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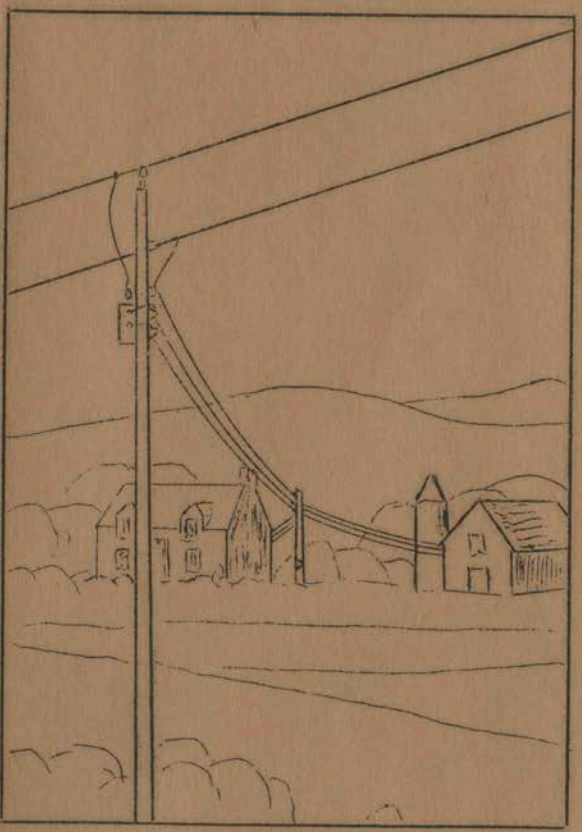

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HOW TO OBTAIN ELECTRIC SERVICE

The term "Rural Electrification" was almost unheard of by rural people 12 years ago. In 1925 approximately 1500 rural families in Virginia were receiving electric service, mainly because they lived near lines connecting towns. There were about 150 miles of such lines serving rural customers. Today, more than 46,000 rural families are enjoying the economies and pleasures made possible by electricity that is being provided by over 6,800 miles of rural electric lines. Though these figures show much progress we must realize that about 90% of Virginia's farm residents are still without electric service. It is evident that the job has just been started.

There are three methods of obtaining electric service for the farm: (1) through the facilities of the local public utility serving the area; (2) by organizing an electric cooperative, financed through the Rural Electrification Administration; and (3) by installing individual farm electric plants. Since the problem of rural electrification is being considered from the standpoint of the community and state, only the first two sources of power will be discussed here. The purpose of this circular is to explain the logical procedure in obtaining electric service for a community from either the local utility or through the Rural Electrification Administration.

THE MINIMUM GUARANTEE PLAN OF THE PUBLIC UTILITIES

This plan is generally known as the state rural extension plan. It was formulated and adopted in 1929 and a large portion of the existing power lines were constructed under this plan. Several minor amendments to the plan have been made since 1929, making it more liberal and simple. At the present time the plan is uniform with all the larger utilities and is as follows:

Where the customers living along a proposed line will guarantee a total monthly revenue to the company that will equal 1½% of the total construction cost of the line, the company serving the area will make the extension. The purpose of this guarantee is to assure the company that the revenue from the new line will be sufficient to cover taxes, interest on the investment, depreciation, maintenance and operating costs. These costs now run from $12 to $18 per mile of line where the total investment in the line is around $1000 per mile. The cost of the electricity which is supplied the lines is a minor item compared to these fixed charges; therefore, customers must guarantee the company a minimum use of the service.

The following typical problem will illustrate how the plan works. Assume that 20 rural families desire electric service and that 4 miles of line costing $4000 will be necessary to serve them. Then 1½% of $4000 is $60, which is the total monthly guarantee. If all the customers are willing

to guarantee the same amount, then the guarantee per customer will be $60 divided by 20 or $3.00 per customer per month. It is not necessary that each customer assume an equal guarantee, however, and the total might be made up as follows:

6	customers at $2.00 each	$ 12.00
4	customers at $2.50 each	10.00
5	customers at $3.00 each	15.00
3	customers at $4.00 each	12.00
2	customers at $5.50 each	11.00
20		$ 60.00

It should be understood that the minimum which the customer guarantees simply means that this will be the least that his electric bill can amount to for any one month, and that he is entitled to use whatever amount of electricity his minimum will buy on the prevailing rate. Assume that a customer guarantees a minimum of $3.00 per month on the above extension and that the prevailing electric rate with the company providing the service is:

First 30 kwh @	5½¢	per kwh
Next 60 kwh @	4½¢	" "
Next 60 kwh @	3 ¢	" "
All in excess of 150 kwh @	1½¢	

Then the three dollar minimum would entitle the customer to use all of the first step of the rate, which is 30 kwh at 5½¢, which totals $1.65; and can use $1.35 worth in the 4½¢ step, or 30 kwh in this step. In other words, this customer is entitled to 60 kwh of electricity for the minimum which he will pay. If he does not use the 60 kwh, then the minimum of $3.00 must be paid just the same. If he uses more than 60 kwh, the bill for that month will be increased according to the rate in effect.

LOGICAL PROCEDURE IN OBTAINING UTILITY SERVICE FOR A COMMUNITY OR INDIVIDUAL

1. Ask the county agricultural agent to plan a meeting in the community desiring service. Invite the rural extension engineer from the utility to explain the extension plan. See that every prospective customer attends this meeting. If a utility representative is not available, request the assistance of the state rural electrification specialist.

2. Ask the utility company for an estimate on the total cost of the line so that the total necessary minimum guarantee can be determined.

3. Have a representative of the group assist in signing up contracts for service and in obtaining necessary rights of way. Make sure that the right of way problem is thoroughly understood by every one concerned.

HINTS FOR THE INDIVIDUAL WHO IS OBTAINING ELECTRIC SERVICE

1. Make a sketch of the farm building layout and locate points where the service is to be used. Consult the state rural electrification specialist or utility rural service man for assistance in planning the wiring.

2. See that the service entrance is adequate for all future needs.

3. Have wiring contractors bid on doing the job as outlined in wiring layout.

4. Require the wiremen to furnish a fire underwriters' certificate.

5. Check the completed wiring job against the original wiring layout.

6. Take advantage of the literature and information available through the county agent, utility, or state college, on using electricity on the farm.

THE GOVERNMENT FINANCING PLAN THROUGH THE RURAL ELECTRIFICATION ADMINISTRATION

An act of Congress has made available $40,000,000 per year to be loaned to cooperatives, non-profit corporations, utilities and municipalities for financing the construction of rural electric lines in unserved areas. The Rural Electrification Administration has been set up as the government agency for administering these funds. "Its chief function is the lending of funds for line construction and for the installation of the consumers premises of wiring and electrical and plumbing appliances."

The Rural Electrification Administration prefers to loan money for the construction of projects that will operate on a non-profit basis, which means through the organization of a farmers' cooperative or non-profit cooperation. "While an independent system comprising not less than 25 to 30 miles of line would be given consideration, such small systems present special problems in connection with an adequate arrangement for wholesale energy and for maintenance of lines." Therefore, the project should consist of at least 30 miles of line and should reach an average of at least 3 customers per mile. There should be a monthly revenue available of from $12 to $18 per mile of line to cover interest, depreciation, maintenance, operation, energy charges, taxes, and payments on the loan. These requirements vary with the size of project, density of customers, costs of line construction and other conditions. The money is loaned for a period of 20 years at an interest rate of approximately 3% per year.

"The following steps are suggested for organizing a local cooperative:

1. Ask your county agent to call a meeting of all the people in a community who are interested in and likely to become customers of a rural electrification association.

2. From this meeting form a committee to arrange plans for organization.

3. Call a township meeting and appoint local committees to call on all farmers to determine the willingness to participate in an electrification association, either as members or as customers.

4. Procure the signature of all prospective customers as an indication of their intent to purchase electricity if the lines are built, with some indication as to the amount each customer feels able to pay.

5. Apply to R.E.A. for a loan for construction of the lines.

6. If the loan is approved, the sponsoring group should incorporate in the manner that is most desirable under State laws, adopt appropriate by-laws, elect directors and officers, authorize the borrowing of funds and the execution of necessary documents, and take the other steps necessary to begin business. It is not necessary to incorporate before the loan is approved. It is desirable that the proposed articles of incorporation and the proposed by-laws be sent to the Legal Division of R.E.A. for possible suggestions prior to incorporation."

The individual customer obtaining service from an R.E.A. financed project, should take the same steps as outlined above in "Hints for the Individual Who Is Obtaining Electric Service". This will assist the customer in getting the most good from electric service and will save money on the installation of equipment in the future.

HOW MUCH DOES ELECTRICITY COST?

Electric rates in Virginia vary with different companies, so that 100 kwh or units of electric power, cost from $3.85 to $6.20 when used in any one month. This 100 kwh of electricity will usually light the buildings, pump the water, do the washing and ironing, operate the refrigerator and radio in the average farm home, besides furnishing the power for a number of small appliances such as fans, toasters, sweepers, clocks, burglar alarms, etc. Most rates are such that after the first 100 kwh is used, the cost per kwh is low enough to cook, heat water and do power jobs more economically with electricity than with other types of fuel. In fact, all electric rates are such that the more liberally the power is used, the greater are the benefits obtained from its use.

COOPERATION AN IMPORTANT FACTOR

Regardless of the source from which a group or community hopes to obtain electricity, it is necessary that every one cooperate to obtain the service without working a hardship on a few individuals. There are many ways in which this cooperation can be effective. Usually if every one

agrees to take the service when it is made available, the minimum guarantees will be low. No one gains by holding out to come on the line later, and often the failure of a few to become original customers prevents the line from being built. It is very desirable to consider electrifying an entire community at one time so that those customers who live farther apart can obtain service more easily.

Another important problem that cooperation helps to solve is that of getting rights of way agreements. It should be borne in mind that the electric line along rural property increases its value from 10 to 20 per cent and sometimes more. The agreement simply gives permission for the line to be located on the property with the privilege of the operating agency going on the property to maintain the line when necessary. If any individual demands pay for the right of way, the neighbors must pay for it and the contrary land owner gets the benefit of the power line at his neighbors' expense.

No one denies that electric service does more than any other community enterprise to increase property values, raise standards of living and bring happiness. It has been definitely shown on thousands of Virginia farms that electricity can be used to an economical advantage in more than 200 ways. In many cases, the use of electricity for doing one job on the farm saves enough money to more than pay the entire electric bill.

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