THE HISTORY OF THE DENTON COUNTY ELECTRIC
CO-OPERATIVE, INCORPORATED

THESIS

Presented to the Graduate Council of the
North Texas State College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

by

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PREFACE

I would like to take this opportunity to express my appreciation for the help given me in this study by Mr. T. R. Qualls and Mrs. Bertha M. Anderson of the Denton County Electric Co-operative, Incorporated. Dr. Jack Johnson and Mr. Gus H. Egan, who were instrumental in organizing the Denton County Co-operative, were also very helpful in furnishing information.

James W. Grundy
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CHAPTER I

HISTORICAL BACKGROUND OF THE RURAL ELECTRIFICATION ADMINISTRATION

Since the industrial revolution began, scientific and technological progress have continued steadily. Without electricity most of the progress would not have been possible. Since the turn of the century electricity has revolutionized the world. It has made possible, within a half century, greater progress than in all the years of history which preceded it.

Man has learned to harness, distribute, and utilize this magic power for day and night service throughout the civilized world. It is banishing darkness, has lightened the burden of the housewife, and has become the silent partner of industry.¹

As businessmen began to utilize the corporate type of enterprise, industrialization expanded more rapidly, thus continuously concentrating the population in urban areas. As a result city dwellers were the first, and for several years the only, people to benefit from electricity.

On September 4, 1882, the first central steam-operated, electric generating station in the world was opened in New

¹J. P. Schaeenzer, Rural Electrification, p. 3.
York City by Thomas Alva Edison. It was known as the Pearl
Street Station. It furnished fifty-nine consumers in a small
territory in downtown Manhattan with electricity for lighting.

On October 15 of the same year, the first hydroelectric
central station was placed in operation at Appletown, Wis-
consin. It had a capacity of 250 16 c.p. incandescent lamps. 2

It was not until after the New Deal group invaded
Washington in 1933 that any real effort was made to take
electrical energy into the hinterlands to aid in agricultural
production and make the American farm a more desirable place
to live. The New Deal in essence embraced the theory of
compensatory spending by government as originated by John
Maynard Keynes.

On May 11, 1935, Franklin D. Roosevelt signed Executive
Order 7037. That order established the Rural Electrification
Administration. 3

The REA project tied into one bundle several of the New
Deal's fondest hopes--low-cost power, conservation of natural
resources, and the raising of the level of farm life. 4 Originally, REA was to be started by a relief agency but it became
obvious fairly early in the planning stage that the program

2Ibid., p. 4.


4Ibid., p. 53.
was too technical to use unskilled labor. Secondly, the need to spend money quickly precluded any careful planning such as was necessary for such a program.

Finding the REA could not operate as the established relief agencies did, Roosevelt modified his original directive. In August, 1935, he transformed REA into a loan agency.\(^5\) As the agency began to plan its projects on a self-liquidating basis, it also robbed the private power lobbies of their strongest arguments against REA.\(^6\) The government was not going into the power business, but it was helping the rural people to generate and distribute their own power.

The conversion of REA from a relief to a loan agency was probably the most far-reaching fundamental policy decision in the history of the agency. The necessity for using relief labor on technical projects requiring engineers, linemen, and other experts was removed. Even more important, the electrification program would not be one of grant and subsidy. It would be self-supporting.\(^7\)

But this was still not the end of the exploratory period. The problem of how to get electricity to the farms in the shortest possible time remained. There were three ways to do the job: under the loan program--through private

\(^5\)Ibid., p. 53. \(^6\)Ibid. \(^7\)Ibid., p. 54.
companies, through municipalities with publicly-owned plants, or through non-profit co-operatives.

Morris Cooke, the first administrator for the REA, turned to the private utility companies because with their construction crews, their engineers, and territory franchises, they could put the program into effect immediately. The Democratic administration was eager to spend the money appropriated by Congress.

Privately owned electric utility companies were behaving in a peculiar manner. As lines owned by private interests reached the city limits, it was a common plea of farmers just outside the city limits to ask for service. It was almost equally as common that they were refused. As the demand from the farms grew steadily after 1918, utility executives found themselves in a somewhat embarrassing situation. Grover Neff, then president of the Wisconsin Power Company, said,

This is indeed an unusual situation. The farmer, a user of power, is trying to force the utility, a seller of power, to sell him the product it has for sale.8

The campaign to take electricity to the country, thus begun, had indifferent results. As late as 1924, only 2.6 per cent of farms in the United States had central station service, including irrigation districts, although technical

8 Ibid., p. 36.
advance had made real farm extension practicable for nearly
ten years. 9

The farmers, save in thickly settled neighborhoods or
in areas located close to towns and cities, were usually
required to pay for the construction of lines to serve them,
giving title to the companies. Valuations ranged from $2,000
to $3,000, and even $5,000 per mile of line. The next re-
quirement was a monthly payment sufficient to guarantee a
profit to the company, or in case it financed the lines, to
insure return of the capital within five or six years. This
arrangement was variously described as a "minimum" or
"service" or "ready to serve" charge. 10 It had to be paid
even if little or no current were used. It was generally
considered too severe a burden and it put the element of risk
wholly on the farmer. Finally came the rates for energy used,
measured by rate schedules frequently complicated and obscure
even to experts. Few farmers or city dwellers could under-
stand their bills. There was a great variety of rates for
the same essential type of service, sometimes legitimate, and
sometimes otherwise. The prices charged farmers ranged all
the way from eight cents to as high as twenty-five cents a

9 Harry Slattery, Rural America Lights Up, p. 4.
10 Ibid., p. 5.
kilowatt hour. A few freak rates ran as high as forty cents per kilowatt hour. The National Electric Light Association investigating committee of 1911 reported that outside of irrigation districts, typical "average" rates were twelve and fifteen cents per kilowatt hour for lighting and ten cents for power service on the farm.\textsuperscript{11}

During 1935, the number of farms newly electrified by private companies increased 175 per cent. And the private utilities promised that during the following year the increase would be even greater. In 1935, they spent over five times what REA did. While the private companies' rural line building was greater in volume than REA's in the first years, they did rural electrification considerable harm, for the companies extended their lines only to selected areas and ignored the principle of area coverage. This practice cut the heart out of many proposed co-operative districts and prevented some farms from receiving electricity for many years. Farmers denounced these spur lines of the electric companies as "spite lines."\textsuperscript{12}

Widespread use of electricity was increasing so rapidly that rural people became more demanding for electrical service and were willing to pay reasonable but not excessive rates.

\textsuperscript{11}Ibid.

\textsuperscript{12}Childs, op. cit., p. 62.
Between 1902 and 1935, the per capita consumption of electric power in this country increased from thirty to more than 730 kilowatt hours per year, which was more than fifteen times the rate of population growth in the same period.\textsuperscript{13} By 1935, more than twenty-one million homes, about eighty per cent of the total, were wired for electricity.\textsuperscript{14} However, until 1935, very few power lines had touched any of the rural areas of this country. The commercial companies which supplied electric power had spread only to those rural districts which surrounded the cities and towns and the more distant areas were left without the help, for production and for convenience, which the people of the urban areas had possessed for many years. In 1935, only eleven American farms out of every 100 had central station electricity. In fourteen states, fewer than four farms in every 100 were served by electric power lines. More than five million American farms lacked electric service.\textsuperscript{15}

From the early days of the New Deal, and before, advocates of rural electrification by government spending have opposed the free enterprise private utility group. The

\textsuperscript{13}National Resources Committee, \textit{Technological Trends and National Policy}, pp. 250-251.

\textsuperscript{14}Ibid., pp. 318-325.

\textsuperscript{15}Rural Electrification Administration, \textit{A Guide for Members of Rural Electric Co-ops}, p. 4.
National Electric Light Association, a trade association, dedicated itself to stopping the entire REA program.

Guy Tripp, Chairman of the Westinghouse Company, speaking before the 1926 convention of the N. E. L. A., on the subject of "Restoring the Balance Between Industry and Agriculture", pointed out the necessity of electrification for the prosperity of agriculture and concluded:

No government body--State or Federal--can do it effectively. The driving force of all government is political expediency and political expediency is a poor tool when applied to economic problems.  

A survey of rural electrification in other countries revealed that Norway, Sweden, Denmark, France, Germany, The Netherlands, Australia, and New Zealand had far outdistanced the United States in taking electricity to the farm. The number of farms having central station service in these countries ranged from 50 to 90 per cent as against our 10 per cent.  

In every case, investigation by American experts disclosed that the chief reason for this remarkable progress was central government aid, or sponsorship in various ways. Such aid was given to voluntary co-operatives, public plants, and private agencies. In other words, private enterprise abroad

16 Slattery, op. cit., p. 17.
17 Ibid., p. 31.
had proved unsuitable to meet the needs of agriculture, as it had in the United States, and governments had been forced to take the initiative in the interest of the common good.\footnote{Ibid., p. 31.}

One year after Roosevelt's executive order, Congress passed a bill, approved May 20, 1936, extending the life of REA ten years. It was introduced in the Senate by George W. Norris, Senator from Nebraska, and in the House by Sam Rayburn, Representative from Texas, where it had the support of the "Public Power Bloc" led by John E. Rankin, Representative from Mississippi.\footnote{Ibid., p. 32.}

But Norris's insistence that the program be self-liquidating made it necessary for REA to solve many problems confronting eager co-operators waiting on the doorstep of the agency. It was necessary to devise legal, economic, and engineering tests in order to appraise the ability of a proposed co-operative to become a financially sound business. Legal codes varying from state to state determine the form that the co-ops take. The structure of the co-operatives had to be such that the members would not lose control of their company to those who might want to destroy it. Engineers had to design lines that were cheap yet durable. In

\footnote{Ibid., p. 31.}
order to obtain wholesale power, negotiations had to be undertaken with utilities that were often antagonistic. REA investigators had to determine whether or not there was a sufficient number of farm homes within the area to justify making a loan. A capable manager had to be found for each co-operative, one who would be both engineer and administrator.  

In February of 1937, John Carmody, Deputy Administrator of REA, replaced Morris Cooke as administrator. The foundation for the program had been laid. Ninety-four projects costing more than twenty million dollars were under construction or completed. On nearly thirty projects power was already being transmitted. These figures in themselves are not impressive when contrasted with the huge figures that characterize the utility industry. Their significance lies in that they have acted as a yardstick, energized the industry to take cognizance of the farmer, put the farmer in a position to exercise collective bargaining and cause wholesale revamping of rates and conditions under which farmers get electricity.  

A revolution was under way on the American farm. The fondest dream of the farmers was coming true. It had come

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20 Childs, op. cit., p. 67.

21 Bernhard Ostrolenk, Electricity: For Use or For Profit, p. 135.
out of a long-pent-up demand to raise standards on the farms somewhat closer to those prevailing in the cities. Many men had worked in various ways to bring it about, but always it was at the insistence from the country which moved the program forward.\textsuperscript{22}

The effect on the American farmer of rural electrification has been incalculable. Obviously, the first effect was to raise his standard of living, to lift the heavy burden of household cares from his wife and to shift heavy labor from the farmer to this invisible electric servant.

In brief, rural electrification has written a new chapter in American agriculture.

The National Rural Electric Cooperative Association, organized by local co-operatives, through its research department gathers and interprets information to help guide policymaking on the national level. The information is also made available to all REA co-ops in the United States to help them with their individual problems. However, each cooperative has problems of a purely local nature. A local cooperative may not have funds or personnel for its own research thereby causing the local manager to ignore many problems or guess at their solution.

\textsuperscript{22}Childs, op. cit.
The economic influence of rural electrification on agriculture in the United States has been very important. The Denton County Electric Co-operative is typical of over 900 local co-operatives in the United States. There is a need for this kind of study as a matter of economic importance to the Denton County Electric Co-operative.
A mass meeting of all rural people in the Denton County, (Texas) area was called on the first Monday in November, 1936, for the purpose of determining whether or not the people would be in favor of forming a co-operative for the purpose of furnishing electricity to themselves. The meeting was called by County Agent G. W. Warren. Jack Johnson and R. L. Conrod of the North Texas State Teachers College Economics Department spoke to the group of farmers gathered on the courthouse lawn on the advantages of forming a rural electric co-op. A speaker from the A. & M. College faculty was also on hand at the request of the County Agent. The A. & M. representative spoke at great length to persuade the group to be reasonable about what they did, pointing out such things as the limited use of electric lights to farm people, because they went to bed early anyway, and did not have time to listen to their radios. All of the many benefits of electricity to farm people were minimized by the A. & M. spokesman.

1Statement by Gus H. Egan, personal interview.
A vote was taken to see if the people wanted to proceed and almost unanimous approval was granted.\(^2\)

At the original meeting Gus H. Egan of the Krum community was chosen temporary chairman. Denton County was divided into districts, and a committee was appointed to make a survey of each district. Each committee made a map of their district and "possible" members were solicited for the purpose of routing proposed lines. The survey also ascertained whether the legal requirements could be met. At least three members per mile were necessary before a loan could be secured. The data gathered by each district committee were compiled into a map of the entire county.\(^3\)

The principle of area coverage was not ignored but in order to satisfy the requirements of not less than three members per mile some of the original lines were rather short. The first month of operation the co-operative had only seventy miles of line and its total billed revenue was $300.04.\(^4\)

A major problem was securing a reliable source of power at reasonable wholesale rates. There were two possible sources of power available to the proposed rural electric

\(^2\)Statement by Jack Johnson, personal interview.

\(^3\)Ibid.

program in Denton County. They were the Texas Power and Light Company and the City Municipal power plant. At this point the organizers first met with the problem of the actual cost of electricity to them. As a member of the Denton City Commission, Jack Johnson made a public statement (in the local paper) that he thought the city should sell the proposed rural electric co-operative power for one cent per kilowatt-hour. Other members of the City Commission opposed Johnson's proposal because power was being sold to citizens of Denton for more than one cent per kilowatt-hour. They did not consider that the price being charged to city dwellers was a retail price and the proposed price to the co-operative was a wholesale price. They also did not consider that the cost of producing a kilowatt-hour in the Denton municipal plant was one-half cent per kilowatt-hour which would have been a 100 per cent rate of profit for the city.\(^5\)

An investigation of the records by Johnson showed that at that time the City of Denton was collecting revenue on approximately 50 per cent of all power produced by the municipal plant. The other 50 per cent was being used by the city in the various departments of city government and was not a source of revenue. The percentages were determined by records of the number of kilowatt-hours generated and the number of kilowatt-hours collected for. After allowing for line loss

\(^5\)Johnson interview, *op. cit.*
and other variable factors these percentages were reasonably correct. Johnson pointed out that the city was operating its plant at a profit selling only one-half of the power it produced therefore the sale of power to the proposed co-operative could increase the city's power profit. Johnson was not as interested in the city selling the co-op power as he was in lowering the cost of power to the co-op.

Texas Power and Light sent a representative to Denton to negotiate with the temporary committeemen of the proposed co-operative for wholesale power and a wholesale rate of one and one-half cents per kilowatt-hour was finally agreed upon and a contract with the Texas Power and Light Company was signed after the proposed unit received its charter.

A franchise was granted to the Denton County Rural Electric Company on March 26, 1937, and the office was officially opened on May 28, 1937. The Denton County Rural Electric Company was a stock company with three stockholders. The original stockholders were Gus H. Egan, H. P. Koiner, and W. C. Moss. Each agreed to use electricity distributed by the company. Each stockholder was allowed only one vote. The price of the original stock was fifteen dollars for six shares at $2.50 par value. Stock ownership was a prerequisite to service by the company.

6Ibid.

7Egan interview, op. cit.
The corporate charter made the following statement:

No person, corporation or association shall be a stockholder in this corporation who does not use electric motor power or energy supplied by the corporation, or who has not agreed to take electric motor power or energy to be supplied by the corporation from an electric distribution line or system, the construction of which has been commenced or authorized by the corporation. Each stockholder shall, except as otherwise provided by law, have one vote and only one, regardless of the number of shares held by such stockholder.  

The first meeting of the stockholders was held at 3:00 p.m., April 7, 1937, in Denton, Texas. Gus H. Egan was elected chairman. Egan, Koiner and Moss were the sole stockholders of the corporation at that time. Each of the three stockholders held two shares of the capital stock of the corporation.

The first meeting of the Board of Directors of the Denton County Rural Electric Company was held at 4:00 p.m., April 7, 1937. Egan was elected chairman of the board and Koiner was elected secretary. At the first stockholders meeting it was unanimously agreed to execute a loan between the corporation and the United States of America, acting through the Administrator of the Rural Electrification Administration. The amount was not to exceed $530,000 for the purpose of constructing the proposed electric transmission.

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8Corporate Charter, Denton County Rural Electric Company, March 29, 1937.
distribution, and service lines, approximately 555 miles in length to serve approximately 2,464 members.9

The chairman stated that pursuant to the terms of the proposed Construction Loan Contract the routes of the electric transmission, distribution, and service lines or systems to be embraced in the project would be shown on the map therein provided for, which map, when approved on behalf of the United States of America by the endorsement of such approval thereon by or on behalf of the Administrator of the Rural Electrification Administration, would be deemed to be incorporated in and constitute a part of the Construction Loan contract. The corporation executed and delivered a mortgage note in the amount of the loan, bearing interest at the rate of 2.77 per cent per annum payable monthly, and providing for monthly payments on account of the principal calculated to pay and discharge the principal indebtedness within twenty years after the date of the mortgage note. The mortgage note was dated May 15, 1937.10

A special meeting of the Denton County Rural Electric Company's Board of Directors was called for the purpose of changing the name of the organization from the Denton County Rural Electric Company to the Denton County Electric Cooperative, Incorporated.

9Minutes of Board of Directors Meeting, April 7, 1937.
10Ibid.
The reason for changing the name of the organization was to take advantage of the law passed by the state legislature removing the corporation tax on electric co-operatives. Therefore all corporate taxes were avoided when the stock company arrangement was dropped and a true co-operative started. The new articles of incorporation were approved by the Secretary of State May 8, 1937. Membership fee in the new corporation was five dollars.

At a special meeting of the Board of Directors June 16, 1937, the President presented a letter from the Rural Electrification Administration appointing Gus H. Egan as Superintendent of Construction to secure easements and construct lines. Egan acted as Superintendent of Construction until February 1, 1938.11

On June 22, 1937, the Directors met in the Roosevelt Hotel in Waco, Texas, to receive, open, and tabulate bids for a construction contract. The Federal Engineering and Construction Company of Kansas City, Missouri, was low bidder and was recommended to the Director of REA for approval.

In a letter dated October 5, 1937, Boyd Fisher, Director, Division of Operations Supervision of the Rural Electrification Administration, advised that the membership be enlarged to include all those who had paid their membership

11Egan interview, op. cit.
fee. Fisher further advised that it was not the policy of the Administration to approve as Superintendent of Construction a member of the Board of Directors.

Gus H. Egan then presented his resignation as a member of the Board of Directors, which was accepted. B. T. McGee, having paid his membership fee, was voted into the cooperative and was nominated to fill the unexpired term as director. The reason for not allowing Egan to serve in a dual capacity was to retain the true character of a cooperative. 12

At a board meeting held August 7, 1937, a letter was read to the board from the Rate Section of REA submitting the following rates:

<table>
<thead>
<tr>
<th>Rate Level</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 40 KWH</td>
<td>or less per Mo.</td>
<td>$2.75 per month</td>
</tr>
<tr>
<td>Next 40 KWH</td>
<td>or less per Mo.</td>
<td>.04 per KWH</td>
</tr>
<tr>
<td>Next 120 KWH</td>
<td>or less per Mo.</td>
<td>.02 per KWH</td>
</tr>
<tr>
<td>Next 200 KWH</td>
<td>or less per Mo.</td>
<td>.015 per KWH</td>
</tr>
</tbody>
</table>

These retail rates were adopted by the board.

A revised rate schedule was received from the Rural Electrification Administration January 15, 1938.

The rates were as follows:

<table>
<thead>
<tr>
<th>Rate Level</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 25 KWH</td>
<td>or less per Mo.</td>
<td>$2.25 per month</td>
</tr>
<tr>
<td>Next 55 KWH</td>
<td>or less per Mo.</td>
<td>.045 per KWH</td>
</tr>
<tr>
<td>Next 120 KWH</td>
<td>or less per Mo.</td>
<td>.025 per KWH</td>
</tr>
<tr>
<td>Over 200 KWH</td>
<td>per Mo.</td>
<td>.015 per KWH</td>
</tr>
</tbody>
</table>

Churches and schools were charged a flat rate of $18.00 per year.

12 Minutes Board of Directors Meeting, January 15, 1938.
These rates are still in effect (December, 1954).

The appointment of William Long as Project Superintendent to succeed Gus H. Egan was approved January 22, 1938, by Boyd Fisher. The Board of Directors agreed to pay a salary of $175 per month with three and one-half cents per mile travel expenses not to exceed $50 per month.\(^{13}\)

On May 21, 1938, Article IV of the Articles of Incorporation was changed to provide for seven directors instead of three. Each director to be elected for one year.

T. R. Qualls was appointed Project Superintendent at a regular meeting of the Board of Directors September 17, 1938. Qualls reported for duty September 26, 1938, and except for time spent in the armed forces during World War II, has been in charge of the unit continuously. On October 1, 1938, Robert L. Conrod and Jack Johnson, Professors of Economics at North Texas State Teachers College were retained as Economic Counsellors without recompense and were invited to future board meetings.

In January, 1939, there had been 1,472 $5.00 membership fees paid into the co-operative and 175 refunds had been made leaving a net of 1,297 paid members. There was a net increase of 331 members for the year, 1938.\(^{14}\)

\(^{13}\)Minutes, Board of Directors Meeting, January 22, 1938.

\(^{14}\)Minutes, Board of Directors Meeting, January 21, 1939.
In order for rural people to derive the maximum benefit from electricity after it was made available to their farm homes they had to invest in electrical appliances. Many farm people had not fully recovered from the depression and could not afford to spend money and credit was not available to them.

The Electric Home and Farm Authority was a loan organization with headquarters in Washington, D. C. and outlets to borrowers provided through local REA offices which wished to participate. The participating Co-ops did not benefit financially. They only rendered a service to their members.

On April 18, 1939, the Denton County Electric Co-operative entered into an agreement with the Electric Home and Farm Authority. The EHFA was a credit agency authorized by an executive order of President Roosevelt in December, 1933, for the TVA region. It proved so useful that it was made national in scope in 1935.

It worked this way: Jane Jones bought from an accredited EHFA dealer a refrigerator, for example, and contracted to pay for it by monthly installments, added to her electric bill, over a period as long as three years. Should Jane buy two major appliances on this same contract, she could take up to four years to pay. EHFA bought the contract, and immediately mailed a check to the dealer. The co-operative collected the monthly installments and forwarded
them to EHFA until the debt was discharged. There was no charge made for handling this added bookkeeping chore.\textsuperscript{15}

The Board of Directors authorized an extension of the agreement between the Texas Power & Light Company and the Co-operative in January, 1940. The termination date of the power contract was changed from June 30, 1940, to July 1, 1941, all other provisions to remain in effect. The demand charge was $2.00 per KWH with an 18 per cent deduction above the first $650 each month.\textsuperscript{16}

On January 31, 1941, the directors authorized an application for another loan from the United States of America, the amount not to exceed $78,000. This money was to be used for the purpose of constructing additional electric transmission, distribution and service lines to supply electricity to a growing list of rural members. A note was authorized in the principal amount of $78,000 bearing interest at the rate of 2.46 per cent per annum providing for the payment of the indebtedness within twenty-five years.

The loan application was approved and a construction contract was awarded the low bidder (Stoval Construction Co.) for $68,746.85 for clearing the right of way and building lines using conventional transformers.\textsuperscript{17}

\textsuperscript{15}Minutes, Board of Directors Meeting, April 18, 1939.
\textsuperscript{16}Minutes, Board of Directors Meeting, January 20, 1940.
\textsuperscript{17}Minutes, Board of Directors Meeting, February 14, 1941.
The Brazos River Electric Transmission Cooperative, Incorporated was formed on February 26, 1941. At that time the contract between the Denton County Co-operative and Texas Power & Light Company provided for a 40 per cent discount on the first 400 KWH, 35 per cent discount on the next 600 KWH and 30 per cent discount on all power above 1,000 KWH. In March, 1941, Texas Power & Light Company started giving the Denton Co-operative a 55 per cent discount on the total bill.\footnote{Financial Report, Denton County Electric Co-op., Feb., 1941.} Texas Power & Light did not succeed in this obvious attempt to discourage interest in the Brazos River Co-operative.

On May 2, 1942, the co-operative terminated the contract with Texas Power & Light Company for power and entered into a contract with the Brazos River Electric Transmission Co-operative. At that time the power was delivered over lines owned by the Brazos River Electric Transmission but the power was generated by Texas Power & Light Company and sold to the Transmission Co-operative. It was not until December, 1949, that the Brazos River Electric Transmission Co-operative started generating its own power.

In May, 1953, the name of the Brazos River Electric Transmission Co-operative, Incorporated was changed to the Brazos Electric Power Co-operative, Incorporated.\footnote{Statement by T. R. Qualls, personal interview.}
The Denton County Electric Co-operative, Incorporated, is also a member of the "Texas Electric Co-operative, Incorporated," which is the statewide association of electric co-operatives in Texas. The membership fee for each participating co-operative is ten dollars. The Texas Electric Co-operative operates a pole creosoting plant at Lufkin, a transformer repair plant at Austin, and publishes the Texas Electric Co-op, a trade journal, once a month.20

The Denton County Co-operative loaned the Texas Electric Co-operative $4,000 to establish the transformer plant. The loan bears 2 per cent interest. Membership in the Texas Electric Co-operative, Incorporated, has paid substantial dividends. The refunds have been as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td>$30.00</td>
</tr>
<tr>
<td>1946</td>
<td>290.00</td>
</tr>
<tr>
<td>1947</td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>150.00</td>
</tr>
<tr>
<td>1949</td>
<td>180.00</td>
</tr>
<tr>
<td>1950</td>
<td>230.00</td>
</tr>
<tr>
<td>1951</td>
<td>1,140.00</td>
</tr>
<tr>
<td>1952</td>
<td>230.00</td>
</tr>
<tr>
<td>Total</td>
<td>$2,250.00</td>
</tr>
</tbody>
</table>

A major crisis hit the Denton County Electric Co-operative in February, 1945. The calamity was caused by an ice storm which broke down many poles and lines and left hundreds of co-op members without electric service for several days. After paying for labor and materials the operating fund of the local unit was almost completely depleted.

20 Ibid.
On February 28, 1945, a contract was signed with Teague and Goodmen Construction Company to repair lines on a cost plus 10 per cent profit basis. During the emergency period other REA co-operatives sent men and equipment to help repair broken lines. Crews came from Stamford Electric Co-operative; Kaufman County Electric Co-operative; Navarro County Electric Co-operative; and Deep East Texas Co-operative.

In order to meet the expense of repairing lines, the Denton County Electric Co-operative borrowed $14,000 from the First State Bank in Denton, using War Bonds as collateral.

The co-operative was faced with similar circumstances in January, 1949, and again in January, 1950.

Since the last ice storm the Denton County Electric Co-operative has not made any major change in the organization or operation of its business. There have been some minor changes in the bookkeeping to comply with changes in the type of bookkeeping suggested by the National Rural Electric Co-operative Association. The NRECA is the national organization made up of rural electric co-operatives. NRECA member co-operatives often rely heavily on technical advice given them by the national organization.
CHAPTER III

GROWTH AND EXPANSION

As a matter of survival the management of the Denton County Electric Co-operative worked incessantly to increase the membership of the co-operative the first few years of operation. Since a minimum of three members per mile was a necessary prerequisite to get a loan from the federal government much effort was spent to increase the membership of the co-operative. It should be pointed out that there is a difference between the number of members "connected" and the actual number of members. The number of actual members included everyone who had paid their membership fee and had agreed to take electricity from the co-operative when the lines were completed. There was sometimes a considerable difference between the number of members connected and the actual membership. For instance, in September, 1938, there were 547 members connected on 399 miles of line. In September, 1954, there were 3,409 members connected on 1,166 miles of line, and 748 members not receiving service.

The principle of area coverage was another stipulation placed on the local co-operative by the federal lending agency. Area coverage did not allow the co-operative to be selective
about its membership. As long as any person met the qualifications for membership, he could not be refused service when service was made available within the stipulated distance from his farm.

The principle of area coverage is sometimes referred to as "horizontal" expansion. After the area of operation was considered to be well covered emphasis was placed on "vertical" expansion which means increasing the kilowatt-hour consumption per member. The Denton County Electric Co-operative is considered to have accomplished area coverage to approximately the extent of the national average, or above. The NRECA estimates area coverage by REA throughout the United States to cover about 90 per cent of rural people.

The record of vertical growth has exceeded the management's most optimistic expectations. The average kilowatt-hour consumption per connected member in September, 1938, was thirty-five kilowatts. In September, 1954, an average of two hundred and fifty-six kilowatt-hours of electricity were used per member.

The revenue taken in by the co-operative for the month of January, 1939, was $3,059.79. The month of January, 1954, brought into the co-operative's till a total of $22,400.86, which represented an increase of over seven times the income of a like period in 1939. In spite of the three very damaging and expensive ice storms that hit the co-operative's lines
a $52,728.43 cushion of credit has already been paid into the federal government and is drawing .02 per cent interest. The co-operative also owns $181,435.00 in U. S. Bonds.

Another indication of the vertical growth is in the average monthly bill of each member. In September, 1938, the average bill of each connected member was $2.49, while the average bill paid by each connected member in September, 1954, was $8.01.

Actual physical growth of the co-operative is shown in the map in the Appendix. Although most of the co-operative's lines are in Denton County, it extends into Collin, Tarrant, Wise, Cooke and Grayson Counties.

During the first year of operation the co-operative regularly employed only two people in the office other than the manager. There were only two field men employed during the first year of operation. At present, there are six office employees and the manager inside and eleven full-time field men employed outside.

To further indicate the growth of the Denton County Electric Co-operative in the community, the annual payroll of the co-operative has increased from $5,051.54 in 1938 to $52,328.38 in 1953. It also paid $5,143.34 in taxes from January 1, 1954, to November 13, 1954.

The increased confidence of the rural people in REA is a growth factor that cannot be determined. One of the most
difficult problems that confronted the organizers of the co-operative was selling the farmers on the "idea" of rural electrification. Many farmers would not agree to take service and pay a membership fee when they were first asked to join the co-operative because they did not believe that the venture would be successful. Almost all of the doubters joined after lines were built and energized.¹

The tables on the following pages show the co-operative's growth in (1) Number of members connected, (2) Miles of line, (3) Average KW consumption per member, (4) Average bill per member, (5) Revenue; and (6) Annual payroll of the co-operative. A graph of the same information showing the over-all trend in growth is shown following each table.

Other examples of the growth of the Denton County Electric Co-operative could have been cited, but they would be largely a repetition of the information given. Both horizontal (area coverage) and vertical (amount consumed per member) growth is covered in the following information.

Table 1 shows the number of members connected with the Denton County Electric Co-operative, Incorporated, during the month of September (only) from 1938 to 1954. The month of September was chosen because it was the last full month of operation before data for this study were gathered.

¹Statement by Bertha M. Anderson, personal interview.
### TABLE 1

MEMBERS CONNECTED

<table>
<thead>
<tr>
<th>Year</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>547</td>
</tr>
<tr>
<td>1939</td>
<td>1,133</td>
</tr>
<tr>
<td>1940</td>
<td>1,208</td>
</tr>
<tr>
<td>1941</td>
<td>1,481</td>
</tr>
<tr>
<td>1942</td>
<td>1,707</td>
</tr>
<tr>
<td>1943</td>
<td>1,779</td>
</tr>
<tr>
<td>1944</td>
<td>1,891</td>
</tr>
<tr>
<td>1945</td>
<td>2,042</td>
</tr>
<tr>
<td>1946</td>
<td>2,306</td>
</tr>
<tr>
<td>1947</td>
<td>2,439</td>
</tr>
<tr>
<td>1948</td>
<td>2,506</td>
</tr>
<tr>
<td>1949</td>
<td>3,045</td>
</tr>
<tr>
<td>1950</td>
<td>3,223</td>
</tr>
<tr>
<td>1951</td>
<td>3,296</td>
</tr>
<tr>
<td>1952</td>
<td>3,320</td>
</tr>
<tr>
<td>1953</td>
<td>3,359</td>
</tr>
<tr>
<td>1954</td>
<td>3,395</td>
</tr>
</tbody>
</table>

Figure 1 illustrates the trend in growth in the number of members during the month of September, from 1938 to 1954.
Table 2 shows the number of miles of line energized by the Denton County Electric Co-operative, Incorporated, during the month of September (only) from 1938 to 1954. The month of September was chosen because it was the last full month of operation before data for this study were gathered.

**TABLE 2**

<table>
<thead>
<tr>
<th>Year</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>399</td>
</tr>
<tr>
<td>1939</td>
<td>604</td>
</tr>
<tr>
<td>1940</td>
<td>610</td>
</tr>
<tr>
<td>1941</td>
<td>675</td>
</tr>
<tr>
<td>1942</td>
<td>682</td>
</tr>
<tr>
<td>1943</td>
<td>700</td>
</tr>
<tr>
<td>1944</td>
<td>720</td>
</tr>
<tr>
<td>1945</td>
<td>769</td>
</tr>
<tr>
<td>1946</td>
<td>819</td>
</tr>
<tr>
<td>1947</td>
<td>827</td>
</tr>
<tr>
<td>1948</td>
<td>842</td>
</tr>
<tr>
<td>1949</td>
<td>1,062</td>
</tr>
<tr>
<td>1950</td>
<td>1,090</td>
</tr>
<tr>
<td>1951</td>
<td>1,115</td>
</tr>
<tr>
<td>1952</td>
<td>1,114</td>
</tr>
<tr>
<td>1953</td>
<td>1,152</td>
</tr>
<tr>
<td>1954</td>
<td>1,166</td>
</tr>
</tbody>
</table>

Figure 2 illustrates the trend in the growth in the number of miles of line energized, during the month of September, from 1938 to 1954.
Table 3 shows the average kilowatt consumption per member of the Denton County Electric Co-operative during the month of September (only) from 1938 to 1954. The month of September each year was used in collecting data for this study because it is a more stable month of activity each year. The extremes from summer and winter are largely avoided which affects the consumption of power by rural people.

TABLE 3

KILOWATT CONSUMPTION PER MEMBER

<table>
<thead>
<tr>
<th>Year</th>
<th>Kilowatts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>35</td>
</tr>
<tr>
<td>1939</td>
<td>55</td>
</tr>
<tr>
<td>1940</td>
<td>62</td>
</tr>
<tr>
<td>1941</td>
<td>55</td>
</tr>
<tr>
<td>1942</td>
<td>63</td>
</tr>
<tr>
<td>1943</td>
<td>70</td>
</tr>
<tr>
<td>1944</td>
<td>76</td>
</tr>
<tr>
<td>1945</td>
<td>72</td>
</tr>
<tr>
<td>1946</td>
<td>80</td>
</tr>
<tr>
<td>1947</td>
<td>107</td>
</tr>
<tr>
<td>1948</td>
<td>114</td>
</tr>
<tr>
<td>1949</td>
<td>120</td>
</tr>
<tr>
<td>1950</td>
<td>136</td>
</tr>
<tr>
<td>1951</td>
<td>169</td>
</tr>
<tr>
<td>1952</td>
<td>202</td>
</tr>
<tr>
<td>1953</td>
<td>198</td>
</tr>
<tr>
<td>1954</td>
<td>256</td>
</tr>
</tbody>
</table>

Figure 3 illustrates the trend in kilowatt consumption per member, during the month of September, from 1938 to 1954.
Table 4 shows the average bill paid by each member of the Denton County Electric Co-operative during the month of September (only) from 1938 to 1954. The month of September was chosen because it was the last full month of operation before data for this study were gathered.

**TABLE 4**

**AVERAGE BILL**

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>$ 2.49</td>
</tr>
<tr>
<td>1939</td>
<td>3.42</td>
</tr>
<tr>
<td>1940</td>
<td>3.67</td>
</tr>
<tr>
<td>1941</td>
<td>3.45</td>
</tr>
<tr>
<td>1942</td>
<td>3.71</td>
</tr>
<tr>
<td>1943</td>
<td>3.89</td>
</tr>
<tr>
<td>1944</td>
<td>3.97</td>
</tr>
<tr>
<td>1945</td>
<td>3.89</td>
</tr>
<tr>
<td>1946</td>
<td>4.09</td>
</tr>
<tr>
<td>1947</td>
<td>4.72</td>
</tr>
<tr>
<td>1948</td>
<td>4.94</td>
</tr>
<tr>
<td>1949</td>
<td>5.03</td>
</tr>
<tr>
<td>1950</td>
<td>5.71</td>
</tr>
<tr>
<td>1951</td>
<td>6.47</td>
</tr>
<tr>
<td>1952</td>
<td>7.03</td>
</tr>
<tr>
<td>1953</td>
<td>6.85</td>
</tr>
<tr>
<td>1954</td>
<td>8.01</td>
</tr>
</tbody>
</table>

Figure 4 illustrates the trend in the average monthly bill paid by each member, during the month of September, from 1938 to 1954.
Fig. 4.—Average bill per member.
Table 5 shows the revenue of the Denton County Electric Co-operative, Incorporated, during the month of January (only) from 1939 to 1954. The month of January was selected because it was the first full month of operation that would correspond to a full month of operation during the year of this study.

**TABLE 5**

**REVENUE FOR THE MONTH OF JANUARY FROM 1939 TO 1954**

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>$3,059.79</td>
</tr>
<tr>
<td>1940</td>
<td>3,548.17</td>
</tr>
<tr>
<td>1941</td>
<td>3,977.56</td>
</tr>
<tr>
<td>1942</td>
<td>5,087.13</td>
</tr>
<tr>
<td>1943</td>
<td>5,767.93</td>
</tr>
<tr>
<td>1944</td>
<td>6,317.22</td>
</tr>
<tr>
<td>1945</td>
<td>7,102.12</td>
</tr>
<tr>
<td>1946</td>
<td>8,081.24</td>
</tr>
<tr>
<td>1947</td>
<td>9,826.80</td>
</tr>
<tr>
<td>1948</td>
<td>10,636.75</td>
</tr>
<tr>
<td>1949</td>
<td>12,474.76</td>
</tr>
<tr>
<td>1950</td>
<td>15,728.66</td>
</tr>
<tr>
<td>1951</td>
<td>18,225.57</td>
</tr>
<tr>
<td>1952</td>
<td>19,327.89</td>
</tr>
<tr>
<td>1953</td>
<td>21,188.33</td>
</tr>
<tr>
<td>1954</td>
<td>22,400.86</td>
</tr>
</tbody>
</table>

Figure 5 illustrates the trend in the revenue of the Co-operative for the month of January each year from 1939 through 1954.
Revenue For The Month of January Each Year From 1939 Through 1954

Fig. 5.--Revenue for the month of January each year from 1939 through 1954.
Table 6 shows the annual payroll of the Denton County Electric Co-operative, Incorporated, from 1938 to 1954.

TABLE 6

ANNUAL PAYROLL BY YEARS

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>$5,051.54</td>
</tr>
<tr>
<td>1939</td>
<td>9,499.87</td>
</tr>
<tr>
<td>1940</td>
<td>9,137.84</td>
</tr>
<tr>
<td>1941</td>
<td>10,316.82</td>
</tr>
<tr>
<td>1942</td>
<td>11,381.25</td>
</tr>
<tr>
<td>1943</td>
<td>12,681.00</td>
</tr>
<tr>
<td>1944</td>
<td>16,367.36</td>
</tr>
<tr>
<td>1945</td>
<td>23,744.89</td>
</tr>
<tr>
<td>1946</td>
<td>32,247.11</td>
</tr>
<tr>
<td>1947</td>
<td>34,810.06</td>
</tr>
<tr>
<td>1948</td>
<td>37,329.53</td>
</tr>
<tr>
<td>1949</td>
<td>50,394.95</td>
</tr>
<tr>
<td>1950</td>
<td>57,088.27</td>
</tr>
<tr>
<td>1951</td>
<td>58,157.31</td>
</tr>
<tr>
<td>1952</td>
<td>59,393.19</td>
</tr>
<tr>
<td>1953</td>
<td>52,328.38</td>
</tr>
<tr>
<td>1954</td>
<td>42,159.56*</td>
</tr>
</tbody>
</table>

*Only the amount of the first nine months of the 1954 payroll was available at the time of this study.

Figure 6 illustrates the trend in the payroll paid by the Co-operative from 1938 to 1954.
CHAPTER IV

PRESENT PROBLEMS

Local

The local problems of the Denton County Electric Co-operative were outlined for this study by T. R. Qualls, manager of the local co-operative, in an interview on November 11, 1954.

The primary problems, at that time, were rebuilding lines for the moving and widening of U. S. Highways, State Highways, farm to market roads, county roads, and railroads. Approximately one fourth of the total line mileage (1166 Mi.) has been moved since the project was started at a cost of almost one half of the original cost of building the lines.

Maintenance costs to the co-operative consisted mainly of natural depreciation, meter and transformer upkeep, clearance—cutting trees, replacing insulators being shot off by hunters, tightening of hardware loosened by vibration, keeping members interested in the co-operative, and re-routing lines for two lakes built in the local area. Obtaining a sufficient amount of power was also listed as a local problem. The increase in the number of air conditioners has increased the power usage to the point of placing a severe strain on the available power supply. The
co-operative engaged an engineering firm in 1951 to make a survey of its facilities to assist in future planning. At the time of this study (1954) the demand for electricity has been reached that had been predicted for 1963.

The Denton County Electric Co-operative gets its power supply from the Brazos River Electric Co-operative generating station. This power supply is owned and operated by the surrounding REA co-operatives which have limited funds and an increasing demand for electricity. The generating capacity of the Brazos River plant is of course limited. There are nineteen co-operatives in the north Texas area that get their power from Brazos River and each one has an average of 4,000 members. The number of members has been growing and the amount of electricity consumed per member is increasing but funds have not been obtained for increasing the power supply.

There is one advantage in being able to obtain a wholesale source of power from a co-operatively owned generating plant. That advantage is in the cost of electricity. The N.R.E.C.A. figures show that the 982 REA co-operatives in the United States spend an average of 32 per cent of their income for power. From January 1, to November 30, 1954, the Denton County Electric Co-operative spent only 26.8 per cent of its income for power.

The following is a copy of the Secretary's Report that was submitted to the members at the fourteenth annual
membership meeting which was held November 13, 1954. The report consists of a complete financial statement of the Denton County Electric Co-operative, Incorporated.

FOURTEENTH ANNUAL MEETING  
November 13, 1954  
DENTON COUNTY ELECTRIC CO-OPERATIVE, INC.  
TEXAS 49 DENTON  
DENTON, TEXAS

**WHAT WE OWN**

**CURRENT ASSETS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash - General Fund</td>
<td>$70,038.21</td>
</tr>
<tr>
<td>Cash - REA Construction Fund</td>
<td>561.16</td>
</tr>
<tr>
<td>Investments: Texas Electric Co-op., Inc.</td>
<td>3,433.26</td>
</tr>
<tr>
<td>and Denton Dairy Co-op.</td>
<td></td>
</tr>
<tr>
<td>U. S. Bonds (set up as a reserve)</td>
<td>181,435.00</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>32,922.03</td>
</tr>
<tr>
<td>Less: Reserve for Uncollectible Accounts</td>
<td>2,325.99</td>
</tr>
<tr>
<td>Notes Receivable (Texas Electric Co-op., Inc.)</td>
<td>4,000.00</td>
</tr>
<tr>
<td>Materials on hand</td>
<td>42,347.14</td>
</tr>
<tr>
<td>Prepayments (Insurance, etc.)</td>
<td>2,216.19</td>
</tr>
<tr>
<td>Other deferred debits to be cleared</td>
<td>7,467.71</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>$342,094.71</strong></td>
</tr>
</tbody>
</table>

**FIXED ASSETS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution System</td>
<td>1,544,398.08</td>
</tr>
<tr>
<td>Warehouse Building, Transportation, Communication, Office Fixtures, Tools and other Equipment</td>
<td>78,083.92</td>
</tr>
<tr>
<td>Less Allowance for Depreciation</td>
<td>420,776.77</td>
</tr>
<tr>
<td><strong>Depreciated Value of Fixed Assets</strong></td>
<td><strong>1,201,710.23</strong></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>1,543,804.94</strong></td>
</tr>
</tbody>
</table>
## WHAT WE OWE

### LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued Interest to REA</td>
<td>$2,951.73</td>
</tr>
<tr>
<td>Other current and Accrued Liabilities</td>
<td>605.81</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>4,45</td>
</tr>
<tr>
<td>Contribution to Construction</td>
<td>33,735.94</td>
</tr>
<tr>
<td>Other Deferred Credits (materials)</td>
<td>2,726.76</td>
</tr>
<tr>
<td>Operating Margins</td>
<td>297,740.63</td>
</tr>
<tr>
<td>Membership Fees</td>
<td>20,785.00</td>
</tr>
<tr>
<td>REA Construction Obligations</td>
<td>1,185,254.62</td>
</tr>
</tbody>
</table>

**Total Liabilities**: $1,543,804.94

### REA LOAN FUND TRANSACTIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Allocations Under Loan Contracts and Notes</td>
<td>1,748,000.00</td>
</tr>
<tr>
<td>Total Funds Advanced from REA</td>
<td>1,576,484.22</td>
</tr>
<tr>
<td>Interest Accrued - Deferred</td>
<td>36,774.85</td>
</tr>
<tr>
<td>Gross Obligation to REA</td>
<td>1,613,259.07</td>
</tr>
<tr>
<td>Less Payments Applied Against Principal</td>
<td>355,436.33</td>
</tr>
<tr>
<td>Less Advance Payments (Cushion of Credit)</td>
<td>52,728.43</td>
</tr>
<tr>
<td>Net Obligation to REA</td>
<td>1,205,094.31</td>
</tr>
</tbody>
</table>

Amortization on loan contracts—approximately $4,300.00 per month or approximately $51,600.00 per year.

Rate of interest on loan contracts .02%

Loan contracts are for a period of 35 years.
Results of Operations
For The Calendar Year to Date - 1954

Revenue:
We sold electric energy amounting to $241,284.51
Other sales and income amounted to $3,050.75
Total Revenue $244,335.26

Expenses:
Electric Power cost us $64,460.54
Operating and maintaining the system cost $67,245.49
Depreciation of system amounted to $44,864.62
Interest on construction loans amounted to $19,158.24
Taxes amounted to $5,143.34
Insurance cost amounted to $942.64
Total Expenses $201,814.87

Margin For Year: $42,520.39

We have approximately 1167 miles of electric lines with 3409 members receiving electric service, which services are in Denton, Collin, Tarrant, Wise, Cooke and Grayson Counties at an average of approximately 2.9 consumers per mile.

Average KWH per member - per month - for the past year 209.

Average electric bill per member - per month - for the past year $6.94.
National

A perpetual national problem, according to National Rural Electric Co-operative Officials, has been getting an adequate budget to operate its far-flung activities. The federal government's bookkeeping system has come under indictment for burying REA under red ink by using what is in effect a "single entry" bookkeeping system. The NRECA has advanced a resolution calling for the separation of Federal expenditures which are "investments" from those which are expenditures or expenses in the ordinary meaning of the term. This request for a reform of the Federal Budget System would separate Federal outlays of money into two classes: (1) Investments like REA loans to electric and telephone systems, and (2) expenditures like the great bulk of military outlays, expenses for the Congress, payment of judges and other outlays which will never be repaid.

Many economists and statesmen have long advocated this reform, a reform which is referred to technically as the "adoption of a Federal capital budget." A number of European countries already operate under a "capital budget." All private corporations operate with such budgets. All individual enterprises which continue to exist operate under such budget whether they know it or not.¹

When a private corporation or a farmer invests money in interest-bearing or profit-making securities or in a permanent plant, whether that plant be a new factory, a new tractor, a new barn or new land, the outlay of money for such land or equipment shows up on the books as an investment and an asset. The money borrowed or saved for such investments shows up as expenditures, but it is balanced by the net worth of the securities, land or equipment. If this were not so, every private business in this country would be "in the red," technically bankrupt at all times.

On the other hand, when the Federal government lends money to the rural electric systems which is repayable with interest and which is secured by a mortgage on the system, the loan shows up in the budget as an "expenditure" just like money used to buy shells for target practice. Under the outmoded Federal budget and accounting system, the government has only expenses and no assets. This is obviously a denial of the facts. It puts the Federal government in the absurd position of having "spent" about two billion dollars on power facilities connected with the great hydro projects, facilities which are now worth far more than two billion dollars, but those facilities do not show up on the Federal books as assets. They just do not show up at all, except as expenditures. Under the present Federal accounting system, stationery, the national forests, TVA, REA's two and three-tenths billion dollars in outstanding loans, and the
expenditures for the relief of war veterans all show up in the same column marked "expenditures."²

The result is that when the rural electrics go to the Congress to request additional loan funds or investments in self-liquidating power projects, they have to justify those investments as though they were asking for gifts from the Treasury. When the Bureau of the Budget considers the request of the REA administrator for a new year's loan budget, the administrator is in the position of asking for an "expenditure" instead of investment funds. This situation is unrealistic, misrepresents the facts, and leads to endless problems and misunderstandings.

The basic difference between a "capital budget" and the present Federal budget is that the capital budget would distinguish between investments and expenditures so that the Congress and economy-minded citizens could concentrate on "expenditures" and not slash or destroy highly productive, highly profitable investments in the process. A major REA problem for years has been that of wrestling with the Congress on this point. When the Congress insisted on "economy," when the Bureau of the Budget either cut the REA administrator's request or put a ceiling on his loan program, the rural electrics have never known where sincere economy left off and power company "front" began.

²Ibid.
The NRECA has expressed the belief that at the present time (1954) a great raid on the public domain is underway all over the nation by way of the looting of Federal power sites, sites belonging to the people. Basically the slogans being fed the public in opposition to the development of our resources boil down to two: (1) It is more "economical" for the people to give the power sites and atomic resources than it is for them to own them, and (2) it is "creeping socialism" for Uncle Sam to build a dam. But the more potent, the more forceful and persuasive argument with informed people is the economy argument. But what logic could be more misleading than to assert that it is more economical to give away the people's resources than it is to develop them for the use of all the people instead of the profit of a few?

As for the rural telephone and electric programs, by all odds the hardest hill to climb is the "economy" hill. Over and over the Congress is told that an investment in rural telephones and electrification systems is not an "expenditure" but an investment. However, when the budget balancers, both those that are sincere and those that are not, "get rolling," the rural electrics' voice is lost in the hue and cry.3

Another national problem that is eating into REA activities like a cancerous growth is the rising cost of power

3 Ibid.
purchased by REA co-operatives from commercial power companies. Since commercial power companies are monopolistic by nature and the state regulatory commissions which are established to protect the public interest in determining the rates charged, the general public is not very well-informed and the cost of electricity is fairly well hidden. Private utility companies spend more money influencing legislation than any other private interest group in the United States. As a result rural electric systems, which purchase power from commercial companies, pay part of the cost of the very propaganda which is being directed at them.  

Rural electric systems have a big stake in the rates charged by the commercial power companies. They purchase about 50 per cent of their wholesale power from these companies. They paid the companies $54,033,211 for the fiscal year ending June 30, 1953.

Now, from many parts of the country comes word that the companies are raising their rates. Wholesale rates can be raised to the point of destroying any rural electric system.

These increases, at least insofar as the rural electrics are concerned, seem to be directly related to the rapidly disappearing power supply alternatives of the rural electrics, i.e., their right and opportunity to generate

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their own supply or their opportunity to purchase low-cost Federal wholesale power.

Utility regulation in this country has done a lot of good. Investors don't face the same kind of high-jacking they got in the 1920's. But regulation has been a failure when the problems of abundant power supply and low rates are considered.

It is well known that generally the state utility regulating bodies have not been very effective in controlling rates and protecting electric consumers. But why? The theory has always been that electric power companies operated for profit are monopolies and must be regulated to keep them from gouging the people--too much. This has been due partly to the fact that the electric industry, by necessity or design, has become one of the most complicated and involved of all businesses. It is due in part to stock manipulations, rate juggling, and other carefully calculated schemes. It is due in part to lack of popular support and lack of state legislature support of the regulatory bodies.

Furthermore, members of state regulatory bodies have to be either appointed or elected. Most of them no doubt are high-calibered and well-intentioned individuals, but there are always gigantic pressures from whence come campaign contributions and other political assistance.

\[5\] Ibid.
The regulatory commissions cannot do much without substantial staffs of experienced experts and technicians—engineers, economists, rate specialists, etc. Such staffs are seldom provided by state legislatures, and what personnel is available is usually underpaid. Staff members frequently resign to become employees of the very utilities which they have been regulating. This practice even extends to some of the commissioners.\(^6\)

State regulatory commissions often provide the training grounds for future power company employees. For example, many Missouri Public Service Commission employees have quit and gone to work for the companies they were supposed to regulate. Sometimes the commissioners themselves graduate into power company vice presidents. A former chairman of the state commission went straight from his "regulatory" job to become vice president and general counsel of one of the Missouri companies that is fighting REA. And he is a leader in that fight.\(^7\)

Another important factor that may contribute to the rising cost of electrical energy is the concerted move under way by natural gas companies to increase rates for natural gas. This would necessarily increase the generating costs of the electric power companies using gas for fuel. And the

\(^6\)Ibid., 4.

\(^7\)Ibid.
power companies will, of course, pass on this increase in their fuel costs to their power customers by increasing the rates for power. For example, Cities Service Gas Company has filed for an increase of $12,589,000, which is an average rate increase of 44 per cent. Kansas Power & Light Company has already stated that it will increase its rates to its customers by $336,000 if the Cities Service raise is approved.

Thus, rural electric systems which purchase their wholesale power requirements from power companies which use gas as fuel for generation, are faced with rate increases for this reason. Some of the rural systems have fuel clauses in their existing power contracts which will automatically produce the rate increase. Those that do not have fuel clauses in their contracts face the prospect of having the basic rate itself increased.

This is an illustration of a situation that is so deep rooted that the cost of power cannot be controlled merely at the stage where negotiations take place between rural systems and their power suppliers, or even at the time hearings are held before regulatory bodies on the specific question of what rates the power companies should be permitted to charge the rural systems. It must also be remembered that if these gas increases are granted by the Federal Power Commission, the various state regulatory agencies are powerless to refuse
subsequent compensatory increases by electric utilities coming before them. Power companies are entitled to and will pass on to their customers all of their costs, in addition to seeking a profit on their operations over and above those costs. Therefore, once costs of the power companies have been fixed at a certain level there is nothing that the power customers can do about it.

For example, power companies collect back from their customers all of the taxes which they pay. It is the customer that actually pays the tax. That is why it was important to the rural systems to oppose any new method for allocation of consolidated taxes paid by utility holding companies which would have allocated more, even all, of the taxes to the operating companies. These higher tax costs of operating companies could then be passed on to their customers.

The same thing is true of all fuel costs. These costs are also paid, in the final analysis, by the power customer. When the price of fuel goes up, the increase will be paid by the power customer. There is only one way in which the power customer can avoid increases in fuel costs—and that is to stop the increase in fuel costs. Once that increase has taken place, there is nothing that the power customers can do to avoid paying for it through increased power costs.

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There is no authority in any regulatory body to deny a power company the right to recover from the power customers all of its costs in addition to a fair rate of return, and, obviously, this has to be so. Companies cannot operate at a loss. So there is no reasonable argument—moral or legal—against the recovery of actual generation fuel costs from power customers. 9

It is only a matter of time until atomic power is successfully converted into electrical energy and the question of who is going to control it was the subject of a very long and bitter debate in Congress during its last session. In order for the utility commissions to establish what a fair rate is they have long needed some yardstick of costs not based on private utility information. The need for an unbiased unit of measure combined with the certainty of atomic energy entering the electric power field has set the stage for a proposal made by the National Rural Electric Cooperative Association to the Atomic Energy Commission. The N.R.E.C.A. is recommending a partnership between the AEC, the Rural Electrification Administration, and the rural electric co-operatives to build and operate experimental atomic reactors, or furnaces, to produce power for U. S. farms. 10

The recommendation so far has made little progress. The N.R.E.C.A. is on the outside looking in as far as the

9 Ibid. 10 Ibid.
AEC's five-year program to build nuclear reactors for commercial power production is concerned. As yet, the rural electrics have not been invited to work on any of the study teams set up under the program; they have been denied access to information on the development of atomic power for civilian use; and not one rural electric co-op is working with the AEC on nuclear-power development, even on a part-time basis.11

Under the N.R.E.C.A.'s proposal, the REA would make a loan to a system for a conventional generating plant. The AEC would pay the difference between this cost and the total cost of the atomic-power plant. The government would then have a pilot atomic-power plant, and the REA co-operative would not only have power for its patrons, it could also supply accurate and valuable yardstick cost data to the government. This arrangement would not be too different from the one at Shippingport, Pennsylvania, where the cost of the first atomic-energy plant under the AEC reactor program is being shared by the government, Westinghouse Electric, and the Duquesne Light Company.

A number of facts argues persuasively for the N.R.E.C.A. proposal:

Actual operating costs of a pilot plant built on the lines of a rural electric system would be easier to measure

simply because of the co-operative's nonprofit nature. There would be, for example, no royalty costs to figure in, as there would be if atomic patents were involved.

Rural electric systems ordinarily need smaller generating units than other power companies to supply their power. The AEC program calls for experimental plants of about the right size.

A Federal-local partnership such as the N.R.E.C.A. suggests would not only tie in with the research and development program for nuclear-power technology, it would also transmit its benefits to rural America. And after all, atomic energy and its magic is part of the public domain. The public has paid some fourteen billion dollars for it. The REA co-ops believe that its benefits ought to be shared.

At the completion of this study there are possible problems which may affect wide areas, pending the settlement of legal questions. It will be some time before a solution

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Texas' Attorney General John Ben Shepperd has filed a suit against the Unshur-Rural Electric Co-op at Gilmer, Texas, for the courts to determine the meaning of the state co-operative corporation act. The question involves especially that section which says that co-ops may be organized for the purpose of "the furnishing of electric energy to persons in rural areas who are not receiving central station service." The effect of the suit, co-op officials say, would be to force electric co-ops completely away from any populated area, force them to sell out such lines at give-away prices, abandon members and ultimately jeopardize loans made to the co-ops by the Rural Electrification Administration.
to these problems will be reached; therefore, no attempt will be made in this thesis to predict the possible economic effects on REA co-operatives.
CHAPTER V

CONCLUSION

The whole story of the Rural Electrification Administration is a tribute to the ability of rural people to help themselves. Although the number of farmers continues to decrease the demand for their products continues to increase as more people shift into urban employment and the population continues to rise. Before Congress passed the original Act establishing the Rural Electrification Administration in 1936 only 10.9 per cent of the farmers in the United States had electricity on their farms. Now, 90 per cent of the farms have central station service.

Every co-operative has problems of one kind or another and generally rural electric co-operative problems are very similar. Many of the Denton County Electric Co-operative's problems are also listed by the National Rural Electric Co-operative Association as national problems. The two big problems, both locally and nationally, are: (1) shortage of power and (2) lack of funds to meet increased demands for power.

Many REA leaders believe the only real solution to these problems is for the rank and file of the people to get behind
their local co-operative with their collective efforts and demand that Congress appropriate adequate loan funds and continue to allow REA co-ops preference to both present and future supplies of power generated by publicly-owned dams.

Most of the rural people in Denton County have not had central station service over sixteen years and already many of them are taking it for granted. At the last membership meeting of the Denton County Electric Co-operative only 281 members were present. At that time there was a total of 3,409 members receiving service and 748 members not receiving service. The co-operative manager offered door prizes to get that many members out to the meeting.

When interest falls that low the true nature of a co-operative is lost. The basic principles of a co-operative are to provide goods or services to the membership of the co-operative at the lowest possible cost. Also, the membership must be held together by some mutual interest. As interest, and participation of the members, in the co-operative's business decreases, the co-operative becomes a co-operative in name only.

One difference between a privately owned corporation, operated for profit, and a co-operative, not operated for profit, is that a private corporation separates the ownership of the business from the management while a co-operative is member-owned and operated. When a co-operative is managed
entirely by people other than members the co-operative loses its true character. The Denton County Electric Co-operative, Incorporated, currently employs a total of eighteen people. Only two of that number use electricity supplied by the co-operative. The other sixteen have no other connection with the co-operative except as a place of employment. Therefore, the ownership of the co-operative and the administration of its business are separated almost entirely.

There is no reason to question the loyalty of the management of the co-operative and the mention of the separation of the ownership from the management is in no way an indictment of anyone but rather an attempt to fairly appraise the facts.

In a democratic nation with a capitalistic economic system there are only two ways for any segment of society to gain any desired result. One is to bring economic pressure to bear on the opposing forces and the other is to form a strong voting bloc and defeat the opposition with ballots. Obviously no rural electric co-op is a tower of financial strength. However, a well informed co-operative membership can make some show of strength at the polls.

Local REA leaders believe that there is no problem confronting the Denton County Co-operative that cannot be successfully overcome as long as the entire membership is well
informed and takes an active interest in their co-operative program.
APPENDIX

MAP OF AREA COVERED BY THE DENTON COUNTY ELECTRIC
CO-OPERATIVE, INCORPORATED
ARTICLES OF INCORPORATION
of
DENTON COUNTY ELECTRIC COOPERATIVE, INC.

KNOW ALL MEN BY THESE PRESENTS:

We, the undersigned, being natural persons of the age of twenty-one years or more and residents of the State of Texas, for the purpose of forming a corporation under the "Electric Cooperative Corporation Act" of the State of Texas, do hereby adopt the following Articles of Incorporation:

ARTICLE I

The name of the Corporation is
DENTON COUNTY ELECTRIC COOPERATIVE, INC.

ARTICLE II

The purpose for which the Corporation is organized is to engage in rural electrification, including the furnishing of electric energy to persons in rural areas who are not receiving central station service; assisting in the wiring of the premises of persons in rural areas or the acquisition, supply, or installation of electric or plumbing equipment therein.

ARTICLE III

The names and addresses of the incorporators who shall serve as directors and manage the affairs of the Corporation until the first annual meeting of the members or until their successors are elected and qualified are as follows:
NAME            RESIDENCE
Gus N. Egan     Denton, Texas
H. P. Koines    Krum, Texas
W. C. Moss      Denton, Texas

ARTICLE IV

The number of directors to be elected at annual meetings of the members is three (3).

ARTICLE V

The address of the principal office of the Corporation shall be Denton, County of Denton, Texas, and the name and address of its agent upon whom process may be served is Gus N. Egan, Denton, Texas.

ARTICLE VI

The duration of the Corporation shall be perpetual.

ARTICLE VII

Section 1. The undersigned incorporators shall be members of the Corporation. In addition to the undersigned incorporators, any person, corporation or partnership not receiving central station service may become a member of the Corporation by: (a) paying such membership fee as shall be specified in the By-laws of the Corporation; (b) agreeing to purchase from the Corporation the amount of electric energy hereinafter in Section 2 of this Article specified; and (c) agreeing to comply with and be bound by the Articles of Incorporation and By-laws of the Corporation and any amendments thereto and such rules and regulations as may from time to time be adopted by
the Board of Directors of the Corporation; provided, however, that no person, corporation or partnership, except the incorporators of the Corporation or any person, corporation or partnership accepted for membership by the members at any meeting thereof, shall become a member of the Corporation unless and until he or it has been accepted for membership by the affirmative vote of a majority of the members of the Board of Directors.

Section 2. Each member shall, as soon as electric energy shall be available, purchase from the Corporation monthly not less than the minimum amount of electric energy which shall, from time to time, be determined by resolution of the Board of Directors of the Corporation and shall pay therefore, and for all additional electric energy used by such member, the price which, from time to time, shall be fixed therefore by resolution of the Board of Directors. Each member shall also pay all obligations which may from time to time become due and payable by such member to the Corporation as and when the same shall become due and payable.

Section 3. The By-laws of the Corporation may fix other terms and conditions upon which persons shall be admitted to and retain membership in the Corporation not inconsistent with these Articles of Incorporation or the Act under which it is organized.

ARTICLE VIII

Section 1. Subject to the provisions of any mortgage or deed of trust given by the Corporation and within sixty (60) days after the expiration of each fiscal year the Board of Directors, after paying or providing for the payment of all operating and maintenance expenses of the Corporation including an amount for prospective operating and maintenance expenses for a reasonable period, and all interest and instalments on account of the principal of notes, bonds or other evidences of indebtedness of the Corporation which
shall have become due and be unpaid, or which shall have accrued at the end of the fiscal year just ended but which shall not be then due, and after paying or making provision for the payment of all taxes, insurance and all other non-operating expenses which shall have become due and be unpaid and all taxes, insurance and all other non-operating expenses which shall have accrued at the end of the fiscal year just ended but which shall not be then due, shall apply the revenues and receipts of the Corporation remaining thereafter for the following purposes and in the following order of priority:

1. the establishment and maintenance of a reserve for the payment of interest on and principal of all outstanding notes, bonds or other evidences of indebtedness of the Corporation in an amount which shall equal the amount of principal and interest required to be paid in respect of such notes, bonds or other evidences of indebtedness during the ensuing fiscal year;

2. the establishment and maintenance of a general reserve fund for working capital, insurance, taxes, improvements, new construction, depreciation, obsolescence, and contingencies in an amount which the Board of Directors shall deem reasonable;

3. the payment to the members of the Corporation of refunds in proportion to the amounts of their respective purchases of electric energy and goods from the Corporation during the fiscal year just ended;

provided, however, that in no case shall any such refunds be paid to any member who is indebted to the Corporation until such indebtedness is paid or arrangements in respect thereof satisfactory to the Board of Directors shall have been made.

Section 2. Twenty per centum (20%) of the total number of all members of the Corporation present in person or represented by proxy shall constitute
a quorum for the transaction of business at all meetings of the members so long as the total number of members does not exceed three hundred (300). In case the total number of members exceeds three hundred (300), then and in such case, seventy-five (75) members present in person or represented by proxy shall constitute a quorum for the transaction of business at all meetings of the members.

Section 3. The Board of Directors shall have power to make and adopt such rules and regulations, not inconsistent with these Articles of Incorporation or the By-laws of the Corporation, as it may deem advisable for the management, administration and regulation of the business and affairs of the Corporation.

Section 4. The private property of the members of the Corporation shall not be subject to the payment of, and no member shall be individually responsible for, corporate debts to any extent whatever.

IN WITNESS WHEREOF we have hereunto set our hands and seals this 6th day of May, 1937.

[Signatures]

STATE OF TEXAS
COUNTY OF DENTON

Before me, [Notary Public], a Notary Public, on this day personally appeared Gus H. Egan, H. P. Koiner and W. C. Moss, known to me to be the persons whose names are subscribed to the foregoing instrument and severally acknowledged to me that they executed the same for the purposes and consideration therein expressed.
Given under my hand and seal of office this 6th day of May, 1937.

[Signature]

Notary Public Denton County, Texas

My commission expires June 1, 1939.
NO. 71384

CHARTER OF

Denton County Electric Cooperative, Inc.

Denton, Texas

Capital Stock - - - - $ __________
Filing Fee - - - - $ 10.00
Franchise - - - - $ Expd.
Remarks: Perpetual

FILED IN THE OFFICE OF THE SECRETARY OF STATE

THIS ____________ DAY OF ___________, 1937

Secretary of State.

O-694-237-3m. [Signature]
The State of Texas
Department of State

EDWARD CLARK

1. [Signature]

that the foregoing is a true and correct copy of
the charter of the

DENTON COUNTY ELECTRIC COOPERATIVE, INC.

with the endorsement thereon as now appears of record in this Department.

In Testimony Whereof, I have hereunto signed
my name officially and caused to be impressed
hereon the Seal of State at my office in the City of
Austin, this 28th day of May
A. D. 1937.

[Signature]
Secretary of State.
AMENDMENT OF ARTICLES OF INCORPORATION
of
DENTON COUNTY ELECTRIC COOPERATIVE, INC.

STATE OF TEXAS

COUNTY OF DENTON

KNOW ALL MEN BY THESE PRESENTS:

That we, W. C. Moss and H. F. Koiser, President and Secretary, respectively, of Denton County Electric Cooperative, Inc., do hereby certify:

That at a meeting of the members of Denton County Electric Cooperative, Inc., duly held on the 31st, day of May, 1936, in conformity with the laws of the State of Texas and the Bylaws of said Corporation, there were present in person a majority of the members of said Corporation and that at said meeting the following resolutions were unanimously adopted:

RESOLVED, That Article IV of the Articles of Incorporation of the Corporation be amended to read as follows:

"The number of directors to be elected at annual meetings of the members is seven (7)."

RESOLVED, That Article V of the Articles of Incorporation of the Corporation be amended to read as follows:

"The address of the principal office and the principal place of business of the Corporation shall be Denton, County of Denton, Texas."

That said meeting and proceedings were held on the above date and in conformity with the laws of the State of Texas and the Bylaws of said Corporation and that a majority of the members of said Corporation were present and voted unanimously in favor of said Amendment.
Witness our hands this 21st, day of May, 1938.

(SEAL)

President

Constituting a majority of the Board of Directors of Denton County Electric Cooperative, Inc.

Secretary

THE STATE OF TEXAS
COUNTY OF DENTON

Before me, Bertha M. Anderson, a Notary Public, on this day personally appeared W. C. Moss, and E. P. Koiner, known to me to be the persons whose names are subscribed to the foregoing instrument, and severally acknowledged to me that they executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office, this 21st day of May, A.D. 1938.

Notary Public Denton County, Texas

By commission expires May 31st, 1939.
AMENDMENT

NO. 71854

CHARTER OF

DENTON COUNTY ELECTRIC COOPERATIVE

Denton, Texas.

Changing number of Directors to 7 and specifying Denton, Texas, to be the principal office and place of business.

Capital Stock . . . . $ . . . .
Filing Fee . . . . . . . . . . . . $ 2.50.
Franchise . . . . . . . . . . . . $ . . . .
Remarks: . . . . . . . . . . . . . .

FILED IN THE OFFICE OF THE SECRETARY OF STATE

THIS 14TH DAY OF June 1938

[Signature]
Secretary of State
I, EDWARD CLARK, Secretary of State of the State of Texas, do hereby certify that the foregoing is a true and correct copy of AN AMENDMENT to the charter of the

DENTON COUNTY ELECTRIC COOPERATIVE, INC.

Filed June 14, 1938

with the endorsement thereon, as the same now appears of record in this Department.

In Testimony Whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in the City of Austin, this 15th day of June, A. D. 1938.

[Signature]
Secretary of State.
DOMESTIC AMENDMENT

NO. 17-71384

DENTON COUNTY ELECTRIC COOPERATIVE, INC.

Denton, Texas

Amending Article IV

CAPITAL STOCK $ NONE

FILING FEE $ 2.50

SHARES NONE

PAID IN

FILED IN THE OFFICE OF
SECRETARY OF STATE

THIS 25th DAY OF October, 1969

LEDGER NO. EXCEPT
THE STATE OF TEXAS

COUNTY OF DENTON

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, E. M. Faught, President, and H. F. Keiner, Secretary, of Denton County Electric Cooperative, Inc., do hereby certify that at a meeting of the members of Denton County Electric Cooperative, Inc., duly held on the thirteenth (13) day of November, A. D. 1948 in conformity with the laws of the State of Texas and the By-laws of said corporation, the following resolution was duly adopted:

RESOLVED: That Article IV of the Articles of Incorporation of the Denton County Electric Cooperative, Inc., as amended May 21, 1938, be amended to read as follows:

"At the Annual Meeting of members of said Corporation in 1949, there shall be elected seven directors, each of whom shall be a member of the Corporation. The four receiving the highest number of votes, respectively, shall hold office for a term of two years from the date of election, or until their successors shall have been elected and shall have qualified, and the three receiving the next highest number of votes, respectively, shall hold office for the term of one year from the date of election, or until their successors shall have been elected and shall have qualified, and directors to be elected annually thereafter shall be elected for a term of two years."

THAT said meeting and proceedings were held on the above date and in conformity with the laws of the State of Texas and the By-laws of said corporation, and that a quorum of the members of said corporation was present, and that the foregoing resolution was duly adopted by a vote of 339 for and 46 against its adoption. Total membership, 2794.
WITNESS OUR HANDS, this the 20th day of November, A.D.

[Signature]

President

ATTEST:

[Signature]

Secretary

SWORN TO and subscribed before me by E. M. FAUGHT, PRESIDENT, and H. P. KOINER, SECRETARY, on this the 20th day of November, A.D. 1948.

[Signature]

Notary Public, Denton County, Texas

THE STATE OF TEXAS

COUNTY OF DENTON

BEFORE ME, a Notary Public in and for Denton County, Texas, on this day personally appeared E. M. Faught, President, and H. P. Koiner, Secretary, respectively, of the Denton County Electric Cooperative, Inc., known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 20th day of November, A.D. 1948.

[Signature]

Notary Public, Denton County, Texas
I, LOUIS SCOTT WILKESON, Assistant Secretary of State, of the State of Texas, do hereby certify that the foregoing is a true and correct copy of an amendment to the charter of

DENTON COUNTY ELECTRIC COOPERATIVE, INC.

with the endorsement thereon, as the same now appears of record in the Department.

Dated, signed, and sealed at Austin, Texas, this 25th day of October, A. D. 1949.

[Signature]
Assistant Secretary of State.
BIBLIOGRAPHY

Books


Public Documents


Reports


*Minutes of Board of Directors Meeting, April 7, 1937.*

*Minutes of Board of Directors Meeting, January 15, 1938.*

*Minutes of Board of Directors Meeting, January 22, 1938.*
Minutes of Board of Directors Meeting, January 21, 1939.
Minutes of Board of Directors Meeting, April 18, 1939.
Minutes of Board of Directors Meeting, January 20, 1940.
Minutes of Board of Directors Meeting, February 14, 1941.

Articles


Newspapers