

A335.8
R 88
Cope

Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

MARCH

1960



NEW MOVIE: **THE REA STORY**

Page 3.



A Message from the

ADMINISTRATOR

In a *Rural Lines* editorial last July, I suggested that borrowers do things to emphasize the local characteristics of our programs. I suggested that they make their own names more familiar to members and other persons by, for example, answering the telephone "Farmers Electric Cooperative" instead of "REA".

Now that I am recommending that co-ops find use for REA's official 25th anniversary symbol, which incorporates the familiar REA initials, several people are wondering if I have changed my mind since last summer.

The answer is that each cooperative has two stories to tell on REA's 25th birthday. One is the story of its own organization: its name, its unique history, its pioneers. The other is the story of REA—the national story. To millions of people, REA means more than an agency in Washington. It stands for a great national movement of rural people, united in their determination and supported by the Congress to secure electric power for themselves and their neighbors.

I have never advocated nor shall I ever advocate abandonment of the REA insignia as a symbol of one of the great economic and social accomplishments of the 20th Century.

We risk confusing the public if we tell only half the story of rural electrification. All of us should seize the opportunity presented by our anniversary on May 11 to tell both our stories as clearly as possible: the local story, symbolized by the name of your cooperative, and the national story, symbolized by REA's 25th anniversary emblem.

Rural Lines

David G. Samuel

Administrator.

John H. Howard, editor. Contributors to this issue: David Askegaard, Charles R. Ballard, Raymond Forkner, Robert Cox, Hubert Kelley, Jr., Bernard Krug, Louisan Mamer, Raymond Lohsl, Virgil Hassler.

Cover Page: The REA Story movie camera crew on location in Montana.

See A Movie

THE



STORY



A color movie, "The R E A Story," will be released in May, timed to help in commemorating the 25th anniversary of the rural electrification program. This 27½ minute film graphically illustrates the theme, "25 Years of Progress."

The movie was filmed to show how a rural electric system develops and how the REA program has benefitted rural America by bringing electricity to it, giving the farmer a helping hand and making country living more enjoyable. It will help rural electric systems tell the story to their consumers. Since it would have been a big undertaking for any one system, REA produced the film to make it available to all borrowers and others interested in showing it. It is suitable for TV and similar uses.

Some time during the Silver Anniversary year, you will want to show this movie to your consumers. It will give them a better understanding of the part rural electrification plays in their

It was no wonder they called her mother's irons "sad irons" (above), said Sara Lee Pruitt (below), Georgia farm woman in the REA Story.



Ma Pruitt,
Gary, and
Sara Lee
as they
first see
the magic
of electric
lights.




With an electric dishwasher, Sara Lee's young niece thinks housework is fun.

lives. They will share the experiences of people much like themselves, as each role is representative of the many individuals who helped rural electrification grow, who watched its development, or who were children when it started and grew up along with the program. Naturally you will also take advantage of opportunities to show the movie in the various communities throughout your system's service area.

The highlights of "The REA Story" include scenes about—

- Life on the farm for a Georgia family before the coming of electricity and the thrill of getting it.
- The importance of electricity to the farm and home life of a successful poultry farmwoman in Georgia.
- A Kentucky dairy farmer's thoughts while writing a check for his "hired hand"—electricity furnished by his own co-op.
- A tour by air with the flying manager of a Montana co-op, and the meaning to its members of "area coverage."
- A rural mailman's observations of progress of rural electrification and development of housing along a co-op's lines.

Prints of "The REA Story" will be available on a loan basis for use after May 7. Applications to reserve the film are being accepted prior to the release date. Requests for use of the film may be addressed to Information Services Division, REA, or directly to Motion Picture Service, U. S. Department of Agriculture, which will handle distribution. Prints may be purchased at a cost of \$113.00 for a single print.



Timetable For REA's Celebration Of Its 25th Anniversary

May 9

Rural Electrification Week opens with electrification exhibit in Patio of Administration Building, USDA.

May 11

2 p. m. - official observance of 25th Anniversary of signing of executive order—Auditorium, U.S. Department of Commerce—Guest speakers from U. S. Congress.

May 13

Dinner-Dance in Grand Ballroom of Willard Hotel.

Those who are invited:
borrowers; former administrators;
former employees of REA; manufacturers
and suppliers; and everyone interested
in rural electrification.

ALL OUT FOR

All Electric Homes

Kentucky's famed bluegrass and its Derby-winning horses now have another rival for public attention and favor—the Gold Medallion home.

That's because 18 of the State's 26 rural electric distribution co-ops are now franchised to bestow this hallmark of residential excellence on new and remodeled rural homes meeting their high standards. Together these borrowers serve about 145,000 consumers or nearly two-thirds of the total on REA-financed electric lines in the Bluegrass State. Most of the co-ops receive power from East Kentucky Rural Electric Cooperative Corp., G & T co-op at Winchester.

The Kentucky group made their debut into the Gold Medallion Home program at a luncheon meeting in Louisville December 15 before representatives of the building industry, electrical manufacturers, electrical contractors and local newspapers. Before the franchise presentation an architect, wholesale electric distributor, wiring contractor, and a manager of residential market

development activities for the nation's largest electrical manufacturing firm, congratulated the co-ops and told how important the GMH program is to their own industry.

Laurance Messick, representing the National Electrical Manufacturers Association, presented the franchise, first to be awarded after NEMA took direction of the Medallion Program. He also declared this to be the largest franchising on a unified basis since the program began in early 1958.

After accepting the franchises for the cooperatives, Manager J. B. Galloway of Farmers Rural Electric Cooperative Corp., Glasgow, issued the first Gold Medallion to Jim Sherfey for the new all-electric home he had just built near Glasgow. Jim is electrification adviser for Farmers RECC.

The Kentucky franchising came after several months of study and negotiating among the co-ops. The goal was to develop the highest possible standards which could be applied throughout the 18 service areas.

Under the minimum standards adopted by the Kentucky RECCs, a home qualifies for the Gold

Architect Quenten Biagi, Shelbyville, Ky., congratulates co-ops for step which will promote housing improvement.





J. B. Galloway (left), manager of Farmers RECC, accepts first of franchises presented to Kentucky co-ops by NEMA's Laurance Messick.

Medallion award if it has all of these:

Wiring meeting National Electric Code, local cooperative wiring code, and American standard requirements for residential wiring, 1958; *lighting* meeting "Light for Living Standard 1959"; *electric heat*; *pressure water system*; *electric water heater, refrigerator, and range*; *air conditioner* or 3-240v. outlets; *dryer outlet*; *exhaust fans* in kitchen and each full bath, all vented to outside (one fan must have a humidistat in dual control; others manually operated); and no other fuel.

In addition the home must be equipped with at least two of the following: *automatic washer, dryer* (combination counts as

two), *freezer, disposal, or dishwasher.*

Entry of the Kentucky co-ops into the GMH program comes just as new push is building up behind the all-electric home drive. The nation's largest electrical manufacturer, having turned over the "Live Better Electrically" and Medallion projects to other hands, will concentrate personnel and funds in the local markets "where homes are sold and bought." National and regional staffs are being set up to push residential market development. The principal appliance manufacturers will support the Medallion program in national advertising and other ways, NEMA reports.

Jim Sherfey (standing, left) receives first Gold Medallion for his new home from the boss, J. B. Galloway, Farmers RECC manager.



DEALERS DID MOST OF THE WORK

The Upper Cumberland Electric Membership Corporation of Carthage, Tenn., had more money in the till than co-op officials had anticipated. After a year of sound operation, they found they had \$20,000 more net income than they had expected.

The board decided to spend part of the money to increase kwh sales. There is a spread in the Upper Cumberland Valley of considerably less than a cent between average purchase and sale. By launching a promotional campaign they would cut down on the net income surplus for the year, but provide for a gradual increase, making a net income cushion for years to come.

The cooperative found that it had 57 dealers in its area. It wanted them to take an active interest in the campaign, not just fill orders that came in. Also, the co-op wanted them all in on the act, not just some of the dealers. So they cooked up a plan.

The co-op's farm advisor distributed copies of the rules of the campaign to each of the 57 dealers, along with a form.

It wasn't necessary to devote much effort convincing the dealer that he should participate; one of the rules clearly stated that in order for any dealer to be eligible to join the campaign, every dealer in his county must join. All dealers were in the campaign, or else none of them were.

It worked like a charm. One appliance dealer would call on his competitors, talking up the campaign. With no other impetus than a mimeographed page of typing, the co-op managed to get

enthusiastic salesmanship from the appliance trade, and a complete sign-up of all 57 dealers.

In signing the agreement, each dealer stated that he would place approved advertising with the newspapers or radio stations in his trading area to the amount of \$10 for each of several stated major appliances sold by him to co-op members. These were: new air conditioners, water heaters, ranges or home freezers; none of these could be replacements for old appliances. The co-op sent a check for \$20 to the member buying any one of these appliances after it was inspected by a serviceman.

The co-op gave a form to each newspaper and radio station, who returned it filled in with the amount of advertising placed each month by the various appliance dealers. The newspapers and radio stations were glad to cooperate.

Dealers were responsible for notifying the co-op of each sale on the form furnished them. This became a permanent supporting record.

At the end of the 3-month campaign, it was found that 231 water heaters, 95 air conditioners, 241 ranges and 262 home freezers had been sold. It cost the cooperative \$16,675.26, which included \$95.26 the co-op spent for advertising to call attention to the campaign.

"This campaign gave little work to the cooperative," says Manager Raymond H. Forkner. "It is the only way we could get full dealer participation."

New and Revised REA Bulletins

Bulletin 20-2—Electric Loan Policy and Application for Section 4 Loans.

Board members and managers can find much information important to the cooperative's loan planning in this bulletin which has been revised as of November 27 1959. The bulletin has been expanded considerably to summarize REA loan policy as well as to outline the basis for loan applications.

Bulletin 103-2—Use of General Funds in Extensions and Additions to Plant.

This bulletin, revised as of November 27 1959, will also be of interest to board members and

managers. It gives REA's recommendations concerning borrowers' investment of general funds in plant, and waives under certain conditions the provisions in loan security documents requiring prior approval of REA to use general funds for certain additions to plant.

Bulletin 40-6—Construction Methods and Purchase of Materials and Equipment.

This bulletin has been revised to clarify requirements and procedures pertaining to prior approval of construction by REA.

Bulletin 60-10—Annual Work Plans, Electric Distribution Systems.

This new bulletin provides guidance for electric distribution systems on the preparation, use and approval of annual work plans.



POWER use exchange

COOKING WITH KILOWATTS—

Two electric co-ops recently proved to be right on their toes—cooking with kilowatts, so to speak. Both issued cookbooks, edited by their home economists and compiled from favorite recipes sent in by members. Both cookbooks are attractively illustrated and neatly packaged in washable covers. The cookbook of the Holmes-Wayne Electric Cooperative of Millersburg, Ohio, was edited by Mrs. Delpha Shank, who is also editor of the recipe page of the co-op's *Current News*. Its 123 pages are full of delicious-sounding cookery, from shoo-fly pie to quince honey. The cook-

book from the Mitchell County Electric Membership Corporation of Camilla, Ga., was edited by Mrs. Clarice Turk, co-op home economist, and includes such exotic Georgia specialties as chicken cola.

SILVER JUBILEE SCHOLARSHIP—

Some North Carolina high school student will win a \$500 college scholarship this year by correctly answering 20 questions and writing the best essay on "My Electric Cooperative: Democracy at Work." The contest is sponsored by the *Carolina Farmer*, and the scholarship is called the Silver Jubilee Scholarship.



Ray Larkin of Mt. Meridian can make calls for feed or veterinarian services easily.

offered a free trial period and installation without charge to interested subscribers. This program concentrated in one month as many installations as had previously been made over a span of 5 months on that system.

In looking back over the year and a half immediately following the cutover to dial operation, Manager Cedric Ray noted that telephone extensions had been installed at an average rate of three a month. He wanted to change this and looked about for ways to accelerate the number of these additions. He took his cue from observations of practices in the appliance trade, such as offers of a free home demonstration and installation without cost. He brought both features into his plan.

The co-op carried this double-barreled offer throughout the month of July. It advised its subscribers through a series of advertisements that it would install a telephone extension during the month free of charge and would let the subscriber use that extension for the entire month of August with absolutely no charge for the service. Any subscriber who was not satisfied with the extension telephone at the end of the free trial period merely had to call the office and the installation would be removed without charge.

This drive for just the one month brought 15 new telephone extensions onto the co-op's system. Actually 17 extensions were installed and only two were removed at the end of the trial

EXTENSION TELEPHONE TRYOUT

*It
Sells*

The Clay County Rural Telephone Cooperative, of Poland, Indiana, found a way to speed up sales of extension telephones. It

period. The net addition, five times the previous rate, was just about one-third the number installed during the preceding 18 months. Given a chance to try one out, every subscriber with but the two exceptions were thoroughly convinced by experience that the extension is well worth the monthly service charge. Interviews with a number of them revealed why they retained their extension telephones.

One woman, whose children are grown, reported that they spend a large amount of their free time working on their ceramics hobby in the basement of their home. This peppery little housewife at first opposed having an extension placed in their basement. But using it has changed her mind.

Mrs. Arthur Powell of Poland reports her extension in the basement saves time.

She now says:

"I never knew that an extension telephone could be so convenient. It saves me much time, and many, many, steps."

The charming young mother of three lively youngsters reported how the telephone extension had lightened her load. She told of the day she raced upstairs from the basement to answer the ringing telephone only to say an out of breath "Hello" into a dead receiver—this of course on a busy washday. Now she catches calls she might previously have missed. She sums up her feelings this way:

"My telephone extension in the basement saves me a million steps. I can take calls on it when

Max Schroer, Bowling Green, says his extension phone in the dairy barn permits his wife to call him when meals are ready.





Mrs. Ted McNich of Poland does ceramic work in her basement.

washing or ironing and no longer have to run upstairs or catch my breath to answer the telephone.”

One farmer had an extension installed in his hog barn. He uses it to get the latest price quotations in the market, call the veterinarian in time of emergency, and make many other calls in connection with his farming operations. He especially likes the fact that he no longer has to remove his muddy shoes to make a call, as he formerly did when the one telephone was in the house. He put his views into these words:

“The extension telephone makes life on the farm so much easier. I don’t muddy up the house like I used to, and still get a lot of business taken care of over the phone.”

Other farmers had comparable experiences. One had an extension telephone installed in his dairy barn. Another had the installation made in his workshop. A third has his extension tele-

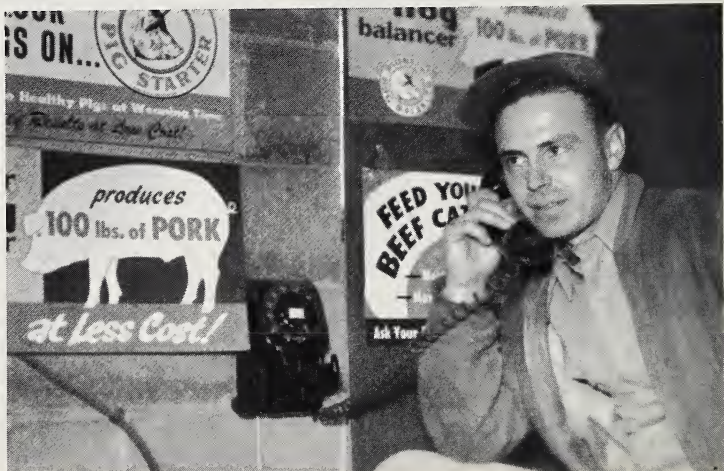
phone in his turkey processing barn. Important calls can be made without having to go to the house. A quick check may be made concerning feed and hay prices. There is no delay in calling for veterinary services. A call to find out if a replacement part is available may save a trip to town. Delivery dates can be confirmed by telephone, right from the barn. The turkey raiser had this bit of praise:

“I just couldn’t get along without an extension telephone now. I never realized I could put it to so many uses. You should see the workout it gets when we start dressing out turkeys. Believe me, it’s here to stay.”

Manager Ray himself has a pretty good idea what an extension telephone means to a farmer. He lives on a farm still being served by the old “hoot and holler” system and is eagerly looking forward to the day sometime soon when dial service will be available. The co-op is modernizing service in that area as quickly as possible. Ray says:

“When the time comes, I intend to have extensions both in the house and in the barn.”

Lloyd Buis of Cloverdale reports his extension phone saves much time and increases his feed business.





LONG SPANS WITHSTAND A STORM



Long span wires on ground after storm.

The telephone line is completely down," called in the lady from the Minnesota countryside. "Funny, though. I can hear you perfectly."

The lady was making a trouble call to the Tyler Telephone Company, of Tyler, Minn. It was one of several received after a recent winter storm in southwestern Minnesota. The long span lines were down everywhere around Tyler—right down on the ground. The service was

perfect practically all over the system, too, although the long distance lines were out. Tyler's long span telephone plant was planned that way.

Harold L. Ericson, president of the Tyler company, is a telephone engineer. His system was chosen by REA telephone engineers for field testing long span insulated aerial wire. It was predicted that this pioneer long span system would withstand ice storms that would wreak havoc with conventional telephone plants. On the first big test, at least, this prediction proved to be right.

The storm began as a sleet and ice storm. The wires were coated with ice to about 1 inch in diameter. This sagged the wires right down on the ground, according to plan, with no damage to poles or crossarms. Then it began to snow, until the wires were covered with 4 foot drifts. This storm brought severe damage to conventional construction everywhere in the area. Long distance circuits were shambles; Tyler was without long distance service for 4 days. Only four subscribers

were out of service on the Tyler Telephone Company's lines for a brief while. This was caused by a circuit that became caught in a barbed wire fence. The wind caused the barbed wire to wear through the wire's insulation, which grounded the circuit until the trouble spot could be located and the wire reinsulated.

The Tyler Company has about 900 subscribers served by approximately 450 circuit miles of long span construction. Three different insulated wires were used in various sections of the system. They were: .080" (20%) copper-steel; .095" (20%) copper-steel; and .109" Grade 195 galvanized steel wire. They are insulated with polyethylene to a thickness of 15 mils. All three are high strength wires suitable to long span construction.

Construction on the Tyler company's long span lines began late in 1958. The company was desirable as a site for long span field testing for two reasons. Ericson, president of the Tyler Company, is a consulting engineer and was himself professionally interested in the project. Also, Tyler is lo-

Barbed wire abraded the wire here, causing ground and a short outage for four subscribers.

Resagging a neighboring conventional line which was in serious trouble.



cated in the ideal region for such a test. It is subject to frequent bad ice storms, and the terrain is fairly flat and level. The prairie country of southwestern Minnesota also has few subscribers per mile, and few highways and railroads, thus making for a relatively small number of control points. The roads are laid out on section lines, straight north and south or east and west, making necessary relatively few angles.

The long span concept relies upon making the span lengths long enough and the wire just high enough above ground so that, when loaded with ice, the wire will rest on the ground before the tension exceeds the elastic limits of the wires. Fifty-five percent of rated breaking strength was selected as the critical point in designing the system. The actual amount of ice load that will put any wire on the ground varies, of course, according to the length of the particular span and the height of the conductor above ground. The

average span length on the Tyler long span construction is close to 900 feet. Fourteen foot ground clearance was provided under all spans. By placing the poles on the highest points of the rolling terrain, it was possible to use poles of an average 25 foot length.

Ice loading on this plant has been closely watched during the past two ice storms. Observers believe that the concept is essentially sound, as far as loading characteristics go. They will continue to make observations while the ice unloads and the conductors return to normal sag, to detect any unforeseen "bugs" in the concept. Later on, a full scale inspection of this plant and all its piece parts will be made, to find out if all the accessories are adequate: materials, deadends, splice sleeves, transposition brackets, crossarms, and so forth.

This inspection will determine whether long span design and construction is good enough for general use under suitable conditions.

**Uncovering wire to
examine its condition.**

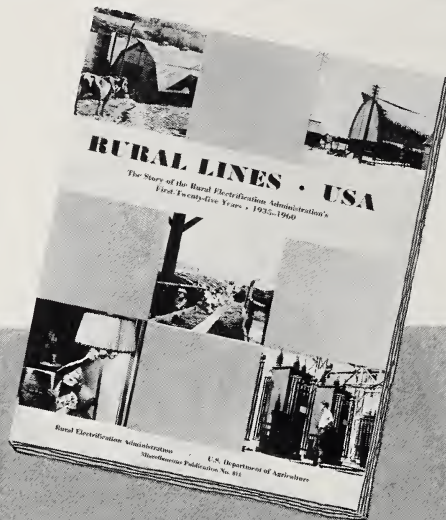
Wire buried deep in the snow.



UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON 25, D. C.

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300
(GPO)

OFFICIAL BUSINESS



NOW ON SALE

This book tells the interesting story of how rural Americans built their own electric systems, and thus transformed rural life.

RURAL LINES • USA

More than 100 illustrations . . . how co-ops came about . . . how the lines were built . . . how costs were reduced . . . how farm people learned to use electricity . . . the changing countryside . . . the future of rural electrification . . .

Single copies cost 50 cents from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. There is a 25 percent reduction on orders for 100 copies or more.