a new home or remodeling your existing home in the near future, then you will be deciding if you are going to stuff it, cut it, blow it, pour it, spray it, or, maybe some combination thereof. If you haven't figured it out already, I'm referring to the different types of insulation that are available today: fiberglass batts, cellulose, loose fill fiberglass, perlite, rockwool, mineral wool, cotton, cementitious foam, rigid foam panels (of which there are several types) and spray-in foam.

What factors should you consider when making a decision which to use? Although there are many factors, several of the more important ones that come to mind are fire retardancy, R-value (ability to insulate), density, carcinogenic, outgasing, and recycled content and embodied energy to make the insulation.

When comparing materials as to its fire retardancy, also consider whether the material outgases hazardous fumes when heated. Some materials, such as cementitious foam (known as Air-Crete) or rockwool, are natural fire retardant materials while others may need to be chemically treated. You may also want to see what standards the product must pass and how it is tested. Cellulose insulation for example must meet the Consumer Product Safety Commission's regulations and have the C739 Safety Label attached.

All insulating material manufacturers can provide you with the R-value of their product. Sometimes the R-value will be stated per inch and sometimes it will be stated as a measurement of the normal state or size that the product is found. Remember, the lower the R-value per inch of material, the more you will need. This is important to understand because design conditions (cathedral ceilings) sometimes limit how much material can be installed. You may also want to consider how the quality of installation affects the performance of the product. The rated R-value is based on laboratory tests and can be seriously affected and changed by poor installation practices. Batt fiberglass insulation for one can perform way below rated R-value if it is sloppily installed.

The density of the insulation can also affect how the material performs in the field. Generally, the greater the density of the material, the

better it will perform. For instance, tests conducted by the Oak Ridge National Laboratory in Oak Ridge, Tennessee, found that loose fill fiberglass insulation (a density of .5 lbs. per cubic foot) can lose its insulating ability when attic temperatures drop. As the attic cools, the air becomes heavy while the air under the insulation and above the ceiling becomes warm and light. When the temperature differential becomes great enough (about 32° F attic temperature), the air will change places, quickly moving the heat from the ceiling to the cold air in the attic. Cellulose insulation (2 lbs. per cubic foot of density) does not experience the same characteristics.

Some types of insulation are made from hazardous materials (many are made from pe-

Thinking about building a new home? Attend this workshop

If you're going to finally build that dream home after all these years, then you want to make sure you do it right. At the New HomeBuilders Workshop you'll find the answers to your questions. Realtors will tell you how to find the perfect site. Bankers will help you find the best way to finance it. Your utility will explain how to make it comfortable and efficient and insulators will tell you about the insulations on the market. And finally, a heating specialist will tell you how the ground can heat and cool your home for pennies a day.

troleum products) and can release these to the atmosphere (outgasing) over time. If the home is relatively tight, these chemical substances can be trapped in the home and can cause health problems, especially for those with allergic reactions. You may also want to ask if the material creates toxic fumes when it burns. If your home catches fire, not having these materials present may mean the difference in your ability to escape unharmed.

A topic that seems to be surfacing more and more in relation to insulation is the recycled content of the material and its embedded energy. By embedded energy we are talking about the energy needed to make the material, including transportation and excavation of raw materials needed to make the material. As insulation has a diminishing return (the greatest number of BTU's are saved in the first inches), the BTU's saved at the high end of the R-value become expensive to save as the insulation costs the same throughout its installed thickness. Cellulose insulation has the lowest embodied

Continued on page 16d...

Continued from page 16c...

energy, mineral wool is a distant second.

All of this may seem confusing to the inexperienced, especially with some of the rumors about insulation that always seem to keep circulating. The secret however is to ask the proper questions and to keep asking until you get a valid response. If you have any questions concerning insulation, feel free to contact us at either of our offices, we'll be glad to answer your questions and if we don't know the answer, we'll help you find it. You may also want to attend the *New HomeBuilders Workshop* on March 11 at the new Elks Club on Shoemaker Drive (just east of the old Brown Shoe plant) in Murphysboro. This is just one of the topics that will be discussed that evening.

Material	Recycled Content	Embodied Energy/ Insulating Unit (BTU)
Cellulose	75% recycled Paper	600
Fiberglass	20-25% Recovered Glass	4,550
Mineral Wool	75%	2,980
Extruded	?	18,000
Polystyrene		
Polyisocyanurate Foam	9%	14,300

Table adapted from: *Insulation Materials: Environmental Comparisons*, *Environmental Building News*, Vol. 4, No. 1

New HomeBuilders workshop

Cost: Just your time to be there.

Where: Elks Club, Shoemaker Dr., Murphysboro

When: March 11, 6:30 p.m.

Who should attend? Anyone considering building a new home or involved in building homes; builders, architects, heating and air-conditioning contractors. Everyone is welcome.

**Call now so that we make sure we have literature for everyone.
If you forget to call, come anyway. See you then.**

684-2143 • 965-3434

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest you:** Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. Please give the person who answers your map, section and house (or locat.) number as found on your billing statement.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



RETAIL WHEELING

I was not going to talk about retail wheeling again for awhile, but a number of bills are being introduced at the state and national level, so perhaps it would be well to discuss it further. The various bills and positions being advanced by various groups involve consumer choice, but differ as to when choice would become a reality. Many proposals call for industrial customers to have choice first, with residential customers having choice sometime later.

It appears that all proposals envision that service areas would remain as they are to avoid expensive duplication of facilities. All electric utilities would have access to each other's lines and could serve customers wherever they might be located by simply paying a charge per kilowatt hour to whichever company's line they used to deliver the energy to the customer. In theory, retail wheeling in the electric business would be similar to the telephone business where you can subscribe to different long distance carriers over your local provider's wire. However, while they sound the same, responsibilities of your electric provider are much different than your telephone provider.

A telephone company can install a fiber optic cable that has the capability of handling 500 voice and data transmissions at one time and it would make a fixed investment to do that. Once the line and terminal equipment is in place, all the company does is measure time. The equipment can record where the call is coming from and to where it is going. Other than revenue flow, it doesn't make much difference whether one call or 500 calls are being handled at one time. If traffic exceeds the equipment's capacity, you get a busy

signal. In other words, they control their peaks with a busy signal and there are no guarantees that your call will go through.

Utility companies also make a fixed investment in the power lines that deliver the energy to the customer, but they also make a much larger investment in a power plant to generate that energy. The lines are generally designed to carry considerably more power than would be needed, but it makes a big difference as to whether one customer or 500 customers are using power. As each customer's load grows or additional customers are added to the line, more steam must be generated back at the power plant to spin the turbine. It is much like your car, the faster you want to go the more you have to step on the gas pedal. Unlike the telephone companies, however, electric utilities can not limit use of the system with a busy signal and they must have enough generating capacity to handle the load whenever the peak occurs and in whatever amount. There are no busy signals in the electric industry. While utilities do not make any guarantees, the past record has been that there have been almost no incidences of brownouts or blackouts because sufficient generating capacity was not available.

It is each utility's responsibility to have enough generating capacity to meet its customers' needs and it must be able to set its generators accordingly to match the load at any given moment. If you are only serving customers on your system, you simply monitor your transmission feeds and delivery points and dispatch your generation according. However, if you want to serve a customer that is on another utility's system, you must now have some means to monitor that customer's load continuously and add that load to your generation requirements. Therein lies the problem with retail wheeling for residential customers. You can afford to install monitoring equipment and lease a telephone line for a large industrial customer, but I do not believe that it is feasible to do it for residential customers. The metering costs and data transmission costs would probably more than offset any projected savings. When the question of dispatching power to residential customers is mentioned to advocates of

(Continued on page 16b)

(Continued from page 16a)

retail wheeling, about all you get is something to the effect that they are "studying it." I submit that they do not know and perhaps the main interest of many groups is that retail wheeling is for industrial customers who use large amounts of power and where remote monitoring would be feasible.

In 1996, the average kilowatt hour cost for residential service on Egyptian Electric Cooperative was lower than any major private utility in the state and was probably one of the lowest averages in the state among all suppliers. If retail wheeling does become a reality, we plan to be your supplier of choice.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Ancona, Michael	Doherty, James P.	Klein, Terry	Nutty & Pautler Inc.
Anderson, Steve	Dvorak, Michael A.	Koch, David C.	Obendorf, Lawrence E.
Anthony, William	Dziak, Elizabeth	Koehler, Ron E.	Oberg, Dennis
Aviation Insurance Center Inc.	Ebert, Phyllis	Koester, William R.	Odum Concret
Barber, James	Eckman, Thomas L.	Kopel, Francis N.	OMahoney, Timothy F.
Barnett, Edward	Elam, Lowell D.	Kopp, Thomas	Orr, Jean
Batson, Sharon	Eland, Thomas	Kraeplin, Larry W.	Pace, Kay R.
Bergstrand, Curt	Elder, Clarence	Kratz, Peter J.	Pardee, Max
Bertram, Katherine	Eldridge, Ruth	Kristoff, Gene	Patterson, Charles T.
Beukema, George	Elwardt, William E.	Krol, Bruce	Patterson, Gary W.
Blackridge, Sally Jo	Engbring, Peter	Kruger, Kenneth R.	Pembor, John M.
Blenner, Joseph M.	Evans, Ivor	Krummrich, Jerry T.	Pesavento, Christopher A.
Boldus, Brian J.	Fick, Doulgas L.	Kubinski, William	Peter, Timothy
Borah, Pamela K.	Fiedler, Donna	Larson, Charles	Peters, Larry R.
Boyd, Sandra M.	Fitzpatrick, James W.	Laughlin, Patricia	Pfaff, Jeffrey P., Jr.
Bridnick, Rosanna	Flannigan, Anthony	Lawler, William M.	Philip, Robert A.
Brouillette, David	Fris, James M.	Leffek, Bruce E.	Pijacek, Nancy
Brown, D. Keith	Gainey, Charles R., Jr.	Leibsker, Ira	Podlesvy, John A.
Brown, Marlin H., Jr.	Gdowski, Joseph E.	Lockridge, Joy A.	Pollard, Lanny R.
Buchanan, Robert	Getz, Chris	Lohr, James J.	Pollock, Richard
Buting, Lawrence A.	Gickling, Edward	Loughran, Thomas J.	Ponderosa Homes Inc.
Burdette, Rick	Gierlicz, Garry	Loveless, Michael	Pope, Rhey
Burkett, Charles R.	Gillan, Garth	Lukawski, James	Posey, Edward L.
Burns, Joseph E.	Girton, Jerald E.	Lukosus, James	Prensner, Douglas
Buss, Ray	Gliege, Gerard	Mackin, Jeffrey	Price, Debbie
Carlson, Robert J.	Glover, E. K.	Mailloux, Daniel	Redfield, Lynn D.
Carmical, Herald	Gorden, Kent W.	Makepeace, Scott	Rednour, Andrew
Carter, Rose	Graham, Stephen R.	Mangurten, Bruce	Reimenschneider, George
Cascio, Lawrence T.	Greer, Michael J.	Mannign, Robert	Reinehr, Merle J.
Cassel, Norma E.	Gusewelle, Richard L.	Mason, Charles F. & Judith	Reinhardt, Kenneth
Castell, Richard T., Jr.	Hahn, Sheila	Massing, Lawrence	Rishel, Steven
Castell, Steven W.	Haleblian, Haig	Matlock, James	Rogers, Warren B.
Childers, Jack	Halper, Frank, Jr.	May, John	Romeo, Carmen J.
Chudoba, Gerald	Hankamer, Gail	McBride, Michele	Rosedale, Richard R.
Cler, David A.	Harrison, Tom	McCarthy, George J.	Ruppert, Rebecca
Conway, Ronald D.	Hartenberger, Richard	McCraw, Raymond	Russell, Horace W.
Cook, Carla	Hastings, John	McDonnough, Billie	Saccomanna, Glen
Cook, James A.	Helmer, David	McFarlin, Charles	Salupa, Jolyn M.
Cooper, L. Bob	Herring, Ron	McLaughlin, Danny K.	Sanders, R. Michael & Rebecca
Cosgrove, Thomas J.	Higgerson, Lawrence, Jr.	McNair, Donald	Sawyer, Susan
Cox, James L.	Hilerbrand, Roy	Merkelz, Curt F.	Schekovske, Ronald C.
Crackel, Micael	Hingtgen, John	Meyer, Greg	Schiffler, William
Crowder, Terry L.	Huitt, Sue Ann	Miatke, Phillip J.	Schmidt, Stephen A.
Cruit, Mike	Hyde, Larry	Moore, Merrill	Scott, Robert
Cummings, James	Irick, Drew	Motney, Gary	Sears, Steven R.
Cunningham, Phillip	Jackman, Joe	Murphy, Robert	Sharp, William D. III
Dallman, Elane	Janek, Bernard	Ness, James C.	Shauger, John M.
Dembski, Timothy J.	Johnson, Thomas L.	Nielsen, Richard J.	Shewhart, Gary
Dennis, James	Karnatz, Joann C.	Niemeyer, Billy G.	Shojaei, Sandra Kay
Devries, James L.	Karolick, David	Norman, James W.	Shore, David G.
Dicicco, Fred M.	Katz, David	Northcutt, Gregg A.	
	Keiser, Thomas A.	Nugent, Janet	

SIU Club
Small, Larry A.
Southcomb, Charles A.
Sparks, David L.
Sporleder, Ron
Spriegel, George F., Jr.
Stafford, Carl M.
Stark, Dana T.
Sutton, Michael A.
Swanson, George R.
Swayne, Sandy

Taylor, Paul A.
Taylor, Marie
Taylor, Terry D.
Teckenbrock, Bradley
Terwische, David K.
Theefs, Walter W.
Thien, Duane
Thompson, Duane
Timmons, Gregory A.
Tonnies, Robert A.
Townsend, David & Lorraine

Upsall, Michael J.
Vanblaricum, Larry
Vanhall, William
Varon, Byron E.
Varil, Terry A.
Vaughn, Joe E.
Vetter, Richard P.
Volek, Thomas M.
Waggaman, Kim A.
Waterman, James M.
Watt, Alvie
Weber, David F.

Weber, Stephen
Weinman, Richard
Welchel, Patricia
Whitaker, Daniel R.
White, Earl E.
White, William
Willaims, Kent M.
Williamson, Stuart D.
Wilson, Helen E.
Wimberly, Ernest

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

\$ \$

Egyptian Electric Cooperative Association

**1005 W. Broadway
Steeleville, IL 62288
965-3434**

**10169 Old Highway 13
Murphysboro, IL 62966
684-2143**

*Did you know
that if you closed off unused
rooms you could save on heating
and cooling costs?*

**Payment accepted
with bills at these banks**

Carbondale

**Bank of Carbondale
216 E. Main**


**First Bank
1500 W. Main**

**First National Bank & Trust
509 S. University**

Murphysboro

**Magna Bank
1301 Walnut**

**First National Bank & Trust
1709 Walnut**



Willie Wirehand

\$ \$

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest you:**

Steeleville 965-3434 or Murphysboro 684-2143.

After office hours:— Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. **Please give the person who answers your map, section and house (or locat.) number as found on your billing statement.**

The Energy Page

by Bryce Cramer

Last month, as you may recall, we discussed considerations for choosing an insulation system for your home. One of the considerations discussed was the density of the insulation, as the denser the insulation, the better job it does of stopping air movement. As you know, air infiltration and exfiltration (the conditioned air that leaks out) can be up to 40% of the heating costs for some homes. By using a 'housewrap', some of this concern can be negated.

Housewrap, as it is commonly referred to, is actually an air-barrier. It is normally made from a type of poly-propylene material or spun olefin fibers. Some computer disc jackets and mailers are made from olefin fibers as they are very hard to tear. The purpose behind housewrap is just as you guessed by now, to stop air from leaking into and out of your house.

One of the concerns that we have in construction and energy efficiency relates to moisture. In fact, several past issues of *The Energy Page* have discussed moisture related problems.

We have also discussed that the interior of the home has a higher level of moisture than the outside and that this moisture is always trying to equalize itself by moving through the walls to the outside. As housewrap goes on the outside of the home under the siding, some people have raised a concern that it will trap moisture in the walls.

If the walls of the home are constructed properly, this will not happen. First, housewrap does allow water vapor to pass through it, although it does repel water droplets. For hunters, this is quite similar to the Goretex fabric that is used to make hunting apparel.

It stops rain and wind, but allows perspiration to evaporate through it. Housewrap acts the same way.

Secondly, I recommend that all exterior, framed walls above grade have a moisture barrier installed on the inside of the wall (concrete walls below grade should have the moisture barrier behind the insulation, against the concrete). This stops any moisture from entering the wall cavity. Care should be taken when installing the moisture barrier to ensure that any seams or openings in the barrier are sealed to prevent moisture from leaking into the wall.

I am sometimes asked if housewrap is needed when wet-spray cellulose insulation is used. Cellulose insulation has a high density and does an excellent job of stopping air infiltration and exfiltration. The answer to that question depends on the siding that is to be used. As mentioned

earlier, housewrap does repel water. If the siding that is to be used is not 100% weatherproof, then the housewrap will do an excellent job of repelling any rain that leaks past the siding.

What sidings are not weatherproof? In all honesty, other than masonry, none are 100% weatherproof. Vinyl and aluminum sidings have seams and channels that can let wind-blown rain past, especially in the cooler weather of the fall when the siding draws up. Cedar lap siding dries out and cracks and shrinks, as does 4 X 8 panels of fir and pine. Without some type of water-repellent material behind the siding, rain can easily leak into the house or be absorbed by the exterior sheathing.

Even masonry or brick finishes should have a housewrap installed under it. Brick is normally installed 1/2" or more away from the exterior of the house. This air space can allow moisture-heavy air to come into contact with the cold brick, causing condensation. The housewrap will ensure that this condensation does not come into contact with sheathing where it can cause structural decay.

How do you install housewrap? First, you should read the manufacturer's instructions. They will tell you how often it should be nailed or stapled and how long it can be left exposed to the sunlight (most manufacturers recommend that the siding be installed within twelve months of the date of installation).

You should also remember that the housewrap is providing you with weather protection. If there are horizontal seams, the bottom layer should be installed first so that water cannot run into the seam. Take special care around doors and windows, especially the tops.

Most manufacturers recommend that you cover the rough opening, then cut an X in the opening and staple the material to the rough opening 2 X's. However, this may provide an opportunity for water to run behind the top nailing flange of the window and into the house. A better method is to slip the flange under the housewrap or to install seam tape (per manufacturer's instructions) over the nailing flange so that water cannot run behind it. Care should also be taken on the sides and corners to ensure that a path for rain water to the inside is not present.

At \$.08 per square foot (not including installation), housewrap is not very costly. However, the increased utility bills and structural damage that can occur without it can be. Anything that helps stop drafts in the home helps the house to be much more comfortable to live in.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



LEVELIZED PAYMENTS

Now that we are leaving the high energy usage winter months and approaching the time when we start the new budget billing year, it's a good time for me to make my annual pitch for budget billing. We know that many of our members are unprepared for bills that are created by cold weather such as we experienced in January and thus have trouble accommodating them in their budget. I personally utilize budget billing for our home and think it is a great way to pay the electric bill. In the beginning of the budget year I built a small cushion, lost ground during the air-conditioning months and then gained again during the fall months. Once the cold weather hits, the cushion disappears and I fall behind, but I recover during the mild spring months and wind up pretty close to even at the end of the budget year.

The main advantage to budget billing is that you know each month what your bill is going to be and there are no big surprises. There is an adjustment at the end of the billing year, but usually it is not that large. The main complaint that you hear about budget billing is that people do not like to pay ahead and have the utility use their money for "free." I find that some months I am ahead and some months I am behind and it probably balances out in the end. Even if it didn't and I always maintained a credit balance, I doubt if I would have kept that money in an interest-bearing account and the convenience is worth whatever little interest I might possibly have lost.

May is our closeout month for budget billing and is an ideal time to start budget billing for next year. The more months you spread the higher usage months over, the lower the

average month budget amount. If you first start in December, for example, there are not many low usage months left over which to spread the three high winter months and the monthly budget amount for the remainder of the budget year will have to be considerably higher. If you are interested, call one of our offices and we can look at your account and tell you what your monthly budget amount would be.

BLOWER DOOR TESTS

Now that we are past the winter months, it is also a good time to be thinking about next winter and how you might improve your home's energy efficiency. If you are interested to find out how much your home is leaking warm air and what you can do to improve the situation, we can do a blower door test for you. The test involves installing a blower in your entry door and measuring air changes over a period of time. We perform these tests as a service to our members and there is no charge. All we ask is, that if you request a test, that you have a serious interest in correcting problems that might be revealed by the tests. Bryce Cramer does the energy audits and blower door tests and you can reach him at 684-2143.

TREE CUTTING

During the course of the year we get many offers from members to clean up a tree if we will put it on the ground for them. We are happy to do so if the tree is close to our lines and requires trimming, or if our lines are in danger if it should fall. Sometimes a tree that we are requested to cut has been dead for some time and is quite dry. I am no tree expert by any means, but our men who do the cutting tell me that a tree in that state is a lot harder to handle and a lot more difficult to drop accurately. Therefore, they ask that if you have a tree that is dying, call us before it is completely dead and we will try to work it in while it is still in a condition where it can be handled more safely.

(Continued on page 16b)

(Continued from page 16a)

AUTOMATED BILL PAYMENTS

We have not sent out brochures for awhile, so I again want to remind those members whose meters we read that you can pay your bill directly from your bank account. I pay my telephone, electric and auto insurance bills in that manner and I think it is great and I have never had a single problem with the process. No worries about forgetting to pay a bill or being out of town when payments are due. If you are concerned about accidentally overdrawing a checking account, have the payment taken out of a savings account and increase your savings deposit each month by the amount of the utility payment. Automated payments are not limited to bank checking or savings accounts and can also be made from credit union accounts.

We have offered this service for about a year to our billed accounts and to-date about 170 members have enrolled. I really thought more would have taken advantage of the service and it makes you wonder about all the hype we are being fed every day about how we are going to be doing everything by computer in the future. If only 170 out of approximately 3,500 sign up for direct payment of their electric bill, it would seem rather doubtful that the masses are going to be doing all their banking and bill paying by computer anytime soon.

Office closing

Our offices will be closed on Monday, May 26, in observance of Memorial Day.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Adams, Kleta & Frank	Cook, Edwin A.	Glidwell, Karn S.	Johnson, Jim
Adkins, Ernest M., Jr.	Cooper, Jackie	Goddard, Al	Jones, Scott
Allen, Ernie A., Jr.	Corrie, Bryan	Grady, John L.	Jones, William J.
Allen, Lyle	Cox, Tracy W.	Green & Company	Jordan, Harry
Anderson, Glenn B.	Crites, Paul H.	Greenwell, Paul	Karales, John N.
Anderson, William & Nancy	Crould, Francis Kay	Greten, Roger	Kastner, Deborah A.
Balin, Gregory	Crowley, J. Brian	Gruenenfelder, David	Keehner, James L.
Bath, Margaret B.	Cummens, John A.	Guebert, Lena	Keene Construction
Bauernfeind, Martin	Dakin, Joseph	Gunkel, Alexander	Keene, Norman, Sr.
Beddow, Merle	Davis, Louis E.	Hailey, Russell L.	Kelley C. M.
Beggs, Jack D.	Delby, Dennis M.	Hall, James & Eileen	Kerasotes, Michael
Bergman, Andrew	Densmore, Billy	Hallock, Thomas	Kerns, Martin
Black, Kenneth	Dobbs, Richard	Hammond, Robert P.	Kersten, Gary L.
Bleiweiss, Shelly	Downs, Steven J.	Hankla, Edna R.	Kirby, Edward
Bloodworth, David L.	Duffy, Paul J.	Hansen, Robert W.	Kirkham, J. Michael
Blum, Robert E.	Dunlap, Charles E.	Hanson, Michael V.	Kirn, Alma
Bost, Michael D.	Dzendolet, E. R. Gene	Hartman, Rudolph, Jr.	Knippel, Charles R.
Boulet, Thomas	Ebersohl, Linda	Harwood, Kenneth	Koffman, John
Brogan, Edward E.	Ellington, Ricky	Hastings, Jerry	Kowal, John
Brown, Fred	Elliott, Thomas R.	Heavener, Douglas	Kreft, Keith
Brown, Maurice E.	Ellis, Harold	Heidorn, Leonard	Krupp, Barry E.
Bubanovich, Thomas	Engel, Terry	Hellmer, Doug	Lamont, Lester
Bump, M. S.	Fann, James M.	Henderson, James A.	Lamontagne, Armond J.
Buntz, Leonard	Fareno, James	Hoffman, Lynne	Landis, James R.
Butler, Michael J. & Corrine	Feuguay, Willard	Hollis, Cecil R.	Lanni, Donna M.
Cain, James	Filla, James F.	Holst, Robert W.	Larsen, Paul
Calufetti, Larry	Firestein, A.	Hoppe, Loyd C.	Larson, Lee M.
Capels, Marilyn E.	Firnhaber, Richard	Horning, George, Jr.	Lecroy, O. T.
Carbondale Development	Flynn, Timothy	Hoskins, Richard A.	Lewis, Bernard
Carey, Russell G.	Folsom, Charlotte	Houston, Roger M.	Lindsey, Gary W.
Carter, Jim	Foppe, Aloys	Howe, Stephen J.	Lindsey, Jefferson & Helen
Cashion, Jerry	Fox, Barbara Jean	Hughes, Roger D.	Little, Harold D.
Celeschi, Allen D.	Franklin, Jerry L.	Hunt, David	Loss, James M.
Cereoli, Bruce	Fricke, John M.	Hunter, Ben H.	Lounders, Mario
Clark, David J.	Frost, George E.	Hunter, Ronald W.	Lounsbury, Stan
Clarkson, Larry A.	Funk, Joseph C.	Hutts, Carl L.	Lowery, William G.
Cluck, Leon	Gabrial, Frank J.	Ingram, Barbara	Lubbes, Gary J.
Coleman, Lena	Gardner, Neal	Irwin, Carole	Malan, John A.
Colston, William	Gareis, Joseph J., Jr.	Jachim, Phillip	Marks, Spencer
	Gibbs, Wayne	Jamieson, William D.	Martin, Gregory D.
	Gill, Hancel C., Jr.	Johnson, Don & Faye	

(Continued on page 16d)

The Energy Page

by Bryce Cramer

Several times in recent articles I have expressed concern with in-door air quality issues, especially in regard to problems relating to high levels of moisture. As our colleges and universities become more interested in studying homes and research techniques become more sophisticated, I believe we will find that air quality is a real concern, especially in newer homes. Levels of air pollutants can begin to increase in a relatively short period of time in new homes as they are tighter and do not have the air leaks that older homes have. New materials tend to out-gas higher levels of pollutants, adding to the buildup. Pollutant sources can be new furniture, carpet, paints and varnishes, pressed woods (the glue contains formaldehyde) used for sub-floors, sheathing, cabinetry and furniture, and combustion from fossil fueled appliances. If it sounds dangerous to live in a new home, for some people it may very well be. Fortunately, there is a solution. We can ventilate the house, removing polluted stale air and exchanging it with fresh air from outdoors. If we use a heat recovery ventilation system, we can even maintain the energy efficiency of the home.

The secret to providing fresh air and removing indoor air pollutants, while maintaining the energy efficiency of the home, is to remove the heat from the indoor air that is being expelled. Homes that are relatively leaky with high levels of air infiltration, will normally have low levels of indoor air pollutants. But homes like this are not energy efficient and will have high energy usage for space conditioning (both heating and cooling).

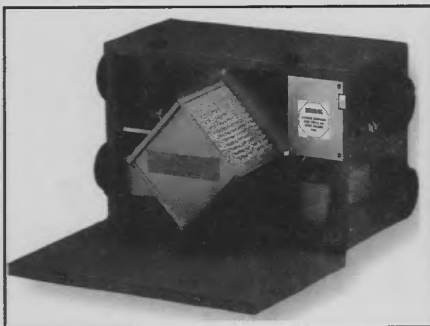
Heat recovery ventilation systems discharge the same amount of stale indoor air as fresh outdoor air that they bring into the home. Some systems use identical motors and fans, one to bring in air and one to discharge air out at the same volume. Other systems use one motor with a fan mounted on each end of the motor's shaft. One fan is in the intake side of the system and one is on the exhaust side.

These fans are mounted in a metal box that is generally thirty-six inches wide, eighteen inches tall and fifteen inches deep. Generally, the box will have two openings (intake and exhaust) on each end to allow ducts to be attached. On one end, the intake brings air from the outdoors to the unit and discharges it

out the other side. On the other end, stale air from the air is brought to the unit and discharged from the opposite end.

Inside the box, the two air streams are kept separate and heat exchangers pass the heat from the stale exhaust air to the cool fresh air from outdoors. The heat exchangers most often used are an aluminum core or a desiccant wheel.

The aluminum core heat exchanger operates on the same principle as a car radiator. The two streams of air are kept separate from each by thin pieces of aluminum but as aluminum has a low resistance to heat transfer, the heat is allowed to pass from one stream to the other. The only draw back to the aluminum core exchanger is that in very cold dry climates, the air indoors tends to dry out as the exchanger does not pass the moisture from the indoor air to the fresh dry air from outside.



The aluminum core heat exchanger

A desiccant wheel exchanger operates quite differently than a core exchanger. The streams of air are once again kept separated, but instead of passing through small baffles, the streams are kept parallel. The desiccant wheel is at a right angle to the streams of air so that one half of the wheel is in each of the two streams. As the wheel turns, the portion of the wheel that is in the exhaust air stream absorbs heat and moisture from the air. It then enters the cool dry outdoor air stream where it gives up its heat and moisture. The ability of the desiccant wheel to also transfer moisture allows the unit to bring in fresh air without causing the home to dry out.

HRV's can be purchased in various sizes and efficiencies to fit your home; most units are 70-75% efficient and have a 100-200 cfm rating. Larger sizes are available for commercial and industrial. HRV's should be installed by your heating and cooling contractor unless you have extensive experience with the installing of duct systems.

Although prices will vary from manufacturer to manufacturer depending on the quality and options chosen, you can expect to pay \$1,000 on average for an installed unit. This may seem expensive, but if you have people in your home with allergies or the home has excessive moisture, this is a low cost for relief from these problems.

There are also a number of ways to control
(Continued on page 16d)

(Continued from page 16c)

the operation of the HRV. Some units operate on timer mechanisms, allowing the unit to operate at the optimum periods for the lifestyle of the occupants. Other units are controlled by humidistats, bringing the unit on when the humidity rises above the set limits. A new programmable controller on the market today claims that it can detect odors in the home from gases, cigarette smoke, cleaning compounds, cooking odors, paints, solvents and formaldehyde.

Although HRV's are not new, we do not see an extensive use of them in the United States at this time. This is not so in other countries. I recently did an Internet search and found two interesting hits. One was a housing developer in the United Kingdom who advertised HRV's as a standard piece of equipment in their homes. The other was for the sale of a home in Australia and the HRV was listed as one of the spe-

cial features of the house. HRV's have been used for several years in foreign countries as they do not have the benefit of low cost energy that we have in the United States. As foreign home builders have made their homes more energy efficient to combat the higher energy prices, they have also recognized the need to provide for quality air in the home. But they have chosen to do this in the most energy efficient way as possible.

Do you need an HRV in your home? If allergy and breathing problems have appeared only since you have moved into your current residence, it may be a possibility.

If you are building a new home, consider making the home as tight as possible and then ventilate it with an HRV so that you are in control of your energy costs and air quality. Remember, what you breathe today will affect you for years to come.

(Continued from page 16b)

Mayo, Harold
McBride, Nadine
McConnell, Ken M.
McCormick, Donald
McCormick, Richard T.
McDaniel, Clark H.
McDonald, David G.
McElrath, Jack
McGowan, Gregory J.
McGruder, Anita L.
McKenzie, Norma W.
McRoy, Norman W.
McSparin, Clyde
Menossi, Vic
Mercer, Wayne & Donna
Meteisis, Douglas
Meyer, James H.
Meyer, Michael & Peggy
Milldrum, Phyllis
Miller, Bobby B. & Mathilda
Miller, William G. & Joyce
Milligan, Timothy
Mitsdarffer, Steven
Moore, Johnnie M.
Morris, D. W.
Motsegood, Dorothy
Moyers, Jimmy

Muldoon, Hugh J.
Munk, Richard
Myers, George
Neighbors, Clyde S.
Nelson, David L.
Nickles, Jon R.
Nierman, John
Noll, John R.
Novak, Randy A.
Odell, Larry D.
Olson, Thomas O.
Paige, Sennett T.
Peebles, Ruth C.
Pennock, George
Peterson, Morris
Picou, Edward
Pinkard, Lyle A.
Pleggenkuhle, Gene
Powell, Richard
Prusaczyk, Keith
Quigley, Larry R.
Quisenberry, Art
Randolph, Robert M.
Rasche, Richard W.
Ray, James
Reeves, James S. & Vicki
Rinkus, Robert W.
Robinson, Barbara
Robinson, Mary

Rodgers, Everett
Roemer, Richard R., Jr.
Roettjer, Phillip
Rogers, Richard
Rolen, William T., Jr.
Roseberry, Linda R.
Roth, Daniel J.
Saban, Edward
Sanders, Michael
Schell, Kerin
Schilling, David J.
Schmidt, Dean
Schnell, Alois
Schnepel, Robert H.
Scholz, Leonard
Schuepfer, Michael R.
Scott, Robert D.
Sedberry, John So.
Sellers, Denny L.
Seper, Robert E.
Shelby, Shawky
Smith, J. C.
Somers, Timothy
Soria, Joseph M.
St. Pierre, Raymond
Stallings, Robert
Stokes, Carl H.
Stone, Larry J.
Strack, Janet Kay
Taylor, Charles J.

Taylor, Pete
Thetford, Ronnie
Thompson, Earl
Throgmorton, Dwayne
Tippey, James F.
Toal, John
Towle, J. Ellwood
Towle, Tim
Train, Alan L.
Trent, Barbara
Valentine, Robert I.
VanHorn, Michael
Waggoner, John A.
Wallace, James R. & Naomi
Walters, Bruce
Wargel, Robert E.
Waugh, Robert R.
Weithorn, Bernie L., Jr.
Welzian, James S.
White, Margaret B.
Wilcoxon, Harold
Willhite, John
Williams, Joseph L.
Wise, Douglas K.
Womack, James
Woolsey, Tom
Yates, Dale
York, Robert L.
Youngblood, J. W.

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest you:** Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: Steeleville area — Call 1-800-606-1505

Murphysboro area — Call 684-2144

Someone is always on duty to take emergency calls after hours.

5. Please give the person who answers your map, section and house (or locat.) number as found on your billing statement.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



Damages to appliances

The cooperative provides service to over 12,000 meters and during the course of the year we encounter a number of situations where a member has had an appliance fail and believes that the cooperative is responsible. It might be a case where a repairman said the damage was due to a voltage surge, an appliance did not work after an outage or something else happened on the system that caused the member to believe the power system was responsible for the damage.

We do carry liability insurance, but it is strictly insurance to cover situations where the cooperative is liable because of negligence. It is not insurance to pay for damages due to something that was totally beyond our control or for damages that someone might claim were due to an incident that is related to the standard or normal operating practices of an electric utility.

We had a situation occur on Saturday, April 5, that is a good example of what can happen on a power supply system that is really no one's fault, but appliance damage did occur. A large tree that was 69 feet from the centerline of a 69,000 volt transmission line tipped out of the ground and fell into the line. The shock of the tree hitting the conductor caused an insulator string to become unhooked and dropped the 69,000 volt line into the 7200 volt line below it. Consequently, we had three substations out of service and several of our members had damage due to overvoltage in their homes. After such an incident, the question immediately arises as to who should pay, the member's home owner's insurance or the cooperative's insurance carrier.

Our carrier's position is that the tree was completely outside the right-of-way; the cooperative had no control over the situation and therefore was not negligent. Incidents such as this fall into the "Act of God" category. The homeowner's carrier, on the other hand, will argue that their client did nothing wrong and it is

the power supplier's fault.

No matter who is liable to pay the claim, I believe that it should be the insurance carriers who debate the claim and the cooperative and the member should not be involved. If a member has damage and our carrier concludes that the damage was not due to any negligence on the part of the cooperative or its employees, the member's homeowner's insurance should then take care of its insured. After all, that is why we carry insurance in the first place. If the homeowner's carrier believes that the cooperative was at fault, they should then pursue it with the cooperative's insurance carrier. Both the member and the cooperative have insurance, so the argument as to liability ought to be between the insurance carriers and not the member and the cooperative.

Too often, we as consumers do not question or inquire into our homeowner's coverage as thoroughly as we should. I have to admit that I am no better than most and I had to inquire as to whether or not I would have been covered in the situation I described. I had my agent check his home office and I found that I would have been covered up to \$1000 per damaged appliance. I do not know if I pay the lowest premium around, but the lowest premium is not always the cheapest insurance in the long run. With the large number of expensive appliances in today's modern homes, every homeowner ought to be checking with their agent to see what kind of coverage they have for overvoltage of any kind. Have your agent put it in writing and if your company does not offer that kind of coverage, you must then decide whether you like your agent well enough to take the risk.

What else can you do to protect your appliances against overvoltage? Buy surge protectors! You can have one installed in your home's main entrance panel to protect the whole house, or you can buy individual ones for the appliances you want to protect. The best choice is to put in a whole-house protector and individual ones for the appliances, especially for expensive items such as computers and home entertainment centers. For the price of one deductible on your homeowner's policy, if you have \$250 as I do, you can pretty well protect your home and your most valuable appliances. We are now entering the lightning season and we know from reading

Continued on 16b...

Continued from 16a...

our substation breakers that our lines take a lot of lightning hits during the storm season. Investing now in surge protectors may be one of the better investments you can make.

Retail wheeling

Legislative activity and media ads on retail wheeling are picking up, so I thought you might be interested in what the president of Enron, Jeffrey Skilling, had to say on April 2, as reported in Electric Co-op TODAY. Enron is a corporation that expects to be a big player in power marketing and is spending a lot of money to develop name recognition for its brand of power.

Mr. Skilling suggested that, "brutally competitive markets would result in cost-cutting and elimination of jobs. You must cut costs ruthlessly by 50 to 60 percent. Depopulate. Get rid of people. They gum up the works."

I know that Mr. Skilling is very interested in selling energy in a deregulated retail wheeling market, but I wonder if he really understands what it takes to deliver that energy to you and do everything that is necessary to make a utility run. If we are going to "depopulate" because people gum up the works, who is going to provide you with reliable service? In any retail wheeling scenario, we must make sure that the local distribution companies, which have the ultimate

responsibility to deliver the energy and maintain the service, have the financial means to do so. We all need to keep in mind that under full customer choice, the person on the telephone trying to sell us energy most likely will not be with the company responsible for maintaining our service. His goal will be to make money for his company by selling energy and he will let someone else worry about how that energy is delivered.

Director appointment

As many of you are aware, Hubert Chapman, who served you many years as a director on your cooperative's board, passed away earlier this year. The bylaws of the cooperative provide that the board shall appoint someone to fill the remainder of any unexpired term and the Reverend Paul Hicks has been appointed to serve the remainder of Mr. Chapman's term. Pastor Hicks resides near Carterville in Williamson county and is Pastor of Murdale Baptist Church in Carbondale.

Mark your calendar
Annual Meeting
Tuesday, August 5

Nominating Committee appointed

To: Members of Egyptian Electric Cooperative Association

Pursuant to the By-Laws of the Cooperative and in compliance with the United States Department of Agriculture Rural Electrification Administration Revised Bulletin 20-19, notice is hereby given to the members of the Egyptian Electric Cooperative Association that the Cooperative will hold its annual meeting of its members on the evening of August 5, 1997 at 7:30 p.m., in the Steeleville American Legion meeting room located on the west side of town and a block south of Broadway.

Notice is further given that the terms of office of directors Paul L. Hicks, Carbondale, Paul R. Pyatt, Pinckneyville, and John E. Steele, Campebell Hill expire at said annual meeting.

Notice is further given that the board of directors of the Cooperative have appointed the following named persons as a nominating committee:

Harold I. Dycus, *Carbondale*
Archie Hamilton, *Ava*
Thomas Horn, *Carbondale*
Ray Mulholland, *Marissa*
Leonard Priebe, *Campbell Hill*
Dale A. Smith, *Cutler*
Edward Timpner, *Pinckneyville*

Notice is further given that the above nominating committee will meet at the Steeleville office of the Cooperative, located at the west edge of

Steeleville, Illinois, on Tuesday, June 24, at 9 a.m., for the purpose of nominating candidates for election to the board of directors, and that all members interested may attend said meeting and participate.

The by-laws also provide that the nominating committee, upon making their nominations, shall prepare and post at the office of the Cooperative, at least 30 days before the annual meeting, a list of nominations for directors.

The by-laws further provide that any 15 or more members may make other nominations in writing over their signature not less than 25 days prior to the meeting. Additional nominations may be made from members at the meeting.

The by-laws provide that each active member shall be entitled to one vote upon each matter submitted to a vote at the meeting of the members and that proxy voting is prohibited.

A member having questions regarding the above proceedings may contact any officer or member of the board of directors for clarification or further information.

Copies of the by-laws of the Cooperative are available and can be obtained at the Cooperative offices located at Steeleville and Murphysboro, or mailed to you upon your request.

Respectfully submitted,
Ray Mulholland, *Secretary*



From left to right: Harry W. Kuhn, General Manager, Egyptian Electric Cooperative, Johnson Elugbadebo, Hilary Misselhorn, Katy Cannell, Matthew King, Betsy Pierson, James Millar and Paul R. Pyatt, President of the Board.

Youth to Washington

The energy level was high the evening of April 15, as ten area high school students made oral presentations of their essays at the annual Youth to Washington essay banquet at the Student Center on the campus of Southern Illinois University at Carbondale. The ten students were competing for one of six first place prizes — a week long trip to Washington DC.

The six finalists will be a part of the Illinois contingent that will represent Egyptian Electric and Illinois in Washington DC, June 13 - 20, as part of the Youth to Washington program sponsored by the National Rural Electric Cooperative Association. While in Washington, the students will have the opportunity to visit numerous historic sites and meet with several of the legislators from the Illinois congressional delegation.

The students' essays were judged on five categories, one being their oral presentation. The six finalists were Hilary Misselhorn, Trico High School; Matthew King, Sparta High School; Betsy Pierson and James Millar, Murphysboro High School; and Katy Cannell and Johnson Elugbadebo, Carbondale High School. Also competing were Kimberly Hamilton and Derek Schnoeker, Steeleville High School; Monica Wilson, Trico High School; and Thomas Hess, Sparta High School. Although not represented in the semi-finals, students from Coulterville and Carterville High Schools also submitted essays for the initial judging. The topic of this year's essay was *Campaign Financing: Does it need to be fixed?*

In addition to the trip to our nation's capital, all ten semi-finalists and the top essayists from Coulterville High School, Meghan Jones and Carterville High School, Katie Williams, were invited to visit Springfield on April 30 for Illinois Rural Electric Youth Day activities. The students

toured the executive mansion, Lincoln's tomb and other sites, and met with our area legislators, Senator David Luechtefeld and Representative Mike Bost.

The Rural Electric Cooperatives of Illinois have been sending students to Washington as part of the Youth to Washington program since 1958. Egyptian Electric sends six students each year from the eleven high schools within its service territory.



Ryan Cleland wins IEC Scholarship

Ryan Cleland of Pinckneyville is the 1997 winner of the \$1,000 Illinois Electric Cooperative Scholarship. It is one of two given annually, one to children of co-op employees and directors, the other to members' children. Ryan's mother, Brenda, is administrative assistant at EECA. Co-op Manager Harry Kuhn, left, made the presentation.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

- | | | | | |
|----------------------------------|--------------------------------|------------------------|------------------------|------------------------|
| Adams, Donald R., Jr.
& Joyce | Draves, Merle | Kelley, Raymond | Paterra, Michael J. | Spence, Charles & Ruth |
| Aldrin, Charles B. | Dubrovin, Charles N. | Kenis, Lauren | Patrevido, Thomas | Spence, Charles David |
| Angio, James A. | Ecker, Larry | Kerr, James | Patterson, Judith | St. John, Ralph |
| Applegate, William | Egert, Robert L. | Kerstann, Robert C. | Payne, Lomas | & Patricia |
| Ardinger, Barbara | Eiter, Michael E. | Kettlekamp, Olin F. | Peacock, Dave | Stephens, Janis E. |
| Arview, Bernard A. | Ellish, John L., Jr. | Kirk, Jerry | Peacock, David W. | Stone, Ben & Ann |
| Askew, Larry R. | Elmore, Ronald W. | Kline, Dorothy | & Janet | Stork, Lawrence |
| Austin, Gene | Esty, Edward T. | Klopcic, Wayne | Pemberton, Stephen | & Linda |
| Autullo, Glenn | Evans, Michael J. | Knight, Eddie A. | Perkins, Robert | Stand, Bruce |
| Ayers, William | Fehlig, Daniel M. | Kocsis, John J., Jr. | Perry, George E. & Ann | Swanson, Richard M. |
| Bailey, Woodrow J.
& Anna | Frick, Donna L. | Kraus, Robert P. | Peters, John Richard | Talley, Suzanne L. |
| Baird, Arthella G. | Fuca, Raymond | Krol, Raymond J. | Politsch, Preston B. | Talley, Terry |
| Bajt, James A. | Fuca, Raymond Guy | Kupcikevicius, Kazys | Pollock, Michael | Taylor, William C. |
| Bartow, Douglas | Gaffey, Paul | Lambert, Stephen | & Deborah Sue | Terpening, Willbann D. |
| Behrens, Albert &
Dorothy | Galloway, Gregory | Lasley, Jeffrey B. | Poole, Kenneth W. | Thompson, Russel |
| Beisner & Dagner | Garrison, John | Lee, Michael V. | & Marilyn | & Mary Jane |
| Benson, Donald | Gaultney, Richard | & Alberta | Potter, Luanne | Tomlison, Terry |
| Benson, Ernest C. | Gay, James R. | Lewis, Kenneth W. | Presley, Dan N. | Trexler, Charles E. |
| Bernard, Stephen | Gooden, Bobbie | Link, John & Vicki | Propst, Brian | Troxel, William C. |
| Bessiere, Louis | Goodman, William G.
& Linda | Litzinger, Harold A. | Pruitt, Garrie | Tuthill, Roney L. |
| Bick, Dorothy | Graklanoff, Michael | Lively, Archie K. | Puricelli, Carolyn | & Rene |
| Bird, Laverne | Gray, Charles | Longfellow, Edwin Jay | Pyron, Gary L. | Vakselis, Leo |
| Blacklidge, Judith M. | F. & Wanda | Lott, Blake D. | Raft, Vincent | Vanek, Frank |
| Blume, Jimmie A. | Gregory, Donald E. | Maack, Richard A. | Rhodes, Stephen F. | Vertrees, Greg |
| Borah, Pete | Gregory, Floyd L. | & Leslie | Richmond, Randall | Wagner, Greg |
| Bower, Bill | Griffin, David R. | Maack, Richard A., Jr. | Rimerman, Marvin | Walbauer, Mike |
| Brady, William D. | Grojean, Charles | Maguire, Dian | Robinson, Elaine | Waligorski, Robert |
| Brees, Gary | Gumm, Raymond P. | Maibes, Don Vincent | Roesch, Doug | Walker, James A., Jr. |
| Britton, James S. | Haist, Gordon, Jr. | Mansker, Jerry A. | Rosendale, Robert L. | & Betty |
| Burke, William | Hall, Stephen | Marcus, Dan | Roskilly, C. Larry | Walker, Ronald E. |
| Callum, William | Harms, Duane A. | Marks, Steven | Ross, Charlene | Westendorf, Rodney |
| Campbell, Cynthia | Harms, Peter J. | Martin, Daniel R. | Russell, Nancy | Wharton, Lyndon |
| Campbell, Marilyn | Heiple, Willard | Mason, Roger | Sansedo, Frederick | Wilson, John W. |
| Campbell, William A. | Hines, Richard A. | Matthews, Joe R. | Sauerhage, Louis | & Helen |
| Carlson, John & Ann | Holbrook, Dennis | McGowan, Cynthia | & Rosalee | Woelfel, Charles |
| Carter, Charles & Betty | B. & Polly | McMath, Gilbert G. | Schlesinger, H. J. | Wolfe, Gloria |
| Carter, Charles A. | Hoope, Johnny Dee | & Sharon | Schmidt, James B. | Wood, Dan E. |
| Chambers, Jim L. | Horsley, Charles | Miller, Fred E. | & Bonnie | Wright, Michael |
| Chester, Marcia | House, Stephen | Milligan, Wayne | Schryver, Jeffrey B. | Yokley, Fred |
| Clifton, Lonnie G. | Hudson, Jim R. | & Lisbeth | Scott, David W. | Zanelli, Richard |
| Coe, David R. | Huggins, Vernon | Mooney, Thomas L. | Sealey, Ronald | |
| Conti, Paul L. | Hutchens, Norma | Moore, James W. | Shafer, James P. | |
| Cooley, David G. | Jam, Habib | Moran, Laurie | Shafer, Steven C. | |
| Corbin, Bruce | James, Lonnie | Moritz, Linda Kay | Shannon, Ashley | |
| Cottom, Barbara K. | & Patricia | Morrison, Harold | Sharrett, Patrick | |
| Craig, Richard R. | Jarke, Phillip A. | & Janice | Shepherd, Terry R. | |
| Crammer, Wayne L.
& Louise | Jaskowiak, William D. | Moureau, Annie | Shookman, Lewis | |
| Culbertson,
Joseph B., Jr. | Jobs, Raleigh A. | Naylor, Larry L. | Shoopman, John M. | |
| Danca, Gary L. | Johnson, Anthony | Newton, Clark E. | Shriber, Michael | |
| Davis, Charles A. | Johnson, Eldon | Newton, Eugene | & Suzanne | |
| Davis, Ernest Jr. | Johnson, Sharon | Niermann, Kenneth W. | Simmons, Bennie | |
| Derousse, Edmond | Harris | Novak, Paul E. | Sims, Lee & Alice | |
| Desmaretz, John | Jolcover, Scott | Nunn, Greg | Sitter, Rudolph | |
| Dillard, Larry | Jones, Jackie | Nystrom, Dennis C. | Skloot, Floyd | |
| Downey, William | Jones, Randall | Oberling, Michael | Slifer, Diana L. | |
| Doye, David A. | Jones, Randall L. | O'Brien, Charles D. | Slivinski, Joseph A. | |
| Draut, Michael | Jurgemeyer, Fred | Oliver, Venita S. | Smith, Billy D. | |
| | Kaesberg, Elmer Lee
& Donna | Orsborn, Gerald | & Bernice | |
| | Kandra, Robert P. | Owen, David W. | Smith, Wayne L. | |
| | Kehrer, Roger | Palicki, Ken | & Alene | |
| | | Pasley, Marie | Snyder, Gerold | |
| | | | Sorrell, Robert | |

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



Power supply concerns

As I write this article in late May, we are becoming increasingly concerned about the ability of the interconnected network to deliver the required energy during summer peak conditions. Our power supplier, Southern Illinois Power Cooperative, is a member of the Mid-America Interconnected Network (MAIN) and that network provides the emergency backup for Southern's generating units. Should Southern lose any of its units, the other members of the network pick up the load until Southern can either make arrangements to buy replacement power or get its unit back on line.

At the present time the Main group has at least seven nuclear generating units off line and one operating at reduced power. That loss of generation has made it necessary to import power into the region and has resulted in the loading up of the high-voltage transmission system. We are very concerned at this time that if several of the nuclear units do not get back on line by the summer peaks of July and August, or if other generating units should be lost under peak conditions, that there will not be enough transmission or generating capacity to serve all of the load in the region.

Should a situation develop whereby there is not sufficient transmission or generation capacity in the region to handle peak load, there will be mandatory dropping of load. Those customers who purchase power under interruptible rates will be the first to go, but if not enough load is

dropped and the frequency on the interconnected system drops too far below 60 cycles per second, there will be automatic dropping of load by under-frequency relays. Southern has the relaying installed and has filed an emergency plan that specifies which circuits will be dropped first. Since tie lines with the interconnected network must be the last to go, Southern does not have a great deal of choice in deciding which lines go first. Under any emergency, the priority goal is to keep the network intact and to keep all generating units on line. Once generating units start tripping off line, we have a real outage on our hands.

While I do not want to cause you undue concern and appear to be saying the sky is falling, I do want to make you aware that our region is going to be in a tight situation this summer and load shedding is a possibility. If load shedding is necessary, most likely it will be an emergency situation and we will have little warning and no opportunity to shed load at the distribution level. It appears that the only situation in which we would shed load at the distribution level would be if Southern lost its generating unit during a heat spell and was not able to import sufficient power during the period the unit was off line. Under those conditions we would probably drop load at the distribution level to get us by the daily peaks.

Should load shedding occur, we will route all incoming phone calls to our outage answering system. We will place a message on the system that will inform you that we are in a mandatory loading reduction situation and will restore your service as soon as the peak usage period passes. We will also try to put messages on some radio stations, so if you have a battery radio or a standby generator, you may want to try listening for an announcement.

Since the problem is primarily in the northern part of the state and in Wisconsin, the question naturally arises as to why we should be required to drop load. The simple answer is that the rest of the pool stands by us in an emer-

continued on page 16c

The energy page

by **Bryce Cramer**

Remember the Fram oil filter commercial where the mechanic tells you that you "can pay me now or pay me later?" When talking about windows, you can change that saying to say "you can pay now and pay later!" and be absolutely correct. According to an article from the Department of Energy, the United States spent \$20 billion in 1990 for **unwanted** heat losses and gains through windows in residential and commercial buildings. That was 25 percent of the total energy used to heat and cool those buildings. And, if you have built a new home or considered replacing your existing windows, you know how expensive new windows are. With this information, maybe we should consider not installing windows in homes. That might be the frugal thing to do, but would you want to live in a home like that for very long? So what can be done? By making the right choices, we can lower the energy that windows use and their purchase cost. When considering these decisions, break the window into its parts; the frame and glazing (the glass). In addition, evaluate the position and size of the window in the house and your purpose for the window. Answers to these questions will help guide you to the appropriate decisions.

When considering the frame of a window, evaluate the style of the frame: fixed, double-hung, casement, bow, etc. You will also need to consider the material the frame is made from.

The style of a window can affect its air infiltration. Air leakage around the sash, frames and glazing can account for up to 10 percent of a home's energy usage. Fixed pane windows allow the least amount of air leakage while double-hung windows generally have the greatest. The amount of leakage is also affected by the quality of installation; be sure to follow the manufacturer's recommendations on installation procedures and caulk all cracks and joints. Most manufacturers test and rate windows for leakage; chose a window with a leakage rate lower than the industry standard of .37 cfm/ft².

When deciding on frame construction and material, keep in mind future maintenance and upkeep. Wood frames have low heat loss and gain, but need the most maintenance. Aluminum frames are the least expensive, need little maintenance, but lose considerable amounts of energy. Many manufactures offer combinations of wood with vinyl or aluminum cladding. The wood provides insulation while the cladding keeps future maintenance needs low. Non-typical materials are also becoming popular as research provides new materials and manufacturing methods. Fiberglass windows are becoming popular; they

are stainable, have good insulating qualities and are relatively maintenance free.

The glazing (glass) area of windows has seen the most improvement in energy savings. Whereas just several years ago single pane glass was the only option available, today you can order double or triple pane, special coatings and tints, special fillers and even "smart" glass.

When deciding upon double or triple pane glass, compare the U-values provided by the manufacturer (the U-value is the opposite of R-value, the smaller the number, the better insulator it is). But, beware that some manufacturers provide the center of glass value while others provide the overall U-value. The center of glass value will be better as it does not take the energy lost through the metal spacer bar into account. Many major brands are using the National Fenestration (fenestration means an opening or penetration in the exterior of a building) Rating Council to rate their windows. As the NFRC uses standardized testing procedures, window ratings can be used as a true comparison of the performance of one window versus another. In fact, many manufacturers are beginning to use energy labels similar to those on new appliances so customers can do comparison shopping.

'Low-e' is a special coating that just a few years ago was a seldom used option, but today has almost become standard. Low-e coatings are thin coatings of metal oxide or semiconductor films placed on the glass surface to reflect heat. Depending on which glass surface it is placed on, the coating can reflect the radiant heat either indoors or back to the outdoors. Many manufacturers use double coatings, one reflects heat indoors in the winter and the other outside in the summer. Spectrally selective coatings are considered to be the next generation of low-e coatings, capable of filtering out 40-70 percent of the heat normally transmitted through clear glass while allowing the full spectrum of light to be transmitted. These types of specialty coatings are generally expensive and are most often used in large commercial buildings.

Another improvement of a few years ago that has almost become a standard option is the filling of double- and triple-pane windows with inert gases such as argon. Inert gases conduct less heat and therefore lower the U-value of the window. The combination of argon and low-e coatings make a very energy efficient window.

The spacer bar used to separate the panes of glass is currently undergoing much research and testing. These bars are generally made of aluminum or aluminum alloys which are good conductors of heat, allowing the interior edge to become very cold in the winter. This is one of the reasons

that moisture condensation generally appears at the edge of glass. Improved materials will be able to lower the heat transferred through the edge of the glass, reducing energy usage and moisture condensation.

For those intrigued with the new, the next stage of glazing development will be smart windows. Chromogenic glazings will adapt to the changes in lighting, heating and cooling requirements of the home. Some of these will be passive, changing with the sunlight while others will be active, changing to electric currents provided by computers.

The consideration that can increase the cost of window installation and effect energy usage the most however is the decision made by us as to the size, quantity and placement of windows. When making these decisions, determine if the window is for ventilation, view or lighting. If the window is for lighting and view only, could you save money and energy by using a fixed-pane window? If the window will not be used for any of

these reasons, can it be eliminated? If no one is generally home during the day to take advantage of the light or view, you may not need a lot of glass in bedrooms. Strategic placement of windows can greatly affect energy usage. Windows facing east and west catch the rising and setting sun and can greatly increase the cooling load in the summer, while south facing windows with proper shading can warm the house with the winter sun.

As you can see, there are many decisions that need to be made when selecting windows for your home. They should not be chosen because your builder recommends them, your neighbor has them, they were the cheapest or you liked the looks of them best. They should be chosen because you made an informed decision, weighing present expenditures against future energy savings and maintenance costs. Remember, paying a little more today, may save you from paying a lot later.

How to estimate capital credits

Total margins of \$1,601,248.50 for 1996 have been allocated on the books of Egyptian Electric Cooperative. You may estimate the amount allocated to your capital account as follows:

- Step 1. Add up the total amount paid for energy charges only. Do not include taxes or late payment charges.
- Step 2. Multiply total kwh used in 1996 by .043425336.
- Step 3. Subtract Step 2 from Step 1.
- Step 4. Multiply Step 3 amount by .0290252129.

The amount computed in Step 4 represents the total amount of capital credits allocated to your account. To determine the amount of operating margins allocated due to Egyptian Electric's operations, multiply the amount in Step 4 by .5061.



Office closing

Our offices will be closed on Friday, July 4, in observance of Independence Day.

Mark your calendars!!!

Annual Meeting, Tuesday, August 5 7:30 p.m.

continued from page 16a

gency and we have to do our share when they have a problem. We can not operate isolated from other power systems and as in most other aspects of life, if you want to share in the rewards, you have to be willing to share in the losses.

I want to stress again that I do not want to cause undue concern and we have really debated about how we should approach this situation. Our consensus was that it was better to run the risk of alarming someone rather than have large outages that we could have at least warned you about. There is not a whole lot you can do, but I want to assure you that we are

making plans to handle load shedding if we are given an opportunity to drop load at the distribution level. Most outages should last only a couple of hours until the peak of the day passes and if we do the shedding, we will try to limit outage time to no more than a couple of hours on individual circuits.

Members who have a medical condition that requires electrically driven support equipment should have a backup plan, no matter if it is an outage due to load shedding or storm damage. We can not guarantee that the power will always be on. Anyone in that situation should have an emergency plan and not rely on us to get the power back on in a certain amount of time.

Do You Know These People?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists

will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

- | | | | | |
|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| Absher, Michael W. | Dwiggins, Thomas M. | Klemme, Donald | Rimkus, Michael | Swanson, Kenneth |
| Aeverman, Harold C. | Epplin, Dennis R. | Knaus, Paul | Riordan, John | Talbert, Harold E. |
| Anderson, Ted | Fager, Fred | Knittel, Edwin J. | Ripley, Myrna Brook | Talkington, Michael |
| Anderson, Glenn B. | Farmer, Rodney | Kohout, Michael L. | Robinson, David | Talsma, Michael |
| Anderson, Raymond D. | Fassero, Bruce | Korte, Spencer D. | Robinson, Donald T. | Tannura, John |
| Arneson, Don A. | Fearday, Tom | Kovach, Paul W. | Root, Craig A. | Tatina, Robert |
| Baker, Barry | Feder, Michael | Kratz, Peter J. | Roth, Alan C. | Tekien, William |
| Ball, John R. | Fisher, Kathy | Lambert, James | Roush, Thomas L. | Teske, Myrna J. |
| Ballenger, Micahel F. | Fleming, Peter | Larson, Andrew E. | Rule, David L. | Thomas, Marc E. |
| Bankston, Joanne | Flood, Daniel | Lemonier, Michael E. | Sager, Susan | Thomas, Ralph G. |
| Bartosik, Norbert | Folan, William | Leopard, Russell | Sample, Leonard | Thompson, Edward A. |
| Bauerle, Joseph | French, Howard L. | Leung, George | Schillinger, Lee M. | Thompson, Sue |
| Becker, Craig A. | Gant, Raymond L. | Lewin, Benjamin B. | Schlak, Richard A. | Thoms, Kathye |
| Behnke, Mary | Gdowski, Joseph E. | Little, Stephen | Schmid, Vance | Tippy, Jerry |
| Benson, John P. | Genet, Roger D. | Logan, Ross W. | Schoenbeck, Ronald | Tobey, Scott |
| Borah, William E. | Geocaris, James T. | Loss, James M. | Schramm, Michael | Toong, Pinky |
| Bower, Ralph C. | Getz, Chris | Lusch, Franz E. | Schwarzburg, Jan L. | Triffler, Mark |
| Bowers, Michael T. | Gilman, Lawrence M. | Mabus, Stephen | Scott, John M. | Tripp, Earl |
| Brady, Michael | Gladstein, David | Macik, Edward | Shapiro, Donald | Tschappler, Lawrence |
| Brand, Terrence J. | Glasser, Cathy | Madderom, Robert, Jr. | Sherlag, Joseph | Turner, Ronald B. |
| Bregar, Philip M. | Graves, Truman E. | Magee, Arthur J. | Shultz, Robert D. | Urbatis, Michael P. |
| Broadway, David | Groves, Bernard A., Jr. | Maravill, F. Don | Silverman, Phillip | Vance, Dennis D. |
| Brubach, Kimberly S. | Guha, Ratan Kumar | Marlow, Bruce | Sims, Regina E. | Vanmilligan, Cornelius |
| Buer, Neal W. | Gurley, Wayne L. | Marynczak, John | Sivia, Kathryn Ann | Wade, John R. & |
| Burton, Harry | Gustafson, Fred | Mathis, David R. | Slave, George F. | Marilyn |
| Byrne, James | Hanson, Ralph | McCraw, Ray | Smith, Charles D. | Waggoner, Van E. |
| Cash, Jim | Hargrave, Gary | McKenzie, Wray | Smith, Gregory A. | Walter, Russell |
| Casteel, Richard T., Jr. | Hauer, Allen | Meade, Frank | Smothers, Tom E. | Wamble, Carl |
| Chapman, Mark A. | Havens, John | Meister, Margaret | Snyder, Robert | Weatherston, Bruce |
| Chiappetta, E. G. & | Hayes, James | Merkel, Dyan L. | South, William Roy, Jr. | Welker, Randy L. |
| Lizabeth | Headley, John A. | Michalak, Ronald L. | Sparenberg, Carl | Wells, Thomas G. |
| Cipriani, Nick | Healy, Paul E. | Miller, Harold W., Jr. & | Speaks, Ernest G. | Westland, Keith |
| Coccarelli, Guido | Heck, Bruce | Denice | St. Vincent, Reed | Williamson, Byron |
| Colderala, Robert M. | Heinkel, Paul | Mountian, Patrick | Stivers, Edward | Woodburn, Lawrence |
| Collins, Mark H. | Helpingstine, Linda | Munden, Richard G. | Stover, Danny Leroy | Worthington, Jacque |
| Connor, Paul & Denise | Hitzke, Alvin W., Jr. | Munson, John D. | Struck, Vincent | Yates, Charles & Andrea |
| Connors, William C. | Hohm, John F. | Munton, William L. | Stuck, Allan | Yosset, Makosso |
| Covinder, Bill | Holda, Daniel C. | Musil, Allan | | |
| Cox, Jane | Holmgren, Daniel | Nelson, Brian | | |
| Cox, Larry M. | Holt, James | Nelson, Glen A., Jr. | | |
| Crane, Dale | Horwitz, Bob | Nelson, Jack | | |
| Curtis, E. Duane | Hoskins, Jennifer | Nielson, Richard | | |
| Czarkowski, Robert F. | Huntington, Robert | Norman, Tom F. | | |
| Davidson, Robert | Hustedde, Bill | Nurkiewicz, Richard | | |
| Davis, Bradley A. & | Hutter, Paul E. | Ogeary, Dennis P. | | |
| Judith | Ielase, Charles | Oleary, Michael | | |
| Davis, Clarence & Judy | Jackson, Jon S. | Parker, Denise | | |
| Decicco, Tom | Jegl, William | Parks, Sara | | |
| Delahanty, Gregory | Jordan, Arthur | Patterson, Jerry | | |
| Denbo, John R. | Kane, Elmo | Paulich, Edward T. | | |
| Deulavery, Michael | Kanjo, Marwan | Phillips, Henry W. | | |
| Devries, Kenneth | Katzberger, Stephen M. | Pietrzak, John | | |
| Dierks, Larry A. | Katzmarek, Joanne | Plumley, Allen G. | | |
| Dingwerth, Jerome E. | Keajec, Robert | Pomeranz, Enid | | |
| Duff, Robert J., Jr. | Keith, Scott | Ponce, Ronald J. | | |
| Dumin, Michael W. | Kimball, Gus | Qualkinbush, John | | |
| Duner, John K. | Kirksey, Sarah Jane | Rancino, James | | |

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505
Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

Invitation to the annual meeting from the board of directors



Pyatt

On behalf of the board of directors of Egyptian Electric Cooperative, I extend a personal invitation to attend your cooperative's 59th annual meeting. The meeting will be held at Steeleville's American Legion Hall on Tuesday, August 5, 1997. The hall is air-conditioned and has been very comfortable in past years in spite of the summer heat.

Registration will begin at 6 p.m., and each member registering will receive a free gift for attending. All members registered by 7:30 p.m. will be included in the drawing for our 59th Anniversary Prize, the two grand prizes of \$100 electric credit and the ten \$20 credits to be applied on an electric bill. At the conclusion of the meeting, all members present will be eligible for the drawing of other attendance prizes.

As in the past few years, we are planning a very short business meeting to conduct the necessary business affairs of the cooperative and we will conclude the meeting with a guest speaker. From past experience, the most effective method of getting word to the members about the annual meeting is for those reading this announcement to tell others about the meeting. Please help us out and remind your friends and neighbors about the annual meeting. Better yet, bring them with you and let's have a big turnout. This is your opportunity to participate in the operation of your cooperative and we promise to keep the meeting short and get you home at a reasonably early hour.

Paul R. Pyatt, President
Board of Directors

Official Notice

**Egyptian Electric
Cooperative
Association**

**59th Annual Meeting
August 5, 1997 • 7:30 p.m.**

**American Legion Hall
South Chester Street
Steeleville, Illinois**

Action will be taken on the following matters:

1. Report on the number of members present, in order to determine the existence of a quorum.
2. Reading of the notice of the meeting and proof of the due publication or mailing thereof, or the waiver or waivers of notice of the meeting as the case may be.
3. Reading of unapproved minutes of previous meeting of the members and the taking of necessary action thereon.
4. Presentation and consideration of reports of officers, trustees and committees.
5. Election of board members.
6. Unfinished business.
7. New business.
8. Adjournment.

Ray Mulholland, Secretary
Board of Directors
Egyptian Electric Cooperative

by Harry Kuhn



Power supply

You should have received a letter from me in June informing you that the power supply situation in Illinois is cause for concern this summer and that this cooperative could be affected. Our plan was to mail the letter before the hot July and August months and we did not anticipate that we would have problems before then. As it turned out, SIPC lost unit #4 at the generating plant on Friday, June 13, and it is still off line as I write this on June 24. It has been rather hectic since the 13th, but so far we have been able to avoid shutting off anyone's service.

With the weather turning hot last week, the loads on all power systems in the state increased dramatically. With the nuclear generating units being off line, the large amount of power being imported caused some overloading of the transmission system. On Friday, June 20, the Mid-America Interconnected Network (MAIN) had to curtail power transfers because an interconnection point was becoming overloaded and one of SIPC's power purchases from another utility was one of those terminated. At that point, SIPC had one hour to find replacement power from another source or we would have had to drop load. Fortunately, they were able to get power through a TVA interconnection from a source in Pennsylvania, but it sure did increase the stress level.

Our power supply situation has been virtually day to day and hour to hour the last ten days.

Once unit #4 is back on line, the situation will improve greatly, but any time it should go off line this summer, it will probably be a scramble to find replacement power if the weather is hot over a large area. We hope that the power supply situation this summer is a one-time thing, but with all the talk of retail wheeling and the impact it could have on transmission line loading, this summer could be an indicator of things to come.

You usually read what I write about a month after I write it,

so I hope that by the time you read this it has not been necessary for us to interrupt your power. Should it become necessary, we intend to rotate outages and treat everyone as fairly as possible. Once power is interrupted under peak conditions, it is always difficult to pick up the circuits again because of all the load coming on at the same time. Under those conditions, you can help by turning off some of your load and then turning it back on some time after the power has been restored. As always, we appreciate your patience and assistance.

Annual meeting

It is that time of year again to mark your calendars and plan to spend a couple of hours with us on Tuesday, August 5th. The meeting will be held at the Steepleville Legion Hall and we are planning a program similar to other years. The hall is air conditioned and we will keep the business meeting short, so plan to join us.

Chris Egelston, a magician from Carterville, will be strolling the audience before the meeting displaying his amazing acts of magic. His presentation includes close-ups, stand-ups and audience participation. Those of you who witnessed Chris' performance before last year's meeting will agree he made the time go by more quickly. If you arrive early, be sure to catch a part of Chris' program.



Egelston

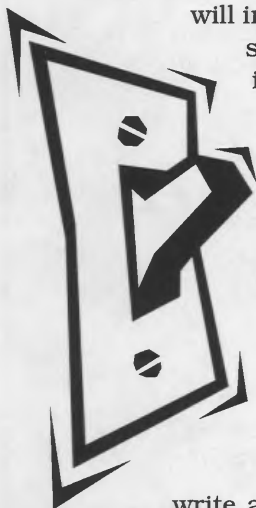
Our featured guest speaker this year will be **Jeff Fleming**, the Country Lawyer, from Olney, IL.

From the humorous experiences in his law practice to everyday events that affect all of us, Jeff Fleming has delighted audiences with his stories. From lawyers to judges to clients, he can poke fun at himself and others in such a disarming way that no one will take offense. Jeff encourages people to search for humor in their daily lives, enjoy it when they

find it and relieve stress in the process. He believes that life is better if we learn to laugh more often. We are sure that Jeff will be an enjoyable addition to our annual meeting program.



Fleming



Minutes of the Nominating Committee

The Nominating Committee, in compliance with the by-laws of the Egyptian Electric Cooperative Association, met in Steeleville, Illinois, in the office of the Cooperative, on June 24, 1997, at 9:00 a.m., to nominate candidates for the office of Director of the Cooperative to serve for a three-year term and to be voted upon by the membership of the Cooperative in its Annual Meeting to be held on August 5, 1997, in the Steeleville American Legion Hall.

Attorney William Broom opened the meeting by stating that the purpose of the Nominating Committee is to nominate candidates for the office of Director of the Cooperative, and that the terms of Mr. Paul L. Hicks, Mr. Paul R. Pyatt and Mr. John E. Steele were expiring this year.

A roll call of the members of the Nominating Committee was taken, and all members were present.

Attorney Broom stated that the first order of business would be to select a Chairman and a Secretary of the meeting.

Mr. Dale Smith was duly selected as Chairman of the Committee, and Mr. William Broom was selected as Secretary of the meeting.

The Chairman requested the Secretary to read the minutes of the last year's Nominating Committee meeting.

The Chairman instructed the Committee that three or more nominations could be made by the Committee and placed on the ballot. Following a discussion on this, it was unanimously agreed to nominate three candidates.

Mr. Edward Timpner nominated Mr. Paul Pyatt, Mr. Leonard Priebe nominated Mr. John Steele, and Mr. Thomas Horn nominated Mr. Paul Hicks for the office of director of the Cooperative. Mr. Ray Mulholland moved that the nominations be closed and that they be nominated by acclamation, and that their names be placed on the ballot to be voted upon at the Annual Meeting of the members on August 5, 1997.

The motion was seconded by Mr. Archie Hamilton, and unanimously carried.

There being no further business, motion was duly made and seconded that the meeting be adjourned. Motion carried.

Dale A. Smith, Chairman
Archie Hamilton
Ray Mulholland
Leonard Priebe
Edward C. Timpner
Tom Horn
Harold I. Dycus



Annual meeting registration instructions: last name please

The membership will be divided alphabetically, by the last name. There will be two lines immediately inside the entrance doors for registering members. Be sure that you get in the correct line, as it speeds up registering and keeps the line moving. Members must be registered by 7:30 p.m. to qualify for the anniversary prize, the two grand prizes, and the ten \$20 electric credits. Registration will begin as early as 6 p.m.

Entrance to the hall will be through the double

doors on the south side, from the walkway between the Legion Hall and the bowling alley building. Access to this walkway is from the front parking lot towards the bowling alley, or from the west parking lot behind the ball diamond. These entrances will be clearly marked, and Cooperative employees will be located around the area to help direct you to the meeting. The club room doors will be locked, so there will be no entering from the club room.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505
Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

Youth Tour winners tour nation's capital



Six students representing Egyptian Electric Cooperative Association recently took in a full week of experiences around the nation's capital. Among the highlights of the 1997 "Youth to Washington" Tour was a meeting with their congressman, Congressman Jerry Costello on Capitol Hill. The students were among 63 rural youth leaders and their chaperones from downstate Illinois who toured Washington, D.C., June 13-20. The annual trip is sponsored by the electric and telephone cooperatives of Illinois. From left are: Hilary Misselhorn of Ava, Katy Cannell of Carbondale, Derek Schnoeker of Steeleville, Congressman Costello, Kimberly Hamilton of Steeleville, Betsy Pierson of Murphysboro and Monica Wilson of Ava. The trip's agenda included stops at many of the capital's monuments and memorials, Arlington National Cemetery, the Smithsonian museums, the National Cathedral, the Royal Embassy of Saudi Arabia, the U.S. Holocaust Memorial Museum, and the U.S. Supreme Court. The group also attended a performance at Ford's Theater and cruised on the Potomac River. The tour began with a visit to the Civil War battlefield at Gettysburg, PA.

Egyptian Electric Cooperative Association

59th Annual Meeting • August 5, 1997 • 7:30 p.m.
American Legion Hall • South Chester Street • Steeleville, Illinois
Registration begins at 6 p.m. • Short business meeting

- ★ Refreshments
- ★ Attendance Gift
- ★ Magician
- ★ Guest Speaker
- ★ 10 Credits for \$20 on Electric Bills
- ★ Two \$100 Credits on Electric Bills
- ★ Free Gift to Each Registered Member

59th Anniversary Prize—25-Inch color TV with remote

Drawing for Attendance Prizes—(Must be present to win prizes)

**Our offices will be closed on
Monday, September 1 in observance of Labor Day.**

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



Rates for 1997-98



As many of you know from past years, we usually announce at the annual meeting as to what rate changes may be made for the coming year and any changes would be effective with the October billing. After reviewing our financial situation and taking into consideration the uncertainty caused by the possibility of the legislature passing a retail wheeling bill, we have decided to go another year

without any rate changes. Current rates will remain in effect through September of 1998.

Should a customer choice bill pass and the cooperatives are involved, in all likelihood there will be a major restructuring of all rates. Under customer choice, consumers would still receive their electrical service from their present local supplier, but would have a choice as to which utility they would purchase their actual energy needs. It would be comparable to the phone industry whereby you receive your service from someone else. Rate changes become necessary under such an arrangement because if you should choose to buy your energy needs from someone else and we do not have an opportunity to recover any of our distribution costs in those sales, our basic service charges have to be high enough to recover our costs.

When the telephone industry became deregulated, you probably saw your basic monthly service charge double or triple and I would expect that the same would hold true in our case. If we are going to have to recover

most of our costs in the facilities charge and price energy near wholesale costs, I would expect that our current monthly facility charge of \$10 will at least double or triple. That won't make too much difference to the larger users because they will make it back in the lower energy charges, but the small user will most likely see his or her bill go up under customer choice. In the telephone industry they argued that long distance was subsidizing local service and in our industry they are claiming that the large users are subsidizing the small user.

Once a customer choice bill becomes law and we know just how the cooperative is going to be affected, we will do a complete cost-of-service and unbundling-of-costs rate study to determine the form of our rates for the future. In the meantime, you can continue to enjoy one of the lowest residential rates in the state.

Customer choice

As some of you may be aware, the Illinois House did pass a customer choice bill for the electric industry in Illinois this past session, but it did not come up for a vote in the Senate. There is speculation that the matter will be taken up in the veto session this fall and something may pass then. The bill as presently written is approximately 260 pages, so I don't think anyone knows for sure just how the law will work and how customers will ultimately be affected. The present language does provide that cooperatives and municipal systems are not included, but have the right to opt

in if they so choose. Since cooperatives and municipals are directly controlled by their members or customers through elected directors or councilmen, and not by board members

(Continued on page 16c)



The Energy Page

by Bryce Cramer

As the price of lumber and wood products continues to fluctuate widely, some home builders are looking to alternative types of framing that are more stable in price. One alternative to standard wood studs is light steel framing, commonly referred to as metal studs. As much of the steel used to manufacture metal studs is recycled product, its price is relatively stable. Metal studs also have an advantage over wood framing as to consistency in size, they do not twist, shrink or warp, and they are not affected by termites. Metal framing is also lighter in weight and walls can be built 'in place' instead of horizontally and then having to be raised into place as wood walls do. With all of these advantages, it is surprising that more home builders are not using steel framing. That is because steel framing does have a fatal flaw, its thermal performance or heat loss.

Thermal resistance tests show that steel transmits heat over 300 times faster than wood but a wood 2 X 4 is 30 times thicker than a comparable metal stud. The net result is that a metal stud transmits 10 times the heat than a wood stud does.

Heat is like water and electricity, it always takes the path of least resistance. As metal studs contact materials on the inside of a wall



and the outside at the same time, heat bypasses the insulation in the wall cavity and flows to the metal stud. This is called 'thermal bridging'. Thermal bridging has the effect of lowering the net R-value of the wall cavity insulation by as much as 50%. The American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) has designed the insulation correction table for cavity insulation (shown below).

Commercial and industrial builders have largely ignored the heat loss characteristics of steel framing in favor of its advantages and are willing to pay higher energy bills associated with the heat loss. Residential builders, and rightly so, have not readily accepted this cost however. To get past this hurdle, the steel framing industry has attempted several things to lower the thermal loss or effect of the metal studs.

One recommendation has been to not replace wood structural members in the wall one for one with steel since steel is structurally stronger than wood. Instead of building with 16" centers as is normally done, the recommendation is to build on 24" centers. However, as you can see in the correction table, this just slightly improves the effective R-value of the wall.

The steel framing manufactures have also attempted to lower the thermal bridging affect by cutting out larger portions of the steel web, lessening the amount of metal that is present to transmit heat. This has also been marginally effective.

Stud Size	Stud Spacing	Cavity Insulation	Correction Factor	Effective R-value
2x4	16" o.c.	R-11	0.50	R-5.5
		R-13	0.46	R-6.0
		R-15	0.43	R-6.4
2x4	24" o.c.	R-11	0.60	R-6.6
		R-13	0.55	R-7.2
		R-15	0.52	R-7.8
2x6	16" o.c.	R-19	0.37	R-7.1
		R-21	0.35	R-7.4
2x6	24" o.c.	R-19	0.45	R-8.6
		R-21	0.43	R-9.0
2x8	16" o.c.	R-25	0.31	R-7.8
2x8	24" o.c.	R-35	0.38	R-9.6

Another manufacturer has attempted to lower the bridging effect by decreasing the surface area of the metal stud that the drywall and sheathing are in contact with. Instead of having a flat face, the new metal stud has a cupped face so that the wall covering is only in contact with ridges instead of the entire flat face. This does improve the effective wall R-value about 10%, but still falls far short of wood.

The most promising alternative so far has been to install R-6 insulation foam board on the exterior of the wall. Although this does not stop the bridging effect of the metal studs, it does increase the wall R-value to the approximate R-value of the installed insulation. For example, the effective R-value of a 2 X 4 wall on 16" centers now becomes R-11.5 instead of the R-5.5 it would have been without the insulation board.

As you can see, steel framing construction does have some advantages. However, if energy costs are of a concern to you, you may need to look at other alternatives. If you like to design homes and play with computers, you may want to contact the California Energy Commission about their EZFRAME software. It allows you to experiment with innovative alternatives and calculate the results. Their address is: Publications Office, MSS-13, PO Box 944295, Sacramento, CA 94244-2950.

**You've heard of
Letterman's Top Ten,
now its the . . .**

Energy Page top ten reasons to use metal studs

10. Metal studs don't hurt as bad when they land on your head.
9. There is no saw dust to clean up.
8. Never could drive nails without bending them.
7. Don't need a hammer any more, so my thumb nail will finally heal.
6. Never could figure out how to find the crown in wood studs.
5. If I build a round house, I won't need a satellite dish.
4. Always wanted to learn how to weld.
3. Hate those darn wood splinters.
2. No more holes from picture hangers, just use refrigerator magnets to hang pictures.
1. ??? Send us the #1 reason. If we publish yours next month, we'll give you a \$25 credit on your electric bill.

Send your suggestion to:
**Egyptian Electric Cooperative
Top Ten**

10169 Old Highway 13
Murphysboro, IL 62966

(Continued from page 16a)

elected by stockholders, they are being given the right to choose whether they want to participate in open competition or customer choice. We think that is a good idea for a couple of reasons. First off, it will give us a chance to see if it works and whether or not it is a good deal for our members. Secondly, we think we have done a pretty good job of managing our own affairs in the past and if the majority of the members think that customer choice is a good deal for the cooperative, they will make their views known to the directors and they will take appropriate action. Directors serve at the discretion of the members and will certainly respond to the wishes of the majority of the members because that is what a cooperative is all about.

Capital credits

It was also announced at the annual meeting that the Board of Directors has authorized the refunding of capital credits that were allocated on the books of this cooperative for 1977. The Board also authorized the refunding of those capital credits that were refunded to this cooperative by Southern Illinois Power Cooperative for the year 1977. Together, the two refunds total approximately \$460,000. We are in the midst of converting the software on our mainframe computer and do not know at this point how it will impact the issuing of the capital credit refund checks, but we will try to get them mailed sometime early winter.



Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them.

Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Allen, Ernest L.
Allison, James & Judy
Andrews, Charlotte J.
Auguston, Lee
Aydelott, L. Paul
Batinski, Michael C.
Bean, James R.
Beck, Loren & Linda
Beisner, Lester
Bennett, Larry G. & Kathleen
Berry, Michael D.
Bey, Calvin F.
Biesterfeld, Dennis
Big Chef Lumber
Bittle, Billy H. L.
Boone, Michael E.
Borger, Raymond & Maxine
Boswell, Marion
Boyer, Dale A.
Boyer, Ernest B.
Brown, Cherly L.
Brown, Randy R.
Bruce, Ted
Buescher, Kenneth R.
Burgess, Steven
Burse, Jeremiah
Buster, Charles
Byers, R. Harold
Carter, Karen
Chaffee, Norman
Chitty, Floyd S.
Cibock, James M.
Cissell, Allen Paul
Cochran, Michael C.
Cook, John P.
Cook, Mark Allen
Cooper, Mark
Cox, Glenn R.
Cramer, Joanne B.
Criswell, William
Crum, John P.
Currier, Jeffrey
Curtner, John L.
Dasenbrock, Carl R.
Delassus, John A.
Demarsh, Richard
Deming, Bert
Diederich, Richard M.
Dietrich, Ric
Dineen, Thomas P.
Dittamore, Joseph
Domolky, Andrea
Dorris, Don
Dorris, Jack W.
Dugas, William J.
Eaton, Richard G. & Lynn C.
Emge, Louis H.
Eovaldi, Debbi

Estes, George A.
Etchison, Don L.
Evan, Wayne
Evers, Randy
Falconer, Neil D.
Fishleder, Randy
Freeman, Norman
French, Charles
Fuca, Raymond Guy
Garcia, Raymond
Gebbia, Guy F.
Gibbs, Sherwin D.
Giovannetti, Larry
Glassman, Gary
Goldberg, E. H.
Goldstein, Edward
Gore, H. Rodgers
Grace, Charles W.
Grah, Peter C.
Gray, Laren A.
Gregg, Kevin R.
Hallquist, Robert
Hanson, Paul J.
Hapeman, Mark
Hasara, Anthony
Healy, Mary E.
Henderson, John & Sherry
Hermosa, Rita A.
Hess, David N.
Hill, David
Hite, Daniel L., Jr.
Hoffe, Elaine
Holt, Mark R.
Holt, Warren D.
Houck, Kenneth J.
Houserman, Raymond L.
Huffman, John
Hughes, Guy B.
Hunter, Patrick R.
Hutcheson, Karen
Jarrett, Lorenzo S.
Jenkins, Kati
Johnson, Gary W.
Jones, Edward
Jones, Edward D.
Kahn, Alan M.
Keene, Joannis
Kellums, Jim C.
Kendrigan, Kevin
Kepp, Warren C.
Kingery, Tendell W.
Kirchner, Larry
Klaudinyi, George R.
Klein, Terry
Kloever, & Partlow
Knope, Jimmie D.
Komoromi, Albert
Koonce, Ruby
Kuhn, Clifford

Labodie, Lawrence R.
Lamb, Gerald E.
Layman, David
Lewis, Shelby
Limpus, Ernest
Lingle, Terry
Long, Bill
Loverher, Duane
Lowtwait, Donald A.
Lunnemann, Floyd
Mabry, Richard Warren
Makins, Rees T.
Mallinsoni, Donald C.
Malone, Lou
Marathon West—
Steve Knowle
Mason, James E.
Mawdsley, Harold
May, John
McCarley, Michael S.
McCreery, George R.
McGinnis, John S.
McKay, Robert A.
McKissic, Darrel
McMillen, Greg H.
Mid States Oil Property, Inc.
Midway Equipment Co.
Mitchell, Mary Susan
Mize, Stanley A.
Morrison, James D.L. Jr.
Mumper, Laddie
Murray, Alfred
Murray, Everett
Musickl, Larry
Naas, Paula
Nawojski, Carole
Noonan, Peter J.
Norwood, Don J.
Oboyle, Michael T.
Ondriska, George
Osborn, Richard N.
Overturf, Judy
Oxford, Russell
Pace, Benjamin E.
Paluch, George
Pape, Richard
Pattberg, Howard W.
Paulsgrove, Glen
Peterson, Charles W.
Plocher, Eugene P.
Posey, Carlton
Prough, Larry
Purcell, Linda
Pursell, Perry L.
R.H.I.S. Steel Suppliers
Raines, Cheryl

Randolph, Mary
Rapp, John W.
Rector, Robert
Reed, David L.
Rice, Gordon
Rich, John J.
Ridge, Jerry
Rinella, Barbara
Rohan, Donald L.
Rolewic, Larry J.
Ross, Harold
Rothermel, Micha
Ruffino Plumbing & Heating
Sauget, Paul
Schmidt, Spencer L.
Schmitt, Landis Ray
Scott, Gregg E.
Shelton, Ronnie
Sieritis, Chris
Sikes, James B.
Skelcher, Paul
Sledge, J. A.
Smith, Ben
Staffey, James
Starrett, Gary H.
Stephens, Jonathan
Stevens, Ed
Stewart, Bruce D.
Stewart, John W.
Stocks, Steve
Stone, Alvin R.
Stone, James
Stone, William L.
Strauss, Lois
Streuter, Pat
Struss, William, Jr.
Sutton, Timothy
Swalley, Byron E.
Swick, Kevin
Taheny, John P.
Taylor, John

Thompson, Ronald D. & Leanne
Tripp, Floyd A.
True, Larry W.
Tubbs, George
Tucker, Karan
Uhren, Eddie L.
Varns, Thomas
Vaughn, Larry J.
Vieira, Jan P.
Voris, Daniel E.
Wagner, Tim
Walker, Daryl L.
Walls, David A.
Watson, Gary
Webb, Lewis
West, Michael
Westerlund, Craig
Wethington, David
White, Warren K.
Whited, Ellen
Whittington, Lionel
Wicks, James R.
Wierzba, Robert
Wietting, John
Wilczorek, Robert
Will, Jerome
Williams, Patricia
Williams, Scott E.
Willis, Harold
Withers, William
Wolfe, Pohle H.
Woolard, Douglas P.
Wright, Leonard M.
Wright, Burt L.
Wright, Wiley J.
Wright, William E.
York, Fred
Young, Sharon O.
Zaleskas, Peter
Zgniawski, Albert
Ziegler, Todd Alan

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505
Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



Rate unbundling

Unbundling of rates is a term that is increasingly being used in conjunction with discussions of what is being called retail wheeling or customer choice in the electric industry. I alluded to it in last month's column in discussing how customer choice might affect our rate structure and I am going to expand on it a little more this month. For consistency, I'm going to refer to deregulation as consumer choice.

For starters, I am going to assume that most people are confused as to just what is proposed to be deregulated and what choices there will be. What will be deregulated are the power generating plants and the high voltage transmission lines, but distribution service will not be deregulated. Under consumer choice, every consumer of electricity will continue to take delivery of that electricity from their current electric supplier over the existing distribution system. The utilities will retain their current service areas and will be obligated to provide distribution service to all consumers within that service area. In return for providing that service, the utilities will assess an appropriate charge to pay for the operation and maintenance of the distribution system.

While the consumer will not have a choice as to who delivers the electrical energy to their meter, under consumer choice legislation they will have the right to choose as to who they purchase that energy from. You, as a member of this cooperative, may decide that you can buy your electrical energy needs a little cheaper from a company in Indiana and you could opt to do that under consumer choice. The supplying company would probably have to pay this cooperative a wheeling charge to use

the lines and it would be its responsibility to dispatch your electrical needs to this system and to have enough generation on line to meet your needs at any given moment. There are technical problems associated with metering and dispatching that electrical energy that have not been addressed, but that is a topic for another day.

Under current rate structures, we recover our wholesale power costs, fixed costs and operating costs in the rate charges that we assess you each month. The charge for each kilowatt hour has these costs included in it. Most rates are designed to recover the fixed costs early, so kwh charges decline as usage increases. Under consumer choice, rates will have to change because there may not be an opportunity to recover any fixed or operating costs in the sale of energy. If you decide to buy your energy from the Indiana company, this cooperative will not be selling you any energy, so it can not recover its operating costs by marking up the wholesale energy costs. It must, therefore, recover its costs in an up front fixed charge and that is what is known as unbundling. Basically, distribution costs will be separated from generating and transmission costs and will probably be shown as such on your bill. Distribution costs may be further broken down or unbundled to separate billing or meter reading costs from the cost of operating the overhead lines and your bill could have any number of billing categories.

Since no supplier will know to whom it is going to sell energy, it appears that all consumers will have to be billed under an unbundled rate. We have not done any unbundled rate studies as yet, but I would guess that the monthly facilities charge in our residential rate will probably double or triple or more from the current \$10 charge. The energy charge will, however, be lower so if you use a fair amount of electricity, it probably will not make that much of a difference on your bill. If you currently pay around \$76 for 1,000

Continued on 16b...

Continued from 16a...

kwh's and the rate changes to a \$40 facility charge and an energy charge of 3.5 cents per kwh, the end result is about the same. However, the consumer who uses a small amount of energy is going to see his or her average costs rise considerably because of the impact of the higher facilities charge spread over few kilowatt hours. The impact will be very similar to telephone deregulation where the rise in the monthly service charge had the biggest impact on those who made few long distance telephone calls. Those who make a lot of long distance telephone calls are probably doing okay under deregulation.

At this point no state is far enough along the deregulation path to where anyone has actually had a choice of power suppliers. We therefore really do not know how this is all going to work, but a major concern of every residential consumer ought to be about what happens if the larger commercial and industrial customers leave a utility and the smaller

consumers are left to pay for the distribution system. All the talk of stranded investment is about generating plants, but the same principle could apply to the entire electrical system. Investments were made to provide service in a specific area and if some of those customers now choose to buy from someone else, should the remaining customers have to pay the entire costs? Those that argue for stranded costs maintain that investment was made on behalf of all and those that choose to leave should have to pay their fair share. I am not sure as to which side is right in this argument, but I am sure that utilities are no different from any other business in that it will go broke if it does not recover its operating costs from those it serves. Ultimately, someone has to pay for what it costs to provide the service and if the larger consumers can leave or cut a better deal, it would seem that someone else is going to have to pay more. You can draw your own conclusions as to who that might be.

Egyptian Electric goes geothermal

On Aug. 5, the Board of Directors of Egyptian Electric took a giant leap forward in energy efficiency. On that date, the Board voted to install a new geothermal heating and cooling system in the Steeleville office.

According to Manager Harry Kuhn, the decision to go geothermal was not the initial direction the Cooperative was considering when the decision to replace the 40-year-old boiler was made in April. Initial plans called for replacing the fuel oil boiler with a natural gas boiler. After further consideration, it was discovered that the boiler provided heat for only a third of the building. Installing a new boiler would do nothing about the remainder of the aged and piecemeal heating and cooling system that contained some equipment over 25 years old. At this point, it was decided to consider alternatives that would provide a modern, energy efficient heating and cooling system for the entire building.

Initial discussions about a geothermal heating and cooling system centered around the typical concern - installation costs. When the bid was received from the geothermal contractor, management realized the direction the Cooperative should go. The bid to replace the boiler alone was more than half the cost to replace the

entire current heating and cooling system with a geothermal system.

Manager Kuhn is confident that the geothermal system will provide a comfortable and efficient environment for employees and visitors to the Cooperative office. In the past, the heat for the building has been provided by a combination of sources: fuel oil boiler, electric baseboard, electric furnace, electric ceiling panels and air-to-air heat pumps. With the new system, the entire office portion of the building will be heated and cooled by geothermal heat pumps while the warehouse and mechanic shop will be heated by quick recovery gas unit heaters.

Geothermal heat pumps use a closed loop system of pipes in the ground to provide heating and cooling. Egyptian Electric has decided to use a vertical loop, placing the pipes in 150 feet deep, 4-inch holes bored on the east and west sides of the building. If you have been curious as to what the large drilling rig has been doing at the Steeleville office, they have been installing the loop portion of the system for the Cooperative. Plans called for the driller to begin installation of the loop system around the middle of September. The entire system should be finished by early October.

by Bryce Cramer

Last month we discussed how home builders search for new construction methods and techniques to build better homes and create price stability in the construction industry. However, we found that one of these alternatives, steel framing, has some advantages over standard wood framing, but has a poor thermal performance and may not be a viable alternative due to its increased energy loss. Just because one new construction technique may not prove beneficial does not mean that all new methods are the same. This month we will look at one such method, insulated concrete forms.

Most poured concrete walls use reusable forms, either steel or aluminum frames with plywood. Although these forms are reusable, they are expensive to purchase and the plywood needs to be replaced periodically. They are heavy and bulky and as a petroleum based release agent must be sprayed on the face of the plywood to keep it from sticking to the concrete, they are dirty and nasty to handle. I can remember the crew that poured my basement six years ago and how tired and dirty they were at the end of each day. I was thankful that I had contracted out this part of the construction of my home to someone else. Insulated foam concrete forms eliminate the filth and weight problems of pouring concrete.

Most insulated concrete forms are made of CFC and HCFC free (these components of some foams damage the atmosphere) expanded polystyrene (EPS) and are designed to stay in place when the job is completed. The high R-value of the EPS creates a concrete

wall with an R-value approaching R-20 compared to an uninsulated concrete wall of R-.88. Most basement walls have to be insulated later by adding insulation to their interior surfaces. Most home owners do not finish their basements right away but rather wait several years. During the time that the concrete walls are uninsulated, the homeowner has a cold basement and pays higher heating bills. Concrete walls poured with these new forms give the homeowner a warmer basement and lower utility bills right away even if they do not finish the interior of the basement until later.

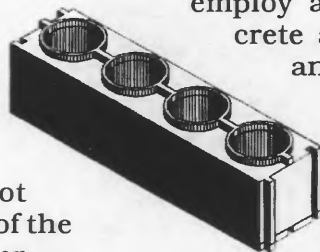
Insulated concrete forms generally fall into one of two types, rigid sheets of EPS held in place by ties to make a form for the concrete wall, or stackable blocks of EPS like Legos that have holes that allow the concrete to flow through them.

Pouring a wall with the first type is very similar to current methods. Instead of the heavy frames with plywood faces, 1' X 8' sheets of 2" EPS are laid horizontally. Plastic ties are placed every foot to hold the foam sheets in place and to keep the concrete from pushing them apart. The ties have a diamond face that is exposed on the outside of each sheet. This supports the sheets and can be used later to screw sheetrock, paneling or whatever the homeowner decides to finish the walls with. Some manufacturers incorporate the ties into the sheets during the manufacturing process, eliminating even more field work. If using this type, look for a manufacturer that uses a plas-

tic tie instead of metal. Metal can corrode and rust, creating a path for ground water to follow through the wall.

The second type of insulated form may remind you of your child's building blocks. This type does not use sheets of foam but rather blocks (generally 1' X 4' X 8") of EPS that have 5" vertical holes in them. The holes are 8" on center and are lined up when the blocks are stacked.

This type of wall does not employ a solid wall of concrete as current methods and the other styles do, but rather a post and beam style of building. When pouring a basement wall below grade that will be



supporting conventional wood framing above it, all vertical holes and the horizontal holes at the base, the mid-point and the top are allowed to fill with concrete. The pillars and beams have reinforcing steel in them. If the wall is above grade and will not be supporting a structure above it, some of the vertical holes are plugged to prevent the concrete from filling all of them. This method takes advantage of the strength of concrete and lets the contractor adjust the amount of concrete used to fit the requirement of the wall.

Although the forms are rather expensive (\$7.50 to \$9.00 per block), the reduced concrete and savings in labor and bracing make them a viable alternative to current methods of pouring concrete. As they are insulated, the homeowner does not have to insulate the wall later when he finishes it yet he receives the benefit of reduced energy costs right away.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Allen, James Melvin	Goodwin, Roger	Millman, William	Shute, Ben
Anderson, James E.	Graff, Lyndal R.	Miranti, Anthony G.	Silbe, Marty
Anderson, Kenneth L.	Gray, Barbara	Mitchell, Jeffrey	Slaubuch, Russel
Arling, Barbara	Grove, Michael	Moore, James A.	Smith, Gary E.
Arndt, Phillip J.	Harmon, Freddie B.	Moore, Michael R.	St. Pierre, Duane
Arnold, Marjorie	Harper, Roger K., Jr.	Morefield, Paul	Stahlhut, Linda L.
Auld, Garret B.	Heisner, Donald R.	Morgan, Michael	Stearns, Bob
Baughman, Jon C.	Held, Stephen L.	Mullins, Terry D.	Stevens, Harry
Belbos, Joe	Helleny, Taffie	Murrie, James A.	Stoedter, Robert
Bell, Stephen R.	Hiller, Jean	Nawa, Richard	Streid, Tim E.
Benedetto, George F., Jr.	Holder, Laura M.	Nelson, Kathy	Strzepek, Stephen
Biery, William L.	Houlihan, Tom	Niskala, George R.	Sutton, Michael A.
Biwer, David	Householder, James	Nitzsche, Glenn	Tepen, Roger H.
Bond, Charles	Hummel, Charles	Ohlau, Melvin M.	Testa, Daniel W.
Bradley, Martyn	Isom, William	Opyt, Kirk M.	Thomas, Arthur W.
Brady, Williams D.	Jackson, Steve	Orick, Lloyd A.	Tickner, Scott
Brute, Joseph	Jacobsen, Bruce A.	Parker, Benny	Todd, Carl D.
Burns, Lyle L.	Jarvis, Donald R.	Parker, Irene G.	Tucker, Gene
Burns, Robert F.	Johnson, James A.	Perkins, Gregory	Waespe, Bruce
Butts, Harlan	Jones, John D.	Phillips, David A.	Watkins, Allan
Buys, George M.	Jones, Linda	Pierce, Glenn R., Jr.	Weaver, Donald
Byrd, Morris P.	Keck, David A.	Pilcher, David C.	Webb, Gary L.
Calderala, Robert	King, Eric C.	Polechla, Ginny	Weimer, George A.
Call, Gerald	Kirby, James	Porter, Loraine M.	Weiser, Susan B.
Carey, Joan	Knapp, Ted A.	Price, Robert G.	Welch, Sue
Cast, Donald R.	Koc, Joseph	Quality Mobile Homes	Wells, Stephen
Christiansen, Martin C.	Kother, Don	Raines, Brenda	Wemhever, Carey
Cochran, Don	Kressenberg, Carolyn	Reed, Margo Hock	Wheatley, Robert
Coffey, Franklin L.	Kruger, Kathleen	Reeves, G. P.	Whitehead, Robert E.
Connors, Kevin W.	Kuriger, Keith	Reinhardt, Barbara	Whiteside, Derrel
Copple, Vernon R.	L & T Construction	Reynold, Harry L.	Whiting, James R.
Courier, Andrea	Lachnit, Betty	Reynolds, Marion J.	Willauer, Kelly
Covino, James A.	Landberg, Judy	Reynolds, Mary A.	Williams, Mary J.
Cox, Kenneth W.	Law, Brenda	Reynolds, Warren	Wilma & Sherry's Grocery
Cox, Warner F.	Levine, Richard N.	Rhodes, Marilyn	Wilson, Clois
Cremeens, Steven E.	Lewis, Judith B.	Roark, John E.	Wilson, William S.
Deneal, Gerald L.	Leyden, Tom	Roberts, Paul M.	Winger, Dale
Denoms, Sam	Loughnane, John P.	Robinson, Kenneth	Wischhover, Jeanne
Dreher, Lisbeth A.	Lucas, Thomas G.	Rodriquez, Arthur	Wolcott, Richard D.
Drews, Dana A.	March, Karen	Romanofsky, Gregory	Wright, Gary L.
Elle, Thomas	Martin, Gerald	Ruffing, Barbara K.	Wyatt, Steven L.
Farriss, Suzanne	Matthey, Robert	Ruginis, Arlene Rose	Yates, Mike
Fernandez, Adrienne L.	McClintock, William J.	Rupprecht, Ulrich	Yergin, Michael
Fiftal, David A.	McCormack, Paul D.	S.J. Grove Construction Co.	York, Fred
Fornieris, John P.	McDowell, Dennis	Salmon, Scott	Yow, Priscilla
Forsythe, James R.	McIntosh, Cheryl	Schader, David E.	Zattich, Frank R., III
Fricke, William	McKinnies, Paula	Schmidt, Donald R.	Zeigler, John
Fushi, Linda	McPherson, Mark	Searle, James	Ziemer, Stephen
Gaither, Stephen	Meentemeyer, Vernon	Serrano, Rose	Zilske, Gerard A.
Gillison, James T.	Meyer, Melvin B.	Shadi, William	Zimmerman, Ken
Givens, Barbara Ann	Miller, Rodger D.	Shoemaker, Richard D.	Zorko, Michael J.

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.

From the Manager's Desk

by Harry Kuhn



Customer choice

Last month I explained that under customer choice legislation, you would have a choice as to which utility you buy your energy from, but no matter where you purchased that energy, this cooperative would still be the utility that delivered the energy to your meter. It would still be our responsibility to maintain the system, build to new customers, restore service after outages and make connects and disconnects. While we would hope to also do the meter reading and billing, some states are considering opening up those services to customer choice, so it is possible that someday someone else could be providing those services to you.

Since you may have a choice of energy suppliers in a few years, I am sure some of you are wondering just how it will work. At this point no one is really sure how consumer choice will work on a large scale, but I will give you my interpretation as how it is supposed to work. Basically, the choice part will be similar to the telephone industry where you have a choice of long distance suppliers. You will choose an energy supplier and after some specified date that supplier will have the responsibility of supplying your energy needs. The local utility will deliver the energy and charge a fee for its services. It may also bill for the energy on behalf of the company supplying the energy or the supplying company may send you a separate bill, depending on how the actual rules and regulations are written. Aside from the possibility of a lot of annoying phone calls from suppliers that want to sell you energy, this part of the process is fairly simple and straightforward.

While the signing up for an alternate energy supplier is not complicated, the delivering of the energy is another matter. The telephone compa-

nies simply sell you time on their lines and if the line is overloaded, you get a busy signal. Their central computers know when you dial a call and to where it is going, so it is a simple matter to do the billing and a flip of a switch will route you from one long distance carrier to another. As soon as that switch is flipped, the appropriate carrier handles the call. Delivering electrical energy is another matter because when the energy leaves the generating plant, we do not know who is using electricity and in what amount and therein lies the major problem with customer choice in the electrical industry.

Every utility supplying electricity to a customer has an obligation to have enough generating capacity on line at any given moment to serve that customer's needs. That sounds simple enough, but how will this cooperative or any other power supplier know what you are doing in your home at any given moment? As an example, I have a heat pump in my home that during normal operations is probably a 3,000 watt load. However, when it is very cold, the backup heater comes on line and the load increases to 10,000 watts. I also have a water heater that has a 4,000 watt element and a clothes dryer that has a 4,000 watt element. So, you can readily see that for the major appliances alone, the peak electrical load in our home could range from zero to 18,000 watts and it is my power supplier's responsibility to match my load with generation capacity.

How do we match your load now? Fairly easily. Since we serve all of our load off our own system, we just follow the load at the power plant and set the generation output accordingly. The problem with customer choice is that utilities will be trying to serve load that is off their system and they will not know what the load is that they have to match with generation. When you ask those that are pushing for customer choice as to how they are going to handle this, they reply that they are going to install real time metering. That means every home would have a meter that continuously monitors the load and reports back to a central computer over a leased phone line. Can you visualize the investment in computer capacity and telephone lines and me-

tering that it would take to make this system a reality? While it may be technically possible, I question where the savings to the customer are going to be if we install and maintain such a complicated system. Such a system may be feasible for large industrial loads, but I am not convinced that it will be done for residential loads anytime soon.

Since no state has tried customer choice except for pilot projects, it's hard to predict what

will happen. I will predict, however, that if real time meters are not installed on loads that are served by a utility or power marketer off their own system, you are going to see a lot of arguments between utilities as to who did or did not have the required generation on line. Having enough generation on line is also a reliability concern and I will talk about those concerns next month.



Office closing

Our offices will be closed on Tuesday, Nov. 11, in observance of Veterans Day. We'll also be closed on Thursday and Friday, Nov. 27 and 28, for the Thanksgiving holidays.

Doug Rye coming to local air waves

According to Doug Apple with WXAN Radio Station, FM 103.9, Doug Rye's nationally syndicated Saturday morning talk show, *Home Remedies*, will be aired in the near future by the radio station.

Many of you may remember Mr. Rye from a past workshop sponsored by Egyptian Electric. Doug is a licensed architect and is probably the best known residential energy consultant in the nation. He conducts over 150 workshops and seminars each year on residential energy conservation. Not only will Doug teach you about energy conservation, he will keep you entertained in the process. In fact, Doug is often referred to as the "King of Caulk and Talk".

For more information as to the exact air times and beginning date, contact the Egyptian Electric office or Radio Station WXAN, Ava.

Top ten winner

The winners of the "number one reason contest" from the *Energy Page top ten reasons to use metal studs* which appeared in the September issue are Marlin, Teresa and James Wilson of Sparta. They reported that they had fun coming up with their answer.

According to them, the number one reason to use metal studs is:

"If your home is struck by lightning, you will save on your power bills."

Congratulations, Marlin, Teresa and James.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505
Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**

The Energy Page

Last month we reported that Egyptian Electric would be installing a geothermal heat pump system in the Steeleville office. As this article is being written (Sept. 23), the installation is underway.

The first task was to install the vertical bore holes for the loop. This was done by drilling one 4" hole, 140 feet deep per ton of equipment and then shoving two pieces of pipe down the holes. The pipes are connected at the bottom with a u-fitting. The pipes will be connected four feet below the ground by a header assembly so that they are in parallel with each other. Each geothermal unit in the building will have its own loop system.

Once the piping is installed underground, it must be brought into the building. As there will be six separate units in the building, six separate loops will be brought into the building at various points.

Once the loops are installed into the building, the heating and cooling contractor will take over. He will install the new geothermal units and connect them to the loop system. Plans call for this work to begin by Oct. 13. (By the time you read this article, the installation should be near completion).

When the installation is complete, the geo-

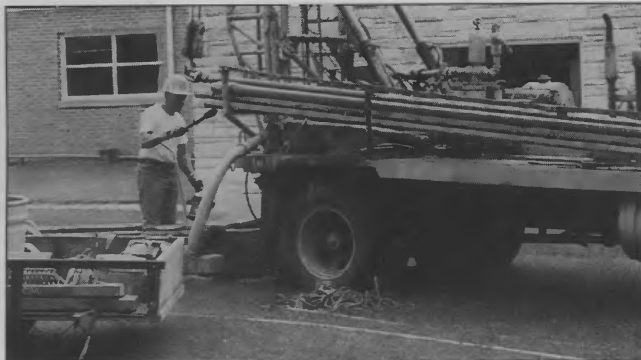
thermal units will be able to heat the building by taking heat out of the ground in the winter and cool the building in the summer by putting the heat into the ground. Because the ground temperature is 57° year round, the geothermal system is a very comfortable and efficient heating and cooling system.

If you are in the Steeleville office or just in the area, stop in and ask to see the system. I am sure any of our employees will be glad to show you the equipment and how it works.



One of the loop installers prepares the header assembly that will tie the loops together.

One of the units to be replaced. Our best guess is that it is over 30 years old and still working. Maybe we should put it in a museum?



Workers prepare to drill the four-inch, uncased holes for the geopipe.

One of the workers rolls out the 3/4" pipe in preparation to placing it in the vertical hole.



A trench is dug from the building to the vertical bores to bring the pipes into the building.

Do you know these people?

General retirements of capital credits have been issued for the years 1953-1976. The following people had service with Egyptian Electric during those years and have left our service lines. We have no current address for them. Lists

will be printed in the coming months in order to locate these members. If you have information pertaining to these people, or their heirs, have them contact Diane at (618) 965-3434.

Adams, Carl S.
Adams, Charles D.
Alexander, Peter
Anderson, Joyce
Andrewson, Edward C.
Arnold, Morris G.
Atkins, Tom
Augustine, Mary Sue
Auguton, Dale K.
Baerga, Manuel
Baird, P. Bradley
Baiter, Gerald
Barry, Margaret L.
Bateman, Lane
Benefield, Paul
Berry, Malcolm E., Jr.
Bierman, David
Boehne, Susan E.
Bostaph, Samuel H.
Brewer, Michael
Briggs, Darrell
Brinkman, Gary E.
Brinkman, Lois
Brooks, Carol
Brost, N. Paul
Brouillette, Suzie
Bruring, Daniel
Buckles, Garth P.
Bullard, Robert K.
Bunch, James R.
Buser, Stephen
Carter, James L.
Cernosia, Arthur W., Jr.
Chandler, Deborah
Cheek, Mike
Conrad, Ronald D.
Cooper, Berwyn
Cooper, Glenn A.
Courter, Eric S.
Cowdery, Marcia
Crandell, Dean H.
Crisswell, Randall
Cronk, Ronald G.
Cruce, Donald G.
Davis, George & Margery
Dempsey, Michael
Dent, Ron
Devons, Lawrence
Dickinson, William A.
Dodgion, Glenn
Donlevy, Frank M.
Dremann, Michale
Duncan, Douglas D.
Duncan, Lee A.
Dura-Plex Industries, Inc.
Eagleson, Lawrence, Jr.
Edler, James Mason
Eustice, Bruce O.
Fair, Timm L.
Feltmeyer, Charles
Ferratier, Louis
Fiorenzi, Donovan D.
Flisher, Charlene
Fox, Bill
Frank, Alan
Frank, Roy R., Jr.
Franklin, Shawn
Frazier, Paris L.
Gamboa, Raymond
Gardner, Thomas B.
Gates, James D.
Gaubatz, Mike
Gerlash, Gib
Gertchen, Glen
Gladden, Steve
Glenn, Bernadine

Glines, Thomas
Glover, Greg
Gordon, Myrtle
Graff, Sherman
Grammer, William L.
Graney, Michael D.
Graves, Sharon
Greenfield, Kenneth
Greer, Linda Parker
Grotefendt, Nancy
Grudinski, Douglas J.
Grwszczyk, Ben
Guebert, Richard L. & Nancy
Haddock, Terry
Hager, Scott
Hale, Darrel
Hale, Eric
Hall, Lawrence C.
Harsey Mine Service
Hazen, Joseph E.
Heider, Robert
Heidinger, Roy
Held, Bill H.
Henard, Danny
Henderson, James M.
Henderson, Robert
Henderson, Terry & Nancy
Henninger, Patricia N.
Herron, Ernest
Hetzal, James C.
Higgins, Kenneth
High, Bob
Hilst, James
Hitt, Jon
Holmes, Phillip E.
Hopkins, Delmar
Hrvatina, Jack
Hubbard, Gene C.
Hurlbert, Michele
James, Phillip
Jams, Fred
Jenner, Lorie
Johnson, Dennis
Johnson, Dianne
Johnson, Glenda
Johnson, Paul
Johnston, Bonita
Joiner, Elisha
Joynor, Victor
Kaid, Terry C.
Kaiser, Roger P.
Kaplan, Donald
Kasik, Mark
Kazemek, Cheryl J.
Keegan, Ken
Keigher, William
Keith, Jon T.
Keller, Clyde F., Jr.
Kelley, Lillian
Kelly, John M.
Kempfer, Clarence
Kennedy, Jerry
Kent, Daniel W.
Kielar, Timothy
King, Royal R.
Kinkaid Development Assn.
Knapp, Edward
Knickerbocker, Bea
Kohl, Sally
Kovacevich, Richard
Kreke, Dennis R.
Kurz, Donald R.
Lacy, David L.
Lambert, Deborah
Lanuti, William
Larrain, Timothy

Larson, Laurie
Lee, Rex
Lee, Terry B.
Lemmond, Bill
Lerch, Robert L.
Lessiack, Lorin
Lester, William M.
Lewis, David K.
Light, Doris
Lipman, Linda G.
Livingston, Robert
Llano, Frank
Lockard, Terry
Long, David
M & L Bait Tackel
Macenas, Christian
Maley, Robert J.
Maloney, John E.
Manley, Daniel
Martins, Paul D.
Mattingly, Charles R. & Connie
McCalla, Michael
McDonald, Robert Lee
McDonnough, Steven W.
McPherson, Charles
McQuarrie, Keith
McVay, Samuel E.
McVey, Diane J.
Melleite, Paul B.
Mensch, William E.
Mercer, John R.
Meyer, John L.
Miller, Donald & Deborah
Milligan, Richard A.
Moburg, Barbara
Moore, Jerry L.
Moreland, James E.
Moro, Danny
Moss, A., William
Mueller, Gregory E.
Mushrush, Carroll
Myers, Larry
Nance, Peggy
Neathery, Darrel
Nesbitt, Michael
Newlin, Deanna M.
Nielson, Janet L.
Nielson, Mary
North, Thomas H.
O'Connor, Terrence P.
OHara, Sean J.
Oliver, William & Jamie
Ozment, Hubert R.
Perkins, John R.
Petit, John
Phillips, Mary S.
Pickett, Sharon R.
Pieschel, Ann
Polle, Doreen
R-B Development Co.
Radtko, William
Ragland, Dale R.
Reed, Ronald D.
Reynolds, Donald
Reynolds, Marion J.
Richardson, Benjamin C.
Richardson, Roy William
Rogers, Gerald R.
Rotramel, Debbie
Ruddell, Steven
Rutledge, Thomas
Saccone, Glenn
Saunders, Joan D.
Schwindamon, Sandra
Scronce, Joe
Seidel, Richard A.

Senkavich, Mary
Senn, Steve
Shaw, Phillip C.
Silvey, Norman P., Sr.
Singer, Robert
Sinon, Richard E.
Sirt, Steven
Slivinski, Joseph A.
Sloughter, Charles
Smith, Boby G.
Smith, James R.
Smith, Michael Loren
Smith, Michael W.
Soloman, Ted
Stearns, Diane
Stemmler, Charles D., Jr.
Stone, Franklin D.
Stowers, Tommy E.
Sumner, Stephen J.
Svoboda, John C.
Tate, Dick
Tengren, Steve
Theigvogt, Charles E.
Thomas, Gloria
Thompson, Ronald G.
Thompson, Thomas
Thornton, Jack H.
Tilden, Jeffrey
Torrance, W. S., Jr.
Toth, John
Travelstead, Mike
Treadman, Jack E.
Treston, Jeffrey
Troutt, Steven A.
Truitt, Gail
Trujillo, James
Trust, John L.
Turin, E. Janice
Tynski, Roberta M.
Valos, John
Vickers, Rick A.
Waite, Loren H., Jr.
Walter, Earl J.
Weaver, Douglas W.
Webb, Linda
White, Gary & Nancy
White, Gary A. & Judy
White, George M. & Nancy
Wilken, Kathleen
Williams, Dolores J.
Williams, Eldon
Williamson, James E.
Williamson, Lisa
Wimp, Robert L.
Winter, Albert F.
Woehlke, Paula
Wright, Scott
Yancey, Patricia
Young, Larry G.
Zeuschel, Donald W.
Zschau, Paul

If you contact Diane about a deceased member who received electric service from our cooperative after 1976, additional capital credits may be available for refund as a capital credit estate refund. The date of death is needed to process these funds. Providing this information when you call will expedite processing the refund. Thank you for your continued cooperation in finding these members.

Egyptian Messenger

The Egyptian Messenger, published by the Egyptian Electric Cooperative Association, with offices in Steeleville and Murphysboro, providing electric service to Southern Illinois.



Seasons Greetings

Directors

W. Dean Bame
William Broom, Attorney
Harold I. Dycus

Archie Hamilton
Paul L. Hicks
Kevin Liefer
Raymond C. Mulholland

Paul R. Pyatt
John E. Steele
Edward C. Timpner

Employees

Harry Kuhn, Gen. Mgr.
Scot Alms
Kevin Barlow
Dana Bayer
Shelia Becker
Donald Bollman
Michael Chamness
Bryce Cramer
Darwin Dailey
Glen Degenhardt
Bryan Diercks
John Donovan
Karen Edmonds
Tim Edmonds
Michael Ellis

Edie Ernsting
Thomas Ernsting
Linda Florreich
James Grothaus
Charles Guetersloh
Larry Hartman
Terry Hope
Lester James
Brian Johnson
William Korando
Robert Kroeger
Wayne Luedeman
Diane Maxwell
Richard McGill
Tammy Mikulay
Arthur Pontow
Robert Poole

Norman Quillman
Brenda Rapp
Harold Shields
Aaron Schuster
David Sickmeyer
JoAnn Simmons
Ronald Simpkins
James Smith
Richard Stein
Roger Stuva
Gerald Thies
Kay Taylor
Linda Williamson
Judith Wolters

From the Manager's Desk

by Harry Kuhn



Winter bills

By the time you read this, we should be started into the colder time of the year and heating bills are going to increase. If you have difficulty paying the higher bills, hopefully you have heeded my earlier advice to sign up for the leveled payment plan. If you did not and are unable to pay a bill in full, please do not decide to pay nothing at all and ignore our notices in the hope that nothing will happen. If we do not receive payment and no attempt has been made to contact the billing department, we can only assume that a member either has no intention of paying or has moved out and we will take action to disconnect the service.

There is some funding available for assisting low income families in the payment of their utility bills, but the money usually runs out before the winter is over. The best advice I can give anyone that is eligible for that type of assistance is to apply early and do not wait until our serviceman is at the door before inquiring as to whether assistance is available. Our policy is that once the serviceman is dispatched, he is to disconnect the service and any arrangement for reconnection has to be made with the billing department. Thus, there is no negotiating with the serviceman for additional time and every effort should be made to insure that the serviceman does not have to be dispatched in the first place.

New billing system

We are converting all of our computer programs over to new software and will plan to go live with billing in January. Those of you who are billed will not see much difference, but there will be some changes for those of you who are self billed. The biggest change will be that for those self-billed accounts that pay late, an estimated bill will be prepared and sent. Payment will then have to be for the estimated amount and not for what the meter might show. Any difference between the estimated meter reading and the actual reading at the time the bill is sent will wash out the next month when an actual reading is sent in on time. Sending out estimated bills will allow us to close a month out on a timely basis and insure that a bill is set up for each month,

regardless of when it is paid. The way for any self-billed account to avoid an estimated bill is, of course, to submit a payment before the due date.

Retail wheeling — customer choice

As of the writing of this article, the Illinois Senate has passed a retail wheeling bill. It differs somewhat from the version passed by the House, but it is expected that a bill will be agreed to by both chambers and it will be signed by the governor. The bill is lengthy and complicated, but the language as it pertains to cooperatives and municipal systems is the same in both versions. Basically, electric cooperatives and municipal systems are excluded from the bill, but have the right to "opt-in" as an alternative energy supplier. If a cooperative opts-in as an alternative energy supplier and wants to serve customers that are not on its system, it then opens up its own system for other energy suppliers to serve its members. Since cooperatives and municipals are directly controlled by their members or customers through elected boards and aldermen, they are given the right to decide for themselves as to what is best for them. It will be several years before residential customers have a choice as to where they purchase their actual energy needs. In the meantime, if the members of this cooperative decide that retail wheeling is a good deal for them, they need to make their wishes known to their elected board members and this cooperative will "opt-in." If, on the other hand, retail wheeling is nothing more than a complicated way to raise or lower everyone's rate to a regional or national average, the members of the cooperative may decide they want no part of it. It is going to be interesting and we will be closely watching what the experience is in other states that are a year or two ahead of Illinois in this process.

Office closing

Early closings

Our offices will close at
2 p.m. on Wednesday,
Dec. 24, Christmas Eve,
and Wednesday,
Dec. 31, New Year's Eve.

Our offices will be closed on
Thursday, Dec. 25,
for Christmas Day
and Thursday, Jan. 1
for New Year's Day.

The Energy Page

By Bryce Cramer

It's 6 a.m. Monday morning after a long weekend of leaf raking and fall yard work. As the shrill blare of the alarm drives the last remnants of sleep from your mind, you roll to a sitting position at the side of the bed. As you stretch the soreness from your tired body, thoughts of a fresh cup of coffee become your goal for the moment. You stumble down the hall, grinding the sand from your eyes, and notice that the sun is beginning to rise outside. "It sure would be invigorating to have some of that daylight in here," you say quietly to yourself. But, not quite able to master the skills of carpentry, you know there is no way to install a skylight yourself. And with all of the obstacles in your attic, there isn't even a way to frame a skylight box from the ceiling to the roof. Besides, most skylights are not very energy efficient. So, giving up on the idea of drinking your morning coffee in a bright, sunlit kitchen, you drink your java like you always do, hoping that it will wake you up and bring some sunshine into your life, knowing that it won't.

But now, thanks to the advent of tubular skylights, you can have all of the sunshine you want in nearly any room. And chances are that if you have any carpentry or home improvement skills at all, you can do the job yourself in two or three hours.

Tubular skylights consist of a clear dome affixed to a metal flashing that goes on the roof. This is where the light rays are captured. Because a semi-sphere is used, light can strike from nearly any angle and be transmitted indoors. As normal skylights are flat or only slightly domed, they must face the direction of the sun to really be of much value.

The tube is the essential portion of the tubular skylight. Depending on the manufacturer, there are several methods used, but all use a highly reflective coating on the inside of the tube. Some, as shown in the diagram, are made with rigid tubes. An adjustable ring allows the tube to be used with different ceiling and roof pitches. Other manufacturers use flexible tubes that look much like the spiral duct used in many homes. Because it is flexible, it can be bent around obstacles that would normally prevent the in-

stallation of a skylight.

Inside the home, a diffuser lens softens the light and diffuses it throughout the room. Some manufacturers have a thermo-pane lens as an option that makes the unit even more energy efficient.

To install a tubular skylight, first cut the proper sized hole in the ceiling and roof. Then, install the dome and flashing from the outside of the roof. You will want to follow the manufacturer's instructions for installation of the flashing to ensure that you have no leaks in the roof. Next, connect the light tube from inside the attic to the under side of the dome and flashing, passing the bottom of the tube through the hole in the ceiling. While you are in the attic, you may want to insulate the tube for even greater energy efficiency. A water heater jacket will do a nice job. After cutting the tube to the proper length, attach the diffuser lens and trim ring to the tube. Finally, step back and enjoy the natural light radiating into the room.

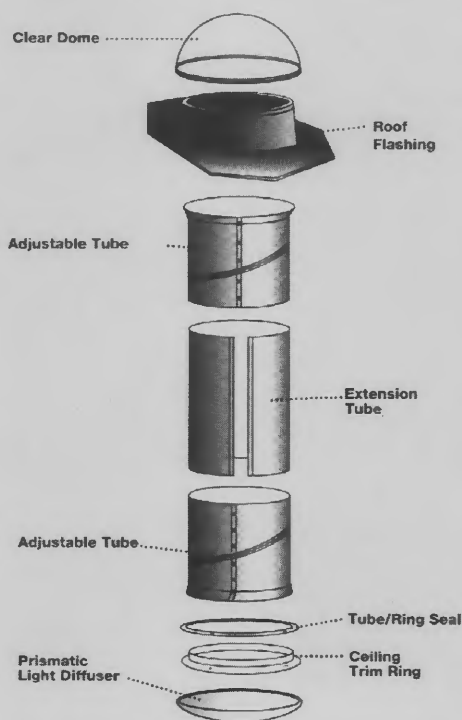
Depending on the size room you want to brighten up, tubular skylights come in different sizes, from 10" to 22". Prices for the different tubular skylights can range from \$230 to \$400. In comparison, a 21" by 27" flat skylight can be purchased for \$170.

Although tubular skylights may cost more, costs to install them are just the opposite.

Whereas the flat skylight will probably cost upwards of \$500 to install, you should be able to have a tubular skylight installed for \$50 to \$100. And, you can enjoy the benefits of the tubular skylight sooner and with less mess.

For businesses with warehouses or mechanic shops, tubular skylights can lower day time lighting costs. In addition, as the tubular skylights bring in full spectrum lighting, colors are truer and brighter. And employees will have an overall feeling of well-being with the brighter atmosphere.

The next time you drag yourself out of bed and wish you had some sunlight to lighten your day, remember that now there is a way. Just call your local building center and ask for a tubular skylight. The following morning you will be glad you did.



IEC Memorial Scholarship Fund

Illinois electric cooperatives have established a memorial scholarship fund whereby we can contribute memorials in honor of deceased members of the cooperative family. The IEC Memorial Scholarship Fund is designed to provide financial assistance to deserving students in the "electric cooperative family." One scholarship in the amount of \$1,000 will be awarded to a son or daughter of an Illinois electric cooperative member/consumer. The applicant must be a high school senior who is planning to enroll in a full-time (at least 12 hours) undergraduate course of study at an accredited, two-year or four-year college, university, or vocational/technical school in Illinois. The scholarship must be used for educational costs, and the student must enter college within a year from the time the scholarship is issued.

Scholarships are awarded based on grade point average, college entrance test scores, work

and volunteer experience, participation in school and community activities, biographical statement and knowledge of electric cooperatives, as demonstrated by a short essay. An IEC Memorial Scholarship Committee will review all applications received from member-cooperatives and select semi-finalists. A Northern Illinois University (NIU) Scholarship Selection Committee will then select the scholarship winner based on the criteria supplied by our state association.

To apply, a student must meet the required criteria and complete a scholarship application available from the high school guidance counselor or from Egyptian Electric's Steeleville office. Each applicant is responsible for submitting all information required to apply for a scholarship and for returning the application to Egyptian Electric by Jan. 1, 1998. For additional information, contact Brenda Rapp at the Steeleville office.



"Could you use \$1,000 for college?"



Light the holidays safely



For the next few weeks you'll probably be busily decorating for the holiday season. Here are a few ideas that can make this festive time safe for your family.

- Before decorating the tree check your strings of lights for cracked or frayed cords, exposed wires and broken sockets. Throw away faulty equipment.
- Use only strings of lights listed by the Underwriters Laboratory or the Canadian Standards Association.
- Don't leave any light sockets empty. Small children may put their fingers in a socket and receive a potentially fatal shock.
- Always disconnect strings of lights before working on them.
- Be sure to replace burned-out miniature bulbs with bulbs designed for the same voltage. They all look the same, but read the packaging carefully!
- For decorating outside, use lights that are designed for outdoor use.
- Use insulated staples to fasten the strings to the house, etc. Never drive a nail through the insulation of a wire.
- Never decorate a metallic tree with electric lights. Damaged wire insulation could put an electric charge on the entire tree.

What to do if the power goes off

We offer these suggestions:

1. Check your main fuses or circuit breakers.
2. Check your meter pole. If you have breakers, make sure they are in the "on" position.
3. If you still have no power, check with your neighbors to see if they have power.
4. **During office hours:** (8 a.m.-4 p.m., Monday through Friday) **call the office number nearest**

you: Steeleville 965-3434 or Murphysboro 684-2143.

After office hours: — Call 1-800-606-1505

Someone is always on duty to take emergency calls after hours.

5. **Please give your map, section and house (or locat.) number as found on your billing statement.**