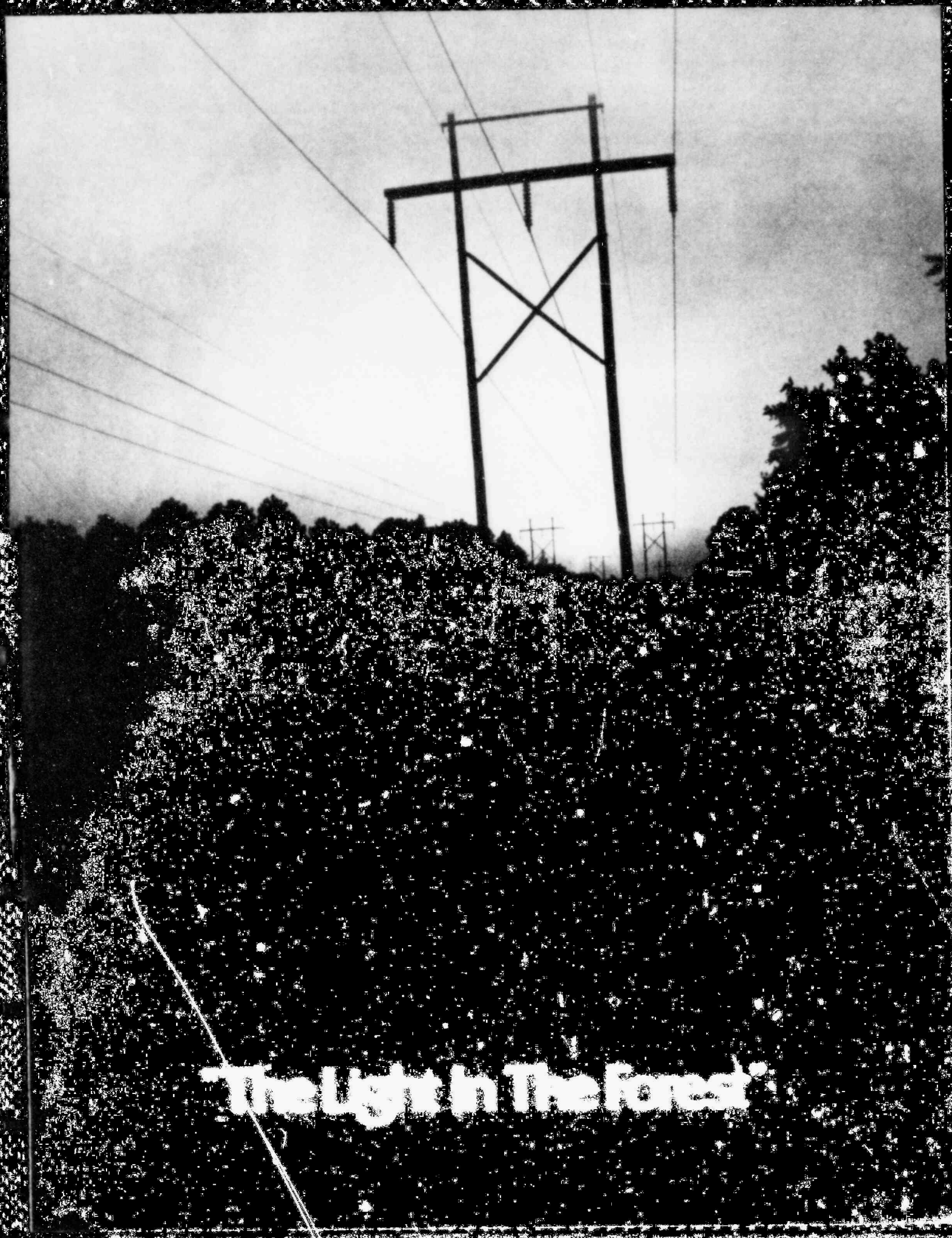
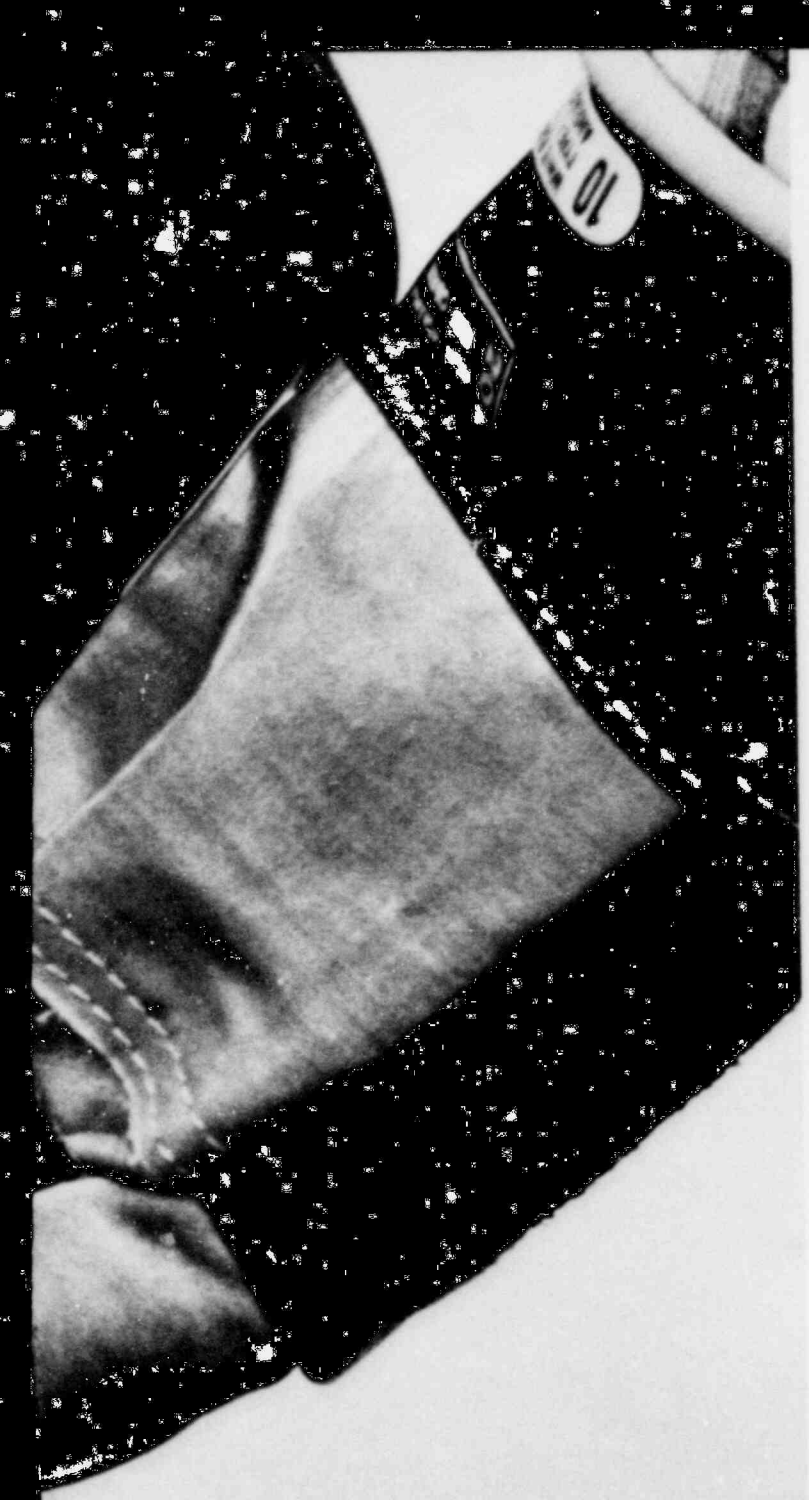
ANNUAL REPORT 1981

SOUTH MISSISSIPPI
ELECTRIC POWER ASSOCIATION


The Light In The Forest



The past decade witnessed dramatic changes in the electric utility industry . . . fuel prices and cost of building power facilities soared; materials, interest on money, transportation . . all operating costs . . zoomed upward. It was a decade of uncertainty.

A new decade is upon us. Settling in to meet the challenge of the new decade is an important facet of growth.

South Mississippi Electric Power Association is a generation and transmission cooperative serving the power supply needs of eleven rural electric distribution systems in Mississippi. For us, 1981 was a time to gain strength from the past and renew our hope for the future.

It took dedication, hard work and a never ending faith for electric power to become a reality for rural areas of the state of Mississippi. This dedication helped bring life to rural Mississippi and brought into being this entity we know as South Mississippi Electric Power Association.

Looking at the future, we know that electricity is a vital resource and we know that rural Mississippi depends upon us to keep an abundant supply of modern electric power on its way. Through planning and wise usage, electricity will still be one of our greatest resources. We are looking to tomorrow, we are working to find lasting solutions to energy problems, planning for the future and keeping pace with the growing needs of rural Mississippi

1981 . . a year of settling in, preparing to meet the challenge of the future. For us, energy is not just an industry . . it's a way of life.

1981: A Settling In

It seems a bit redundant to start this report with the idea that 1981 presented more than its share of challenges. It seems we have been saying that for a good number of years, and we have. We should be thankful to have had numerous challenges to face during 1981.... I have learned that the greatest periods of growth for all of us occur when we are faced with challenges that appear to be beyond solution.

As I look back over the years, I find that South Mississippi Electric Power Association has experienced tremendous growth, both in physical plant and organizationally. This growth, most all of it, occurred in the midst of difficult situations. High costs, excessive regulation, inflation and increasing demand have all presented challenges to our team. We have accepted those challenges in the past, however, and turned them into opportunities and victories. We strove for success.

The challenge of maintaining our program was once again dealt with during 1981. The administration's proposal to make drastic cuts in the REA program was soundly defeated. However, we cannot rest on the victory of this past year. There is an ever present challenge to maintain the program that brought light to rural Mississippi and rural America. We will continue to fight for fair and equitable treatment from this administration and those that follow.

I note with deep appreciation the work of our elected representatives and senators in Congress who have worked with us this year. Without their support, it would be impossible to maintain the REA program as we know it today. I am also appreciative of the efforts of the REA administrator and his staff, the management and staff of NRECA and CFC and the many elected officials, both at the national level and the state level. We recognize that all of these people have an impact on what we are able to accomplish, and we acknowledge their help and their support and offer our sincere appreciation.

You will have the opportunity to read specific accomplishments of the year just ended in other sections of this annual report. However, we cannot rest on the accomplishments of the past.

We must continue to prepare ourselves and our members for the difficult periods that lie ahead. We must continue to seek adequate financing at reasonable rates, and this may require new avenues never before travelled. We must look for new ways to improve efficiency and productivity while at the same time maintaining the level of service and performance we have taken pride in providing.

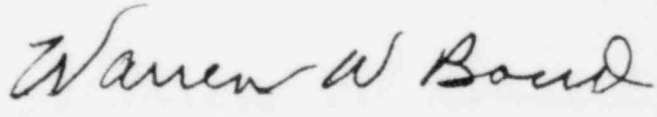
We must continue to work with others in the rural electrification program to find better ways of meeting the many problems that face us. We must support these organizations who have worked diligently in our behalf through the years, such as NRECA, CFC and our statewide organization.

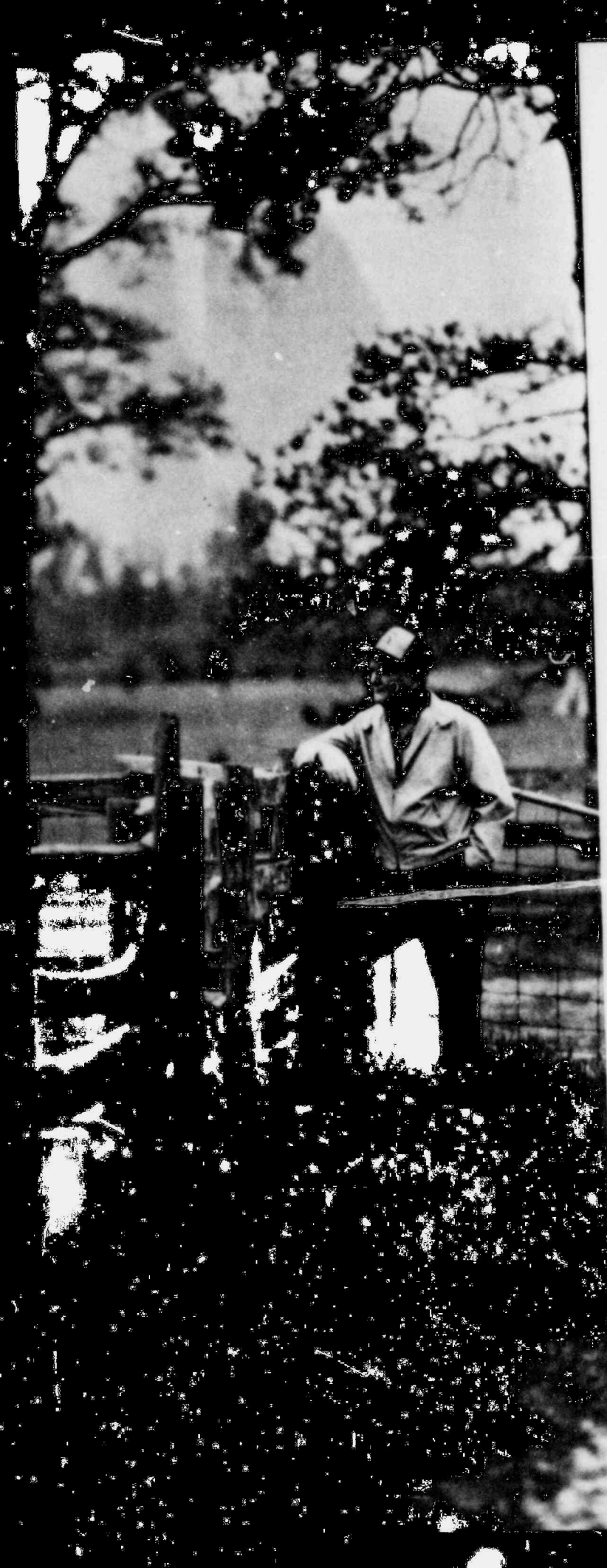
We must renew our efforts to communicate with the public on all fronts. We have a story to tell, and we must tell it often and with accuracy.

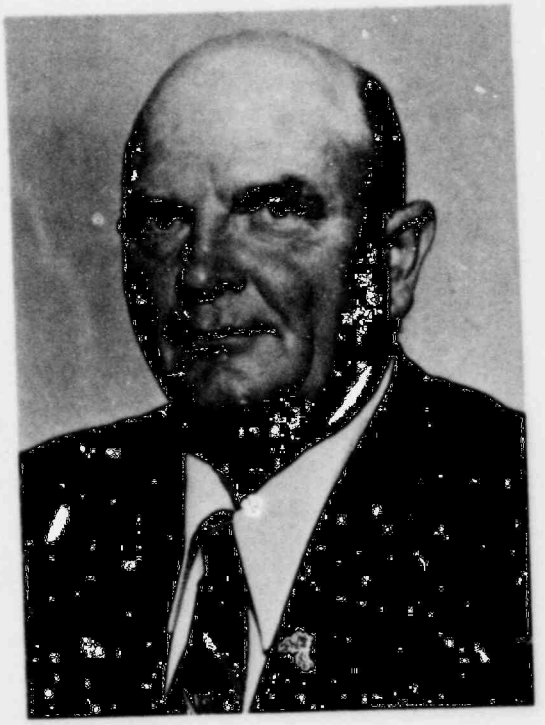
Perhaps, more than anything else, it is imperative that we keep our eye on the goal that we established a long time ago. When everything else is said and done, the service provided to our members at the lowest cost possible is our first and foremost objective.

I am grateful to the members of the board of directors who have given so generously of their time and talent this past year. I appreciate the leadership of our general manager and the employees who have made a contribution to the success achieved under most difficult circumstances.

The years that lie immediately ahead will be filled with many varied challenges. How well we meet those challenges will depend largely upon the measure with which we are willing to work together to meet our common goals. I look forward to the opportunity to continue to work with others who have the best interest of this Association in the forefront of their efforts.







President's Message

1981 has been a year of adjustment. It was the first full year of membership for the four new "West Mississippi" cooperatives, and much of the year was spent in "getting used to" the larger board of directors and the larger service area. This adjustment period has been very successful, however, and the Association is working together with a fine spirit of cooperation.

Load Growth

Load growth, as measured by KWH sales to members, faltered again in 1981. Hot weather during the summer undoubtedly contributed to the slight rate of growth, but indications are that the rate of load growth is probably slowing down with the general economy of the country.

The KW demand placed upon the actual generating facilities of the Association, of course, has increased dramatically with the addition of new members and the assumption of new load. And the number of member-consumers served by our member cooperatives has increased dramatically through the years as new cooperatives became members of the Association.

These factors can be seen more clearly by reference to the following table:

Year	% Increase in KWH Sales[1]	MW Demand on Generating System[2]	No. Of Members at Year's End	Consumers Served by Members[3]
1971	12.96	144	6	105,711
1972	19.01	181	6	111,966
1973	9.92	193	6	118,046
1974	4.70	208	6	122,412
1975	9.55	215	6	125,880
1976	7.85	231	6	130,747
1977	9.24	237	6	135,242
1978	6.59	272	6	139,263
1979	(0.19)	266	7	170,837
1980	8.28	477	11	218,671
1981	2.83	620	11	225,216

[1] *Increase in KWH sales for the same cooperatives for the previous year. Does not include the effect of adding new cooperatives as members.*

[2] *Load actually served from generating resources of the Association. For 1981, this does not include Coahoma EPA, Coast EPA and that portion of Singing River EPA in Jackson County.*

[3] *This represents the total consumer-members of all cooperatives who were members of SMEPA on December 31 of the year in question. This includes those consumers served from the generating resources of this Association, as well as those served from generating resources of others.*

As can be seen from the above situation, the total load being supplied by the Association's generating resources in 1981 was 620 MW. When the required 15 per cent reserve is added to this, the total requirement for generation was 713 MW. Since the total generating resources in 1981 amounted to only 573 MW, it was necessary to purchase 140 MW in order to meet the needs of the Association. 50 MW of this was purchased from Southeastern Power Administration and the balance was purchased from Big Rivers Electric Corporation.

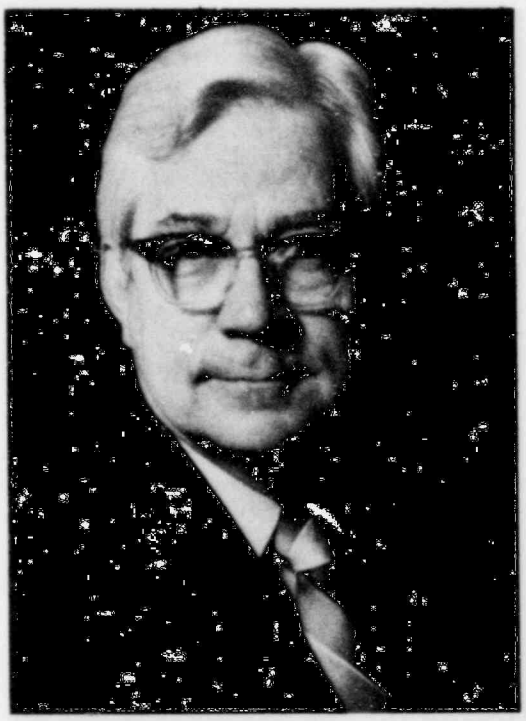
It is anticipated that adequate power can be purchased during the remainder of this decade to meet the requirements of the Association, assuming the Grand Gulf Nuclear Plant units No. 1 and No. 2 are completed as scheduled.

Cost of Power

The cost of power to the members of the Association, as reflected only by the revenue received by this Association, is shown in the following table. It is noted that this measure of cost continues to increase.

Year	Revenue in Mills per KWH	% Increase Over Previous Year
1971	7.62	5.8
1972	9.05	18.5
1973	11.61	28.3
1974	16.83	45.0
1975	20.47	21.6
1976	23.97	17.1
1977	27.29	13.9
1978	31.49	15.4
1979	37.45	18.9
1980	37.26	(0.5)
1981	41.64	11.8

The actual costs to the Association are broken down on page 26 of this report. A study of the chart on that page will reveal the increases in the various components of the cost during the last several years.



General Manager's Report

Grand Gulf Nuclear Plant

Under the provisions of the purchase agreement for the Grand Gulf Nuclear Plant, the Association was to contribute the total construction cost for the project each month until its 10 per cent ownership interest was reached. This 10 per cent level was reached on June 15, 1981, and the Association's total investment at that point was $228,101,410. Since that time, the Association has contributed 10 per cent of the construction cost each month, and at year's end, the total investment of the Association in this project, including interest during construction was $265,080,323.

Work continued on the plant during the year, with most of the systems being turned over to MP&L Company for testing and operation before the year's end. The first shipment of nuclear fuel arrived on site on October 1, 1981, but, of course, fuel cannot be loaded into the reactor until a limited operating permit has been obtained from NRC.

By year's end, it became apparent that the fuel could not be loaded on the previous schedule, and consequently, the commercial operation date could not be met as expected. It is now felt that the plant will be in full commercial operation during the spring of 1983.

Although no final or firm figures are available at the time of this writing, it is estimated that the wholesale rates of the Association will have to be increased by approximately 25 per cent to meet the cost of adding the Grand Gulf Nuclear Plant to the system. According to estimates available at this time, it is estimated that approximately 58 per cent of the total cost of owning and operating the 10 per cent interest in this plant will go for the payment of interest on the debt. It is readily apparent, then, that if the interest rate could be reduced to levels anticipated by the feasibility studies for this plant, the total cost of owning and operating the plant could be reduced substantiallly.

Work on Grand Gulf unit No. 2 was halted in late 1979, due primarily to the shortage of financing available to Middle South Energy, Inc. It is anticipated that when unit No. 1 is placed in commercial service, adequate financing will be available and work on unit No. 2 can be resumed. While no official date is indicated for the completion of unit No. 2, it is now felt that it will be finished in the 1988 time frame.

System Reliability

Through the years of its operation, the Association has striven for better reliability. 1981 has been an outstanding year in reliability . . . the best year on record. A measure of system reliability can be seen from the following table, which gives the number of consumer-hours of outage time each year. This table is broken down into two categories: (1) that transmission system connected directly to our generating plants and operated as an integrated system and (2) those remotely located transmission lines operated by the Association but served from the transmission system of others. Only outages caused by conditions on SMEPA's lines are listed in this tabulation.

Year	Consumer Hours Outage on SMEPA's System	Consumer Hours Outage on Remote Trans. Taps	Total
1971	72,034	0	72,034
1972	50,131	0	50,131
1973	97,534	0	97,534
1974	21,072	1,107	22,179
1975	78,121	0	78,121
1976	23,244	0	23,244
1977	44,510	1,383	45,893
1978	23,146	5,514	28,660
1979	480,848*	215,704*	696,552*
1980	17,434	10,444	27,878
1981	7,886	0	7,886
*Hurricane Frederick accounted for	464,452	215,704	680,156

Other Construction Activities

Construction has taken a back seat to other activities in recent years. Except for the Grand Gulf Nuclear Plant, which is being constructed by others, no major construction activity has been undertaken by the Association. Some of the minor projects are listed here for reference:

- Tie-back system for the trestle area at Plant Morrow was completed. This system is designed to stabilize the walls in the conveyor belt area below the trestle.
- 115-KV transmission tap (9.62 miles) to the new Borg Warner Plant in Hancock County was completed.
- Built the West Yazoo 115-KV switching station.
- Began construction of the Little Yazoo tap.
- Began construction of the Nitta Yuma-Hampton 115-KV line and switching station.
- Added a second 150 MVA transformer at Magee.
- Replaced cast burner fronts at Plant Morrow with fabricated burner fronts.

Fuel and Power Purchases

The Association continued to receive its total coal supply from its property in southeast Kentucky. The coal is leased to Sandy Fork Mining Company, Inc., and coal is purchased back from Sandy Fork under a long term contract. The Association owns a coal washing facility in Clay County, Kentucky, which is leased to Sandy Fork for operation. The Association pays the total cost of ownership and operation of that plant.

820,164 tons of coal were burned at Plant Morrow during the year.

The size of the unit train was increased during the year from 72 cars to 80 cars.

The coal supply agreement with Sandy Fork was amended during the year to provide for: (1) an adjustment in the selling price of coal to compensate for the added costs caused by the washing process; (2) a new guaranteed base BTU per pound; and (3) additional latitude for mining and marketing of limited

coal reserves to third parties.

The Association filed a complaint before the Interstate Commerce Commission regarding the unit train freight rate. This complaint was filed under provisions of the Staggers Rail Act of 1979, in order to protect the interests of the Association in the matter of rail rates. That complaint has not yet been heard.

The oil and gas rights on the Kentucky property were leased to Cabot Oil & Gas Corporation. At year's end, 4 wells had either been completed or started and prospects for producing oil and/or gas on the property were bright.

The gas contract for Plant Moselle and Plant Benndale was amended on May 1, 1981, to provide for an increase in the rates and for other rate-related changes.

The cost of fuel to the Association through the years is shown in the following table:

Cost of Fuel Delivered – $/Million BTU

	Plant Moselle		Plant Morrow	
Date	Gas	Oil	Oil	Coal
1971	.29	.75		
1972	.30	.75		
1973	.56	.83		
1974	.69	1.41		
1975	1.10	1.47		
1976	1.64	1.54		
1977	1.76	1.76		
1978	1.86	1.80	2.75	1.55
1979	2.23	1.94	3.11	1.64
1980	2.78	2.19	4.48	1.80
1981	3.53	2.24	6.15	2.06

Types of fuel expressed as percent of total generation are shown here:

Year	% Oil	% Gas	% Coal
1971	4	96	
1972	18	82	
1973	47	53	
1974	69	31	
1975	56	44	
1976	41	59	
1977	60	40	
1978	46	23	31
1979	11	20	69
1980	0	14	86
1981	1	12	87

Reference to these tables reveals the dramatic rise in the cost of fuel and shows the swing from gas to oil and then to coal in an effort to control the effect of rising fuel cost.

Several factors go to make up the total cost of coal as burned at Plant Morrow. These factors are listed below for a typical month to demonstrate the effect of varying influences on the total cost.

PLANT MORROW COAL COST
December, 1981
$/ton

Contract price - loaded on train	$31.64
Freight	14.40
Preparation plant - ownership, operation & maintenance	5.80
Rail cars - ownership and maintenance	1.00
Loading facility - Kentucky	.50
Use Tax	.46
Other	.01
Total	$53.81

The generating units at Plant Morrow were uprated from 180 MW net to 200 MW net, to be effective January 1, 1982. This action was taken because the units have been proved to be capable of producing this much power, and the Association wanted to take advantage of the maximum output in planning for its power supply.

The Association continued to purchase power from Big Rivers Electric Corporation in Kentucky. A maximum of 120 MW and 237,960 MWH were purchased during the year.

The Association participated in hearings conducted by Southeastern Power Administration to determine SEPA's marketing policy for the Cumberland River Basin power sales. Under the policy proposed by SEPA, members of the Association could receive a substantial amount of hydroelectric power from the Cumberland Basin System.

Finances

Advances received from the Federal Financing Bank (FFB) during the year totaled $180,835,000 at an average interest of 13.9623 per cent.

FFB notes maturing and "rolled over" short term totaled $38,700,000. The average rate on these notes increased from 9.8733 per cent before extension to 14.0471 per cent after extension.

FFB notes maturing and extended to long term during the year totaled $5,250,000. The average rate on these notes increased from 9.8411 per cent before extension to 12.5883 per cent after extension.

Advances from FFB through 1981 totaled $436,094,000 at an average interest rate of 13.0673 per cent.

The board of directors selected the New Orleans Bank for Cooperatives to be financial advisor to the Association.

The Association renewed its line of credit with CFC in the amount of $25,000,000 and with Deposit Guaranty National Bank in the amount of $3,000,000.

The application to New Orleans Bank for Cooperatives for a seasonal loan in the amount of $60,000,000 was still pending at year's end. NOBC had approved the loan, subject to REA's acceptance of certain conditions, but the details of that acceptance had not been worked out at year's end.

Refunds from Mississippi Power Company totaling $4,966,003 were received on December 7, 1981 and the refund was passed on to the member cooperatives the same day.

Capital credits in the amount of $3,413,822.10 were refunded to the member cooperatives on November 6, 1981. All capital credits allotted to date have been returned in cash to members.

Margins for 1981, in the amount of $2,811,554, were used to offset larger losses during 1980, and no capital was available for allocation to members for 1981.

A new collection policy was approved by the board of directors. The policy provides for a penalty for late payment of power bills.

Property insurance was purchased for outlying substations and switching stations for the first time.

The position of internal auditor for the Association was established, and an internal auditor was employed for the first time.

The board of directors approved a midyear increase in the wholesale power rate of 1.03 mills per KWH to offset losses occurring to date. This action was taken in order to assure fulfillment of the Association's TIER objective for the year.

The Association was saddened by the death of Horace A. Bradley, its auditor since 1962, on November 7, 1981. The firm of Ernst & Whinney was selected by the board of directors to perform the audits for 1981 and 1982.

Planning

Buford Goff & Associates completed work on the radio communications study, with recommendations for the specific work to be done to improve and upgrade the communications system.

Burns & McDonnell Engineering Company completed the power planning study with recommendations as to how the Association would meet its load during the 1980's. This study recommended that the next generating unit be in service in approximately 1990.

Planning continued on the proposed interconnection with Alabama Electric Cooperative. Construction of the interconnection was approved by the board of directors, subject to loan funds being made available.

Safety

At year's end, all but six employees had been certified in the Red Cross Multimedia First Aid Course and all but 10 employees had been certified in CPR.

The following table indicates a history of the safety record of the Association. A study of this table will reveal the decrease in the number and severity of accidents among employees of the Association through the years.

Year	Reportable Accidents	Lost Time Accidents	Lost Time Days	Man-Hours Worked
1971	3	0	0	100,350
1972	2	1	8	106,114
1973	7	1	2	137,489
1974	7	3	8	165,417
1975	12	6	61	172,842
1976	6	2	100	197,729
1977	24	8	80	286,634
1978	33	17	126	371,844
1979	42	10	70	398,201
1980	18	2	15	408,978
1981	28	3	8	436,343

The Association has a safety program involving the use of Top Value stamps on a team basis. This program has been in effect for 2½ years, and the program is credited with keeping interest in safety awareness at a high level.

Transmission Maintenance

Approximately 133 miles of transmission line was inspected at the ground line and treated during the year. This inspection and treatment is carried out under a contract with Osmose Wood Preserving Company.

255 miles of transmission line was inspected by walking patrol during the year.

315 miles of transmission right of way was cleared.

Danger timber was cut on 120 miles of transmission line.

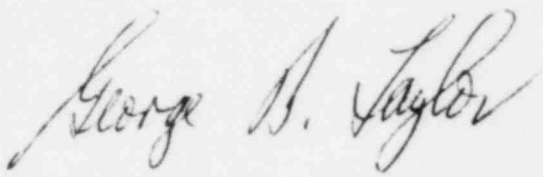
Computer Equipment

The new Harris 800 computer was installed and placed in service in 1981. Acceptance tests were made, and personnel of the Association were trained by the Harris Corporation, at that company's training center.

Programs for load forecasting, load flow, short circuit studies and payroll were placed in operation during the year.

The Association translated approximately 600 tapes for member systems for use in the PURPA load survey programs.

In conclusion, I would like to personally thank the member cooperatives, the board of directors and each employee for making 1981 the successful year it was. We have all worked together as a team, and each member of that team has contributed significantly to the success of the team. The high standard of leadership on the part of the directors and the dedication and loyalty of the men and women employed by the Association make possible the rendering of dependable service to all our members at the lowest possible cost.



South Mississippi Electric Power Association was born in the old Forrest Hotel in Hattiesburg on April 4, 1941.

Representatives of seven electric power associations adopted a resolution on that date which paved the way for the birth of SMEPA.

The purpose of the formation of the new association was to make possible a dependable supply of wholesale electricity at reasonable costs, and further extending the fundamentals upon which electric power associations are founded.

The Secretary of State acknowledged the certificate on April 8, 1941, and the charter of incorporation listed the principal office in Collins, Mississippi.

At a meeting held in Jackson on June 16, 1941, the firm of Gibbs and Hill of New York was selected to do the engineering work. A resolution was adopted to make application to the Rural Electrification Administration for a loan to construct a generating plant and build adequate transmission facilities to serve the power needs of the seven cooperatives.

As a result, SMEPA received a loan allocation from REA on June 12, 1942, in the amount of $2,100,000 for a plant with 12,500 KW capacity and 232 miles of 44 KV transmission line.

Work could not proceed because of a shortage of materials during World War II.

On November 18, 1944, the board met in Jackson and authorized Gibbs and Hill to proceed with a resurvey and requested them to make specific recommendations. The board also voted to join the National Rural Electric Cooperative Association.

Burns & McDonnell Engineering Company of Kansas City, Missouri, in 1946 was employed to make further studies on the feasibility of building a plant.

By the January 1947 Board meeting, Capital EPA, Southwest EPA, and Washington-St. Tammany Electric Cooperative in Louisiana had been added to the membership.

From 1947 until the next loan was obtained from REA in July, 1958, several complete feasibility studies were made and applications filed.

Wholesale purchases from Mississippi Power and Mississippi Power & Light Company were at such a level that it was not feasible to build a self-owned generating plant at that time. The price for power was the governing consideration, and REA would not entertain an application for a loan unless it was justified by sufficient difference in price.

With a threatened increase in wholesale power rates in 1958, however, a price differential did exist and Mr. David A. Hamil, who was then administrator of REA, made a loan of $13,971,000 which, when added to the previous loan of $2,100,000, made it possible to proceed.

Legal maneuvering between the Association and the commercial power companies consumed considerable time and delayed the construction for nine years, but funds were released and construction finally began in late 1967.

An additional loan of $20,671,000 was obtained from REA in 1966, bringing the total loans to $36,742,000. From those humble beginnings, SMEPA now boasts a thriving reputation in the state of Mississippi as an electric utility. SMEPA employs 215 people, and maintains offices on Highway 49 North, Hattiesburg, Mississippi.

SMEPA operates two steam electric plants, one near Moselle, and the other near Purvis. Two gas turbines provide necessary peaking power.

SMEPA operates approximately 1,250 miles of high voltage transmission lines and maintains interconnections with Mississippi Power Company and Mississippi Power & Light Company. A sophisticated control center controls the SMEPA system and offers the latest in data acquisition and economic dispatch of generation.

Member systems include: Dixie Electric Power Association, Magnolia Electric Power Association, Pearl River Valley Electric Power Association, Singing River Electric Power Association, Southern Pine Electric Power Association, Southwest Mississippi Electric Power Association, Delta Electric Power Association, Twin County Electric Power Association, Yazoo Valley Electric Power Association, Coahoma Electric Power Association, and Coast Electric Power Association.

	December 31 1981	1980
ASSETS--Note E		
ELECTRIC PLANT--Note C		
In service	$287,884,147	$283,748,343
Construction work in process--Note B	267,597,784	91,237,467
	555,481,931	374,985,810
Less allowances for depreciation	37,804,451	29,447,020
	517,677,480	345,538,790
OTHER ASSETS AND INVESTMENTS		
Investments in associated organizations--Note D	5,640,779	4,992,701
Other noncurrent assets	12,600	417,800
	5,653,379	5,410,501
CURRENT ASSETS		
General fund cash	134,640	103,890
Construction fund cash and investments	3,904,018	2,267,705
Short-term investments	2,050,000	862,600
Accounts receivable	12,470,154	11,915,213
Inventories:		
Coal	8,379,286	10,853,541
Other fuel (principally fuel oil)	2,238,591	2,365,553
Materials and supplies	3,459,077	3,212,153
	14,076,954	16,431,247
Other	892,220	527,523
	33,527,986	32,108,178
DEFERRED CHARGES	3,514,966	5,016,192
	$560,373,811	$388,073,661

	December 31 1981	1980
EQUITIES AND LIABILITIES		
EQUITIES		
Memberships	$ 55	$ 55
Donated capital	535,436	535,436
Patronage capital (deficit)	(550,725)	51,543
	(15,234)	587,034
LONG-TERM DEBT, excluding current maturities--Note E	544,510,628	364,612,844
CURRENT LIABILITIES		
Notes payable to National Rural Utilities Cooperative Finance Corporation		2,900,000
Accounts payable	11,357,307	15,049,669
Accrued expenses	1,340,683	1,877,649
Current maturities of long-term debt	3,180,427	3,046,465
	15,878,417	22,873,783
COMMITMENTS--Note B		
	$560,373,811	$388,073,661

See notes to financial statements.

Balance Sheet

	Year Ended December 31 1981	1980
Operating revenue and patronage capital–Note E:		
Electric energy revenues	$146,381,767	$108,389,316
Other income	1,089,140	1,010,451
	147,470,907	109,399,767
Operating expenses:		
Operation expenses:		
Fuel	52,656,303	39,810,419
Production	2,290,904	1,972,854
Purchased power	50,556,392	37,511,186
Transmission	2,923,166	1,438,895
Administrative and general	2,114,424	1,866,389
	110,541,189	82,599,743
Maintenance expenses:		
Production	1,508,449	1,571,563
Transmission	1,149,140	922,129
General	135,882	100,987
	2,793,471	2,594,679
Depreciation	7,524,662	7,362,869
Taxes	286,360	233,915
	121,145,682	92,791,206
OPERATING MARGIN BEFORE INTEREST AND OTHER DEDUCTIONS	26,325,225	16,608,561
Interest and other deductions:		
Interest, net of interest income on unexpended bond funds	52,614,430	22,217,640
Allowance for borrowed funds used during construction	(28,710,365)	(1,677,085)
Other deductions	360,879	118,170
	24,264,944	20,658,725
OPERATING MARGIN (LOSS)	2,060,281	(4,050,164)
Non-operating margin–principally interest income	751,273	687,885
NET MARGIN (LOSS)	2,811,554	(3,362,279)
Patronage capital at beginning of year	51,543	3,413,822
Patronage dividends	(3,413,822)	
PATRONAGE CAPITAL (DEFICIT) AT END OF YEAR	$ (550,725)	$ 51,543

See notes to financial statements.

Operations & Patronage Capital

	Year Ended December 31 1981	1980
SOURCE OF FUNDS		
Net margin (loss)	$ 2,811,554	$ (3,362,279)
Add (deduct) items not affecting working capital:		
Provision for depreciation and depletion	8,544,872	8,103,414
Preliminary surveys abandoned	165,231	
Other		(6,632)
TOTAL PROVIDED BY OPERATIONS	11,521,657	4,734,503
Additional long-term borrowings	182,944,249	97,089,000
Other--net	450,434	(41,257)
	194,916,340	101,782,246
APPLICATION OF FUNDS		
Payment of patronage dividends	3,413,822	
Additions to utility plant less carrying amount of retirements	180,683,773	96,837,785
Principal payments on long-term debt	3,046,254	2,960,217
Increase in investment in associated organizations	648,078	617,212
	187,791,927	100,415,214
INCREASE IN WORKING CAPITAL	$ 7,124,413	$ 1,367,032
CHANGES IN COMPONENTS OF WORKING CAPITAL		
Increase (decrease) in current assets:		
General funds cash	$ 30,750	$ (284,379)
Construction fund cash and investments	345,552	1,310,612
Short-term investments	1,187,400	(349,900)
Accounts receivable	554,941	3,070,837
Inventories	(2,354,293)	4,155,168
Other	364,697	57,081
Decrease (increase) in current liabilities:		
Notes payable	2,900,000	(2,840,761)
Accounts payable	3,692,362	(2,915,254)
Accrued expenses	536,966	(836,372)
Current maturities of long-term debt	(133,962)	
INCREASE IN WORKING CAPITAL	$ 7,124,413	$ 1,367,032

See notes to financial statements.

Changes In Financial Position

December 31, 1981

NOTE A–THE ASSOCIATION AND ITS ACCOUNTING POLICIES

South Mississippi Electric Power Association (SMEPA) is a rural electric cooperative utility established under the laws of the State of Mississippi. Financing assistance is provided by the U. S. Department of Agriculture, Rural Electrification Administration (REA) and, therefore, SMEPA is subject to certain rules and regulations promulgated for rural electric borrowers by REA. SMEPA is a generation and transmission cooperative, providing power supply to eleven owner/members who are rural electric distribution cooperative utilities which provide electric power to customers in certain areas of Mississippi.

SMEPA maintains its accounting records in accordance with the Federal Energy Regulatory Commission's chart of accounts as modified and adopted by REA. The more significant accounting policies are described below.

Electric Plant and Depreciation: Electric plant is stated at cost, which includes contract work, materials and direct labor, allowance for funds used during construction and allocable overhead costs. The cost of electric generating stations and related facilities also includes costs of training and production incurred, less revenues earned prior to the date of commercial operation.

The provision for depreciation of electric plant begins when additions are placed in service or, in the case of electric generating stations, at the date of commercial operation. The provisions are computed on the straight-line method at the following annual composite rates:

Production plant	3.00% to 3.10%
Transmission plant	2.75%
General plant and transportation equipment	4.00% to 25.00%

At the time units of electric plant are retired, their original cost and cost of removal, less net salvage value, is charged to the allowance for depreciation. Replacements of electric plant involving less than a designated unit of property are charged to maintenance expense.

Coal reserves are stated at cost. Depletion is provided by the units mined method. The coal mine is operated under an operating agreement with a third party. Substantially all of the coal used in SMEPA's generation of electricity is supplied from coal mines located on SMEPA's property.

Allowance for Funds Used During Construction: Allowance for funds used during construction represents the cost of directly related borrowed funds used for construction of electric plant. The allowance is capitalized as a component of the cost of the electric plant while it is under construction.

Capitalization ceases when the electric plant is placed in service, or, in the case of electric generating stations and related facilities, at the date of commercial operation. The rates used in determining the allowance varied from 5.0% to 16.5% in 1981 and 5.0% to 14.0% in 1980, depending on the source of funds used.

Inventories: Inventories are stated at average cost.

Deferred Charges: Costs of preliminary surveys for development of possible methods to obtain and deliver energy to fulfill members' future requirements while continuing to meet environmental standards (including feasibility studies leading to financing necessary plant expenditures) are recorded as deferred charges. If construction of a project results from such surveys, the deferred charges are transferred to the cost of the facilities. If a preliminary survey is abandoned, the costs incurred are written off.

Bond issue costs are being amortized by the straight-line method over the term of the related debt. The amortization during the period of construction is capitalized.

Patronage Capital: The bylaws of SMEPA provide that any excess of revenues over expenses and accumulated prior year deficits shall be treated as advances of capital by the member patrons and credited to them on the basis of their patronage.

Interchange Power: SMEPA records the electrical power received or provided on an interchanged basis at its cost as determined

under various contractual arrangements.

Reclassification: Certain amounts for 1980 have been reclassified to conform to the 1981 presentation.

NOTE B – CONSTRUCTION WORK IN PROCESS AND COMMITMENTS

SMEPA is a 10% participant in the construction and operation of a 2,500 megawatt nuclear generating station known as "Grand Gulf Nuclear Station" (GGNS), consisting of two 1,250 megawatt generating units. The first unit is scheduled for commercial operation in 1983. The second unit is 20% complete and commercial operation is anticipated for 1988. The first unit is scheduled for fuel loading in early 1982. SMEPA's accumulated costs of construction at December 31, 1981, are $265,000,000, including allowance for funds used during construction of $30,000,000.

SMEPA's share of the basic costs of construction, excluding allowance for funds used during construction, to complete the units are estimated to be approximately $16,000,000 for the first unit and $107,000,000 for the second unit.

NOTE C–ELECTRIC UTILITY PLANT

Electric utility plant consists of the following:

	December 31 1981	1980
Intangible plant	$ 459,285	$ 459,285
Land and land rights	9,360,751	8,219,097
Production plant	205,347,564	205,312,248
Transmission plant	45,374,265	43,963,081
Coal properties	23,282,752	21,905,009
General plant and transportation equipment	4,059,530	3,889,623
ELECTRIC PLANT IN SERVICE	287,884,147	283,748,343
Construction work in process	267,597,784	91,237,467
	$555,481,931	$374,985,810

NOTE D–INVESTMENTS IN ASSOCIATED ORGANIZATIONS

Investments in associated organizations consist of:

	December 31 1981	1980
National Rural Utilities Cooperative Finance Corporation (CFC) Capital Term Certificates	$5,583,186	$4,909,809
Other	57,593	82,892
	$5,640,779	$4,992,701

SMEPA is committed to annual purchases of Capital Term Certificates from CFC through 1984. The amount to be purchased each year is determined by applying an average power cost factor (as determined by CFC) to SMEPA's preceding year's gross operating revenue. The aggregate commitment remaining at December 31, 1981, was estimated to be $3,400,000, of which $876,000 is estimated to be due in 1982 based on 1981 revenues. Capital Term Certificates bear interest at 3% and begin maturing in 2007.

Notes To Financial Statements

NOTE E--LONG-TERM DEBT

Long-term debt consists principally of mortgage notes payable to the United States of America acting through the Rural Electrification Administration (REA) and the Federal Financing Bank (FFB) and pollution control revenue bonds payable issued by Lamar County, Mississippi.

Substantially all the assets, rents, revenues, and profits of the Association are pledged as collateral. Long-term debt consists of the following:

	December 31 1981	1980
2% REA mortgage notes payable, due in quarterly installments through 2009	$ 42,874,583	$ 44,321,710
5% REA mortgage notes payable, due in quarterly installments through 2015	21,531,210	19,580,672
Mortgage notes payable to FFB at interest rates varying from 8.759% to 16.514% due in quarterly installments between 1982 and 2015	436,094,000	255,259,000
Lamar County, Mississippi, Pollution Control Bonds:		
1977 Series, 4.6% to 6.125% due 1982 through 2007	38,675,000	39,350,000
1978 A Series, 4.7% to 6.125% due 1982 through 2008	2,740,000	2,785,000
1978 A-1 Series, 6.25% due 1982 through 2008	980,000	990,000
1980-C Series, 65% of prime (10.24% effective at December 31, 1981) due 1982	2,455,000	2,455,000
Other	2,341,262	2,917,927
	547,691,055	367,659,309
Less current maturities	3,180,427	3,046,465
	$544,510,628	$364,612,844

SMEPA has the option on FFB promissory note advances to elect (subject to REA approval) interim maturity dates of not less than two years nor more than seven years after the date of the advance. At the date of the advance or on the maturity of an interim advance, SMEPA may also designate that it desires a long-term maturity of 34 years after the end of the calendar year in which the advance was made. At December 31, 1981, SMEPA had $430,844,000 of advances maturing in 1982 through 1986 which it intends to refinance for 34 years.

Based on the intention described in the preceding paragraph, approximate annual maturities of long-term debt for the next five years are as follows:

1982	$3,180,427
1983	3,511,671
1984	3,758,432
1985	4,001,056
1986	4,206,089

SMEPA follows the practice of partially financing its construction costs through short-term borrowings from the National Rural Utilities Cooperative Finance Corporation (CFC) and FFB pending long-term financing with REA, FFB, or other outside sources. Interest rates on short-term borrowings with CFC averaged approximately 19.6% and 13.0% for the years ended December 31, 1981 and 1980, respectively.

At December 31, 1981, SMEPA had unused loan commitments from FFB and REA of $173,819,000 and $3,167,000, respectively.

At December 31, 1981, SMEPA has an established line of credit for short-term borrowing of $25,000,000 with CFC. There are no borrowings against this line at December 31, 1981.

SMEPA is required by mortgage covenants to maintain certain levels of interest coverage and annual debt service coverage. The Association was in compliance with such requirements at December 31, 1981.

NOTE F--INCOME TAXES

SMEPA is exempt from United States income taxes pursuant to Section 501(c)(12) of the Internal Revenue Code, which requires that at least 85% of the Association's gross income comes from its members.

NOTE G--PENSION PLAN

Substantially all of SMEPA's employees participate in the National Rural Electric Cooperative Association (NRECA) Retirement and Security Program. SMEPA make annual contributions to the plan equal to the amounts

accrued for pension expense. In this master multiple-employer plan, which is available to all member cooperatives of NRECA, the accumulated benefits and plan assets are not determined or allocated separately by individual employer. SMEPA's pension expense for this plan for the years ended December 31, 1981 and 1980 was $310,000 and $275,000, respectively.

NOTE H--PURCHASED POWER REFUND

During 1981, SMEPA received a refund of $4,966,000 from Mississippi Power Company as a result of a refund Mississippi Power Company received from a coal supplier. The refund applied to amounts reported as purchased power in 1980 and prior years. At the direction of REA, the entire refund was repaid to members based on patronage in the years involved and is not reflected in the statement of operations.

Board of Directors
South Mississippi Electric Power Association
Hattiesburg, Mississippi

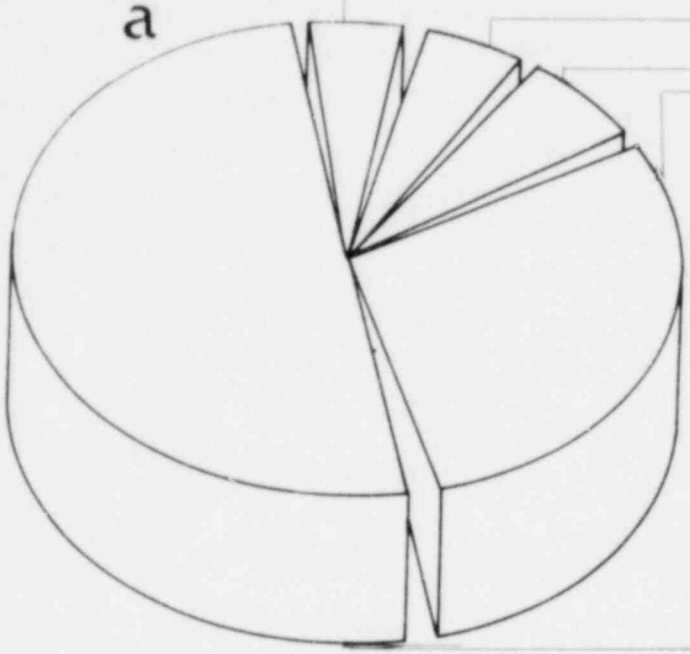
We have examined the balance sheet of South Mississippi Electric Power Association as of December 31, 1981 and the related statements of operations and patronage capital and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. The financial statements of South Mississippi Electric Power Association for the year ended December 31, 1980 were examined by other auditors whose report dated March 31, 1981 expressed an unqualified opinion on those statements.

In our opinion, the 1981 financial statements referred to above present fairly the financial position of South Mississippi Electric Power Association at December 31, 1981 and the results of its operations and the changes in its financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ernst & Whinney

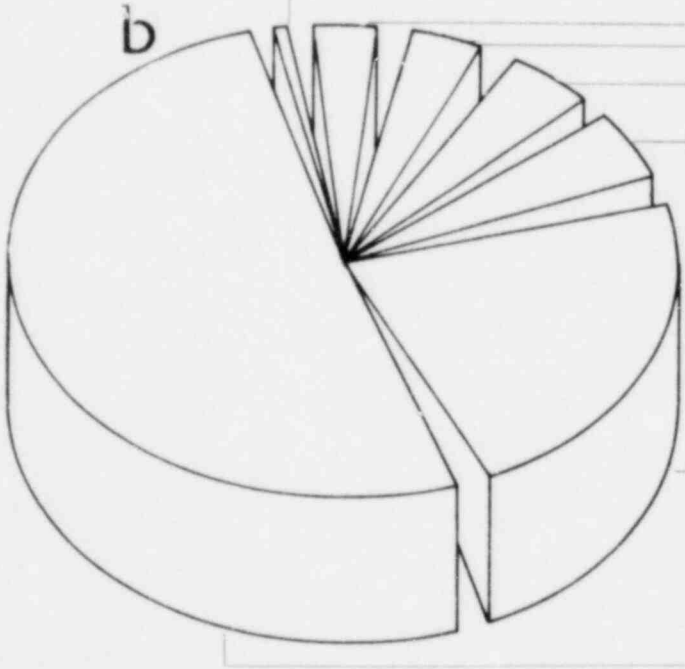
Jackson, Mississippi
April 8, 1982

a



	Mills/ KWH of Sales	Percent
A & G Expense	1.88	4.35
Transmission Expense	2.87	6.64
Other Power Supply	3.42	7.89
Other Prod. Expense	12.79	29.55
Fuel	22.31	51.57
TOTAL	43.27	100.00

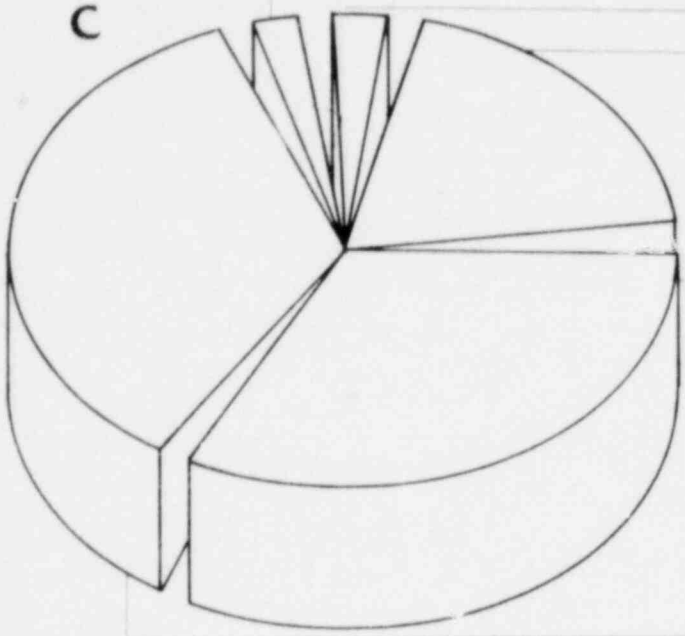
b



	Mills/ KWH of Sales	Percent
Contract Maint.	.21	.48
Other	1.92	4.45
Payroll, Benefits & Taxes	1.99	4.61
Depreciation	3.31	7.65
Purchased Power	3.42	7.89
Interest	10.11	23.35
Fuel	22.31	51.57
TOTAL	43.27	100.00

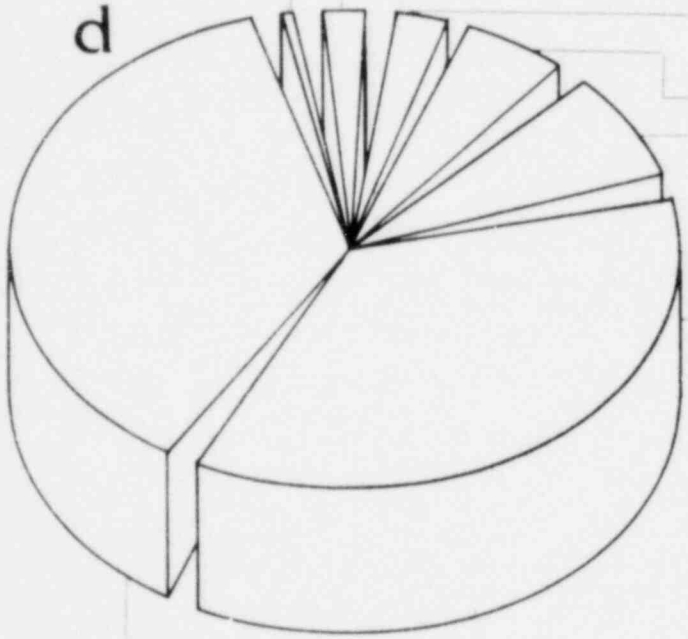
These two pie charts show the actual 1981 expenses of the generation and transmission system operated by SMEPA (without the "Borderline" Transactions). Chart A shows these expenses broken down by major accounting categories. Chart B shows the same expenses broken down differently in order to clearly show the types of expenses.

c



	Mills/ KWH of Sales	Percent
A & G Expense	1.26	3.07
Transmission Expense	1.94	4.70
Other Prod. Expense	8.58	20.87
Other Power Supply	14.38	34.95
Fuel	14.97	36.41
TOTAL	41.13	100.00

d



	Mills/ KWH of Sales	Percent
Contract Maint.	.14	.34
Other	1.29	3.14
Payroll, Benefits & Taxes	1.34	3.25
Depreciation	2.23	5.41
Interest	6.78	16.50
Purchased Power	14.38	34.95
Fuel	14.97	36.41
TOTAL	41.13	100.00

These two pie charts show the actual 1981 expenses of the generation and transmission system operated by SMEPA (including the "Borderline" Transactions). Chart C shows these expenses broken down by major accounting categories. Chart D shows the same expenses broken down differently in order to clearly show the types of expenses.

1981 Operating Expenses

I. SMEPA's Own Generation & Transmission System	1975	1976	1977	1978	1979	1980	1981
Cost of Fuel Burned in SMEPA's Plants - ¢/MMBTU	131.15	160.32	177.03	175.30	181.87	196.72	222.91
Production Costs and Purchased Power/Interchanged Power-mills/KWH	16.60	20.29	22.42	22.15	21.54	23.78	27.34
Transmission O & M-mills/KWH	.48	.49	.74	.89	.87	1.34	1.73
A & G Expenses-mills/KWH	.59	.61	.75	1.00	1.37	1.11	.95
Depreciation & Amort.-mills/KWH	1.37	1.40	1.41	3.40	5.86	4.18	3.18
Interest - mills/KWH	1.12	1.25	1.08	5.57	13.10	11.57	9.91
Taxes and Others - mills/KWH	.11	.09	.35	.27	.25	.16	.16
TOTAL - mills/KWH	20.27	24.13	26.75	33.28	42.99	42.14	43.27

II. Borderline System	1975	1976	1977	1978	1979	1980	1981
Purchased Power/Interchanged Power-mills/KWH	20.55	23.39	27.39	28.09	30.61	33.94	36.73
Transmission O & M - mills/KWH	.01	.01	.02	.03	–	–	–
Depreciation & Amort. - mills/KWH	.04	.04	.05	.05	.04	.02	.01
Interest - mills/KWH	.03	.03	.06	.06	.05	.03	.01
TOTAL - mills/KWH	20.63	23.47	27.52	28.23	30.70	33.99	36.75

III. Total System	1975	1976	1977	1978	1979	1980	1981
Production Costs and Purchased Power/Interchanged Power-mills/KWH	18.35	21.67	24.68	24.82	26.26	27.80	30.43
Transmission O & M - mills/KWH	.27	.27	.41	.50	.42	.81	1.16
A & G Expenses - mills/KWH	.33	.34	.41	.55	.66	.68	.64
Depreciation and Amortization - mills/KWH	.78	.80	.79	1.89	2.83	2.53	2.14
Interest - mills/KWH	.64	.71	.62	3.10	6.30	7.00	6.65
Taxes and Other - mills/KWH	.06	.05	.19	.15	.12	.10	.11
TOTAL - mills/KWH	20.43	23.84	27.10	31.01	36.59	38.92	41.13

Elements Of Cost

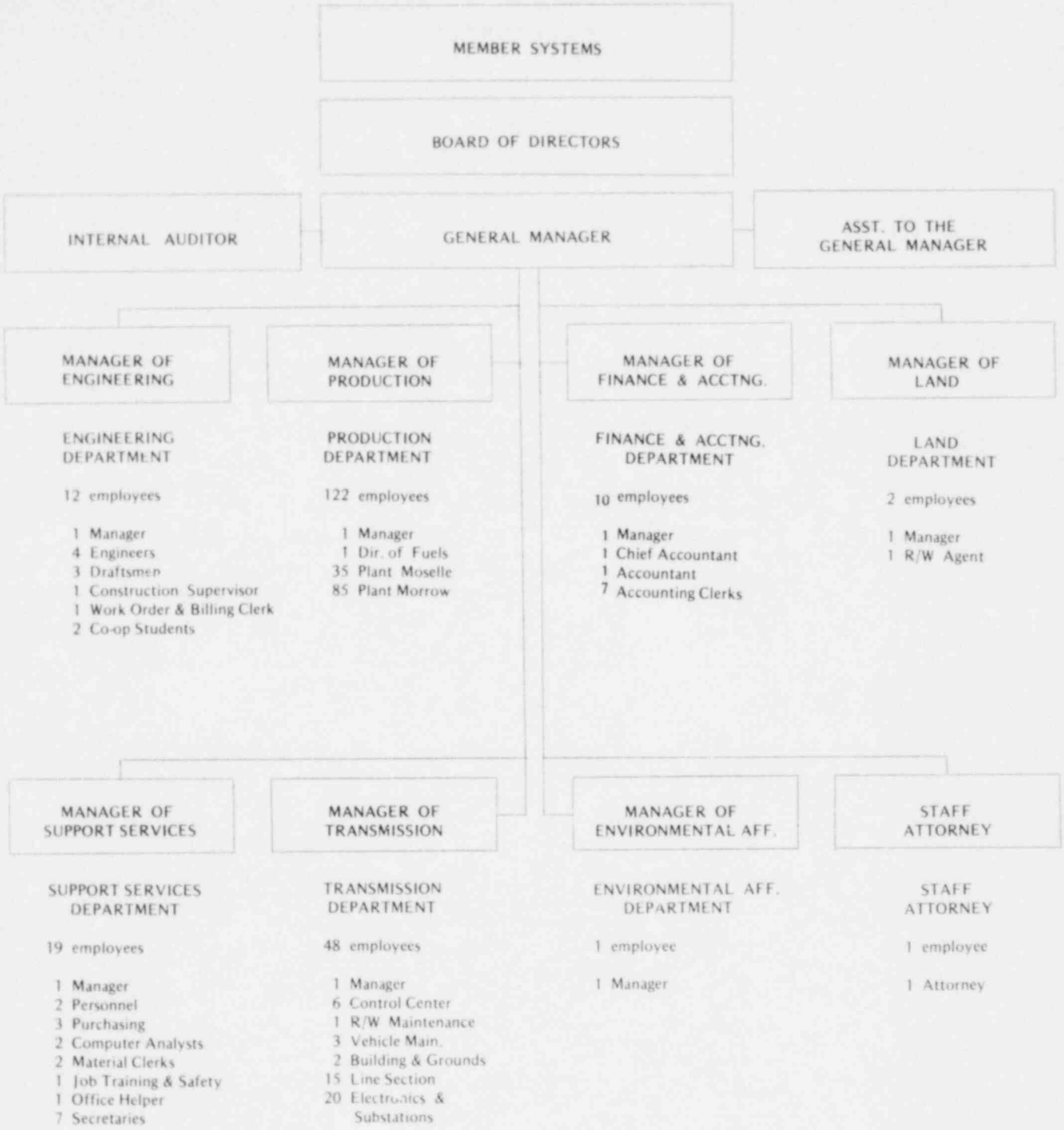
ENERGY SOURCES - MWH	1975	1976	1977	1978	1979	1980	1981
Generated:							
Steam	514,545	479,771	779,572	1,228,110	1,282,352	1,837,173	2,124,364
Other Generation	6,501	5,846	20,117	23,930	7,975	1,794	615
	521,046	485,617	799,689	1,252,040	1,290,327	1,838,967	2,124,979
Purchased:							
Firm	508,090	619,932	395,125	74,270(A)	78,150	83,801	314,740
Borderline	793,124	860,756	960,978	43,927(A)	75,416	86,642	95,114
	1,301,214	1,480,688	1,356,103	118,197	153,566	170,443	409,854
Interchanged Power				924,939(A)	1,156,683	964,703	1,080,126
Total	1,822,260	1,966,305	2,155,792	2,295,176	2,600,576	2,974,113	3,614,959
SALES - MWH							
Southwest Mississippi EPA	165,478	185,646	241,433	254,388	254,046	266,854	252,113
Dixie EPA	236,925	254,539	283,556	325,892	316,449	335,904	338,972
Pearl River Valley EPA	216,602	229,617	244,581	266,292	280,759	308,089	329,312
Singing River EPA	466,085	501,061	545,442	562,480	543,743	594,207	613,529
Southern Pine EPA	536,285	578,605	611,838	642,224	634,255	678,457	669,113
Magnolia EPA	165,431	177,535	178,268	192,592	197,845	219,749	2[illegible],217
Coast EPA					334,848	406,035	442,128
Yazoo Valley EPA						68,553	168,[illegible]22
Coahoma EPA						5,258	77,279
Delta EPA						18,255	266,886
Twin County EPA						7,781	138,136
Mississippi Power Company	235	175	8,372				
Arkansas Electric Cooperative Corp.							3,652
Total	1,787,041	1,927,178	2,113,490	2,243,868	2,561,945	2,909,142	3,516,459
TOTAL SYSTEM DEMAND--KW	417,139	445,817	473,251	520,432	619,162	742,680	960,531

(A) Accounting Method changed in 1978.

Comparative Summary

REVENUE	1975	1976	1977	1978	1979	1980	1981
Sales of Energy	$36,581,399	$46,195,888	$57,399,015	$70,655,998	$95,938,935	$108,389,316	$146,381,767
Other	140,631	172,778	272,888	289,147	1,111,895	1,010,451	1,089,140
Total Revenue	36,722,030	46,367,966	57,671,903	70,945,145	97,050,830	109,399,767	147,470,907
EXPENSE							
Operation Expense:							
Production-Fuel Cost	8,370,788	9,571,057	16,770,261	26,160,937	26,973,759	39,810,419	52,656,303
Other Production Expenses	411,795	452,645	458,811	1,201,621	1,587,006	1,972,854	2,290,904
Purchased Power	23,806,259	31,492,395	34,429,746	27,721,339	37,582,696	37,511,186	50,556,392
Transmission	172,436	207,643	382,677	487,997	451,314	1,438,895	2,923,166
Consumer Accounts	10,243	9,504	12,342	10,679	13,160	19,932	27,721
Administrative & General	557,429	611,472	818,011	1,175,735	1,611,816	1,846,457	2,086,703
Total Operation Expense	33,328,950	42,344,716	52,871,848	56,758,308	68,219,751	82,599,743	110,541,189
Maintenance Expense:							
Production	208,428	192,450	494,113	604,850	1,138,781	1,571,563	1,508,449
Transmission	335,783	342,217	488,335	637,655	616,613	922,129	1,149,140
General Plant	13,901	26,619	37,110	43,792	59,705	100,987	135,882
Total Maintenance Expense	558,112	561,286	1,019,558	1,286,297	1,815,099	2,594,679	2,793,471
Depreciation	1,371,296	1,504,568	1,648,309	4,224,653	7,225,336	7,362,869	7,524,662
Taxes	64,433	71,493	96,883	161,134	219,556	233,915	286,360
Interest Expense (Net)	1,495,090	1,676,134	1,895,200	7,362,657	16,495,094	20,658,725	24,264,944
Total Expense	36,817,881	46,158,197	57,531,798	69,793,049	93,974,836	113,449,931	145,410,626
NET OPERATING MARGINS	(95,851)	209,769	140,105	1,152,096	3,075,994	(4,050,164)	2,060,281
NON-OPERATING MARGINS	53,961	52,795	82,130	138,308	337,828	687,885	751,273
NET MARGINS (Loss)	$ (41,890)	$ 262,564	$ 222,235	$ 1,290,404	$ 3,413,822	$ (3,362,279)	$ 2,811,554

Comparative Operating Costs



General Counsel
John K. Keyes

Independent Auditors
Ernst & Whinney
Jackson, Mississippi

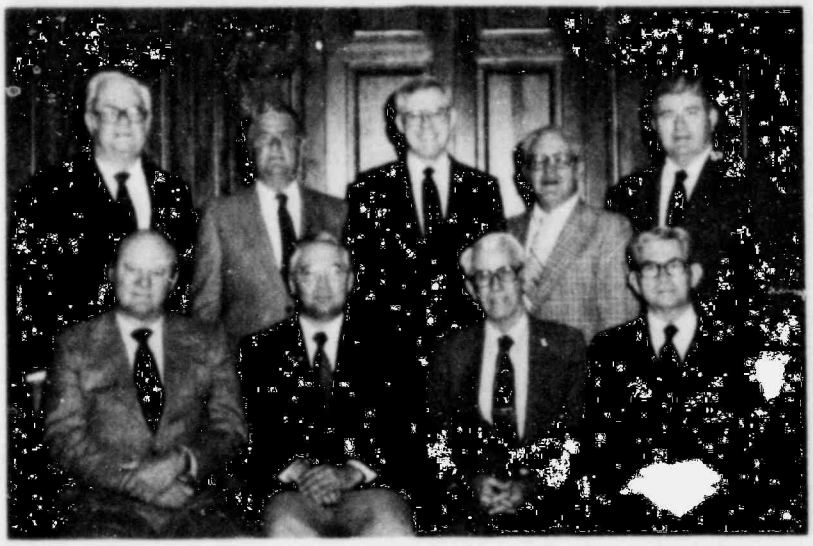
Organization

C. C. Clark, Vice President - Magnolia Electric Power Assn., L. G. Pierce, Assistant Secretary - Dixie Electric Power Assn., D. R. Ware, Secretary - Singing River Electric Power Assn., W. W. Bond, President - Pearl River Valley Electric Power Assn.

(Standing)
L. C. Spencer - Delta Electric Power Assn., Jack Ware - Singing River Electric Power Assn.

(Seated)
Henry C. Waterer, Jr. - Delta Electric Power Assn., Henry L. Thomas - Coast Electric Power Assn., Blaine H. Eaton - Southern Pine Electric Power Assn., James A. Rester - Coast Electric Power Assn.

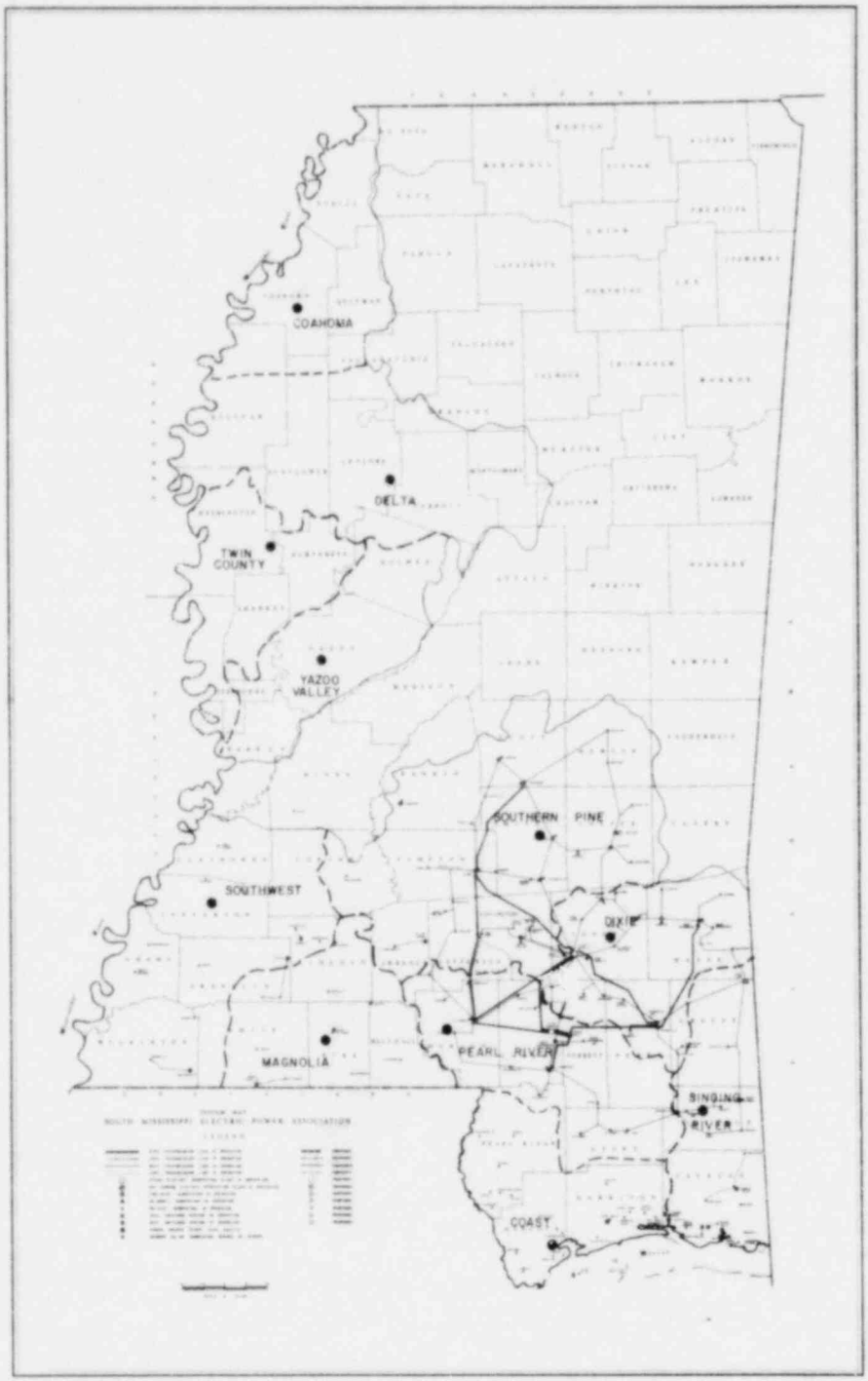
Robert L. Graham - Dixie Electric Power Assn., Louis M. Aden - Yazoo Valley Electric Power Assn., L. R. Parker - Yazoo Valley Electric Power Assn.



(Standing)
Horace H. Twiford, Jr. - Coahoma Electric Power Assn., Joe W. Noble - Southwest Mississippi Electric Power Assn., W. T. Shows - Pearl River Valley Electric Power Assn., W. T. Ruffin - Southern Pine Electric Power Assn., Robert St. John - Southwest Mississippi Electric Power Assn.

(Seated)
W. C. McKamy, Jr. - Twin County Electric Power Assn., Giles Bounds - Coahoma Electric Power Assn., Floyd Lynk - Twin County Electric Power Assn., Claude Parker - Magnolia Electric Power Assn.

Board of Directors



Service Area