# Stability & Growth

### A Message from the Chair and CEO

In last year's annual report, we termed 1998 as the year the "switch was on" and described our transition to a newly-restructured organization, our business transaction with LG&E Energy Corp. and certain of its affiliates, and the successful results from July through the end of 1998. The year 1999 would have to be described as a year of growth and stability. Growth occurred on the financial front. In its first full fiscal year as a restructured organization, Big Rivers saw results that exceeded expectations. Stability was also evidenced financially, as for the first time in ten years of normal operations, Big Rivers saw a positive margin. This and the projections of continued margins provide for a sound financial foundation to begin the new millennium.

The growth was not only apparent on the financial side, but in other ways as well. Big Rivers, as did all of the midwest utilities, saw significant peak demand load growth during the hot, dry summer. This afforded Big Rivers opportunities to sell its surplus power at greater margins. We were also able to work with our member systems and their large industrial customers to reduce peak demand and bring benefits to the customers as well as to Big Rivers.

However, such growth presents challenges as well as opportunities. For one, it will accelerate the time frame when Big Rivers needs additional capacity to meet its growing member loads. This is addressed in a new Power Requirements Study and Integrated Resource Plan, both of which have been filed with the Kentucky Public Service Commission. In addition, the 1999 load growth also puts the need for certain transmission improvement projects on a faster track, requiring expenditures sooner than what had been projected. Big Rivers will be focusing on these and other items with its member systems in addressing the future.

Big Rivers also worked in 1999 to create even more financial stability by pursuing a defeased/sale leaseback project that was consummated in spring 2000 resulting in more financial benefits as well as stability for the member systems.

Stability is bolstered by reliability. A key reliability issue for Big Rivers and its member systems was the potential of a "Y2K" problem. As early as the beginning of 1998, we started aggressively addressing the concerns that we might face with the advent of "Y2K." By early fall of 1999 our work was completed and Big Rivers, as did most other utilities in the country, saw no problems when the clock rolled over at midnight, December 31.

As you can see, we continue to build a new and strong Big Rivers. Our performance described in this annual report provides testimony to this and promise for the future. We remain excited about the future and its opportunities to continue our growth and stability for the benefit of the member systems and their members.

William C. Denton Chair of the Board Michael H. Core President & CEO



Michael H. Core, President & CEO, and William C. Denton, Chair of the Board

### Terminology Reference Guide

**ECAR:** East Central Area Reliability Council **FERC:** Federal Energy Regulatory Commission

**G&T:** Generation & Transmission Cooperative **KPSC:** Kentucky Public Service Commission

**LEC:** LG&E Energy Corp **LEM:** LG&E Marketing, Inc.

NERC: National Electric Reliability Council

RUS: Rural Utilities Service

**SEPA:** Southeastern Power Administration **WKEC:** Western Kentucky Energy Corp.

**Y2K:** Year 2000

### Big Rivers Today



Member Cooperative CEOs
Left to right are Burns Mercer,
President & CEO, Meade County
RECC; B. Dean Stanley, President &
CEO, Kenergy Corp.; and Kelly
Nuckols, President & CEO, Jackson
Purchase Energy Corporation.



Big Rivers Electric Corporation BREC Senior Lineman Brian Catron and Substation Technician Mike Roybal examine equipment at BREC transmission.

In the electric cooperative world, Big Rivers is known as an electric generation and transmission cooperative ("G&T"). It is owned by three member system distribution cooperatives that serve approximately 98,000 member consumers in 22 counties in western Kentucky. Those cooperatives are Jackson Purchase Energy Corporation, headquartered in Paducah; Kenergy Corporation, headquartered in Paducah; Kenergy Corporative Corporation headquartered in Brandenburg. Kenergy was formed July 1, 1999, as a result of a consolidation of Green River Electric Cooperation in Owensboro and Henderson Union Electric Cooperative in Henderson, both members of Big Rivers.

In 1998, Big Rivers completed a massive reorganization of its operation and business as the result of a four-year planning and development process which included a nearly two-year voluntary Chapter 11 bankruptcy. The result of that process was the leasing of the operation of its own 1,459 MW generation and the assignment of its rights of another 232 MW in the Henderson Municipal Power and Light's Station Two facility to LG&E Energy Corp. and certain of its affiliates ("LEC").

While Big Rivers no longer has responsibility for operating the power plants, it continues to have the responsibility of wholesale power supply to its member systems for their customer loads, with the exception of the two aluminum smelters served by Kenergy. Big Rivers fulfills its power supply responsibilities to the member systems from a power purchase agreement with LG&E Energy Marketing Inc. ("LEM"), member allocations from Southeastern Power Administration ("SEPA") and the wholesale power market.

Big Rivers continues to own, operate and maintain its transmission system as it did before the restructuring. Big Rivers also has the responsibility for transmission of electricity to its member systems as well as to LEC and other third-party entities that it serves under its open access transmission tariff.

Today, Big Rivers is a corporation of 93 employees, down from nearly 900 in 1992. The board has streamlined as well. It currently is made up of six directors, two from each of the three member systems.

### An Overview

With stability and growth the key words, the Big Rivers' transition, which began with the exit from bankruptcy in 1998, continued through 1999. Many details and issues that resulted from the transferal of hundreds of employees and operation of the plants in 1998 continued to be worked out in 1999 with Western Kentucky Energy Corp. ("WKEC"), the LEC subsidiary that operates the power plants. As the transition continued, Big Rivers developed the stability necessary to transition in yet another area - that of the changing landscape of a utility industry in the throes of deregulation.

### An Overview (Continued)

Finding stability in a fluid situation involving power supply market conditions that have become very volatile in the summer months is challenging In addition, with the wholesale power market development, the issue of open transmission access has created new challenges that were not present when transmission systems were initially designed to handle internal native load reliability. The past two summers have demonstrated in the East Central Area Reliability ("ECAR") region the difficulty of meeting both internal load flows and those occurring from the outside as well. This will only be exacerbated as gas turbine peaking plants of several hundred megawatts each are sited and built, literally overnight, in the next two years. Big Rivers, along with the rest of the utility industry, will search for creative answers to these transmission challenges. The volatile power markets will also require creative solutions as Big Rivers works to continue to provide an economical power supply to its three member systems' growing loads.

The electric utility industry, which has been accustomed to decision-making processes of considerable length, is now forced to quickly make critical decisions based on conditions that are themselves subject to rapid change. This environment creates a real challenge for Big Rivers and others in this business. It has changed the risk profile of the industry and created the need to have a lean and mobile management process. That is the direction Big Rivers has been headed for nearly two years.



Meade County RECC
Meade County RECC's Account
Representative and Collections Coordinator
Diane Benham answers a customer's
questions.

### **Power Supply**

Bill Blackburn is vice president of power supply. Although no longer generating its own power, Big Rivers retains its power supply responsibility to the member systems, with the exception of power supply requirements for two aluminum smelters. Currently, power supply comes from three resources: LEM Purchase Power Agreement, SEPA and the wholesale market, the first two being the primary sources.

Big Rivers must deal with the significant load growth that it is experiencing. A new peak record of 664 MW was set in July 1999. This represented an 8.1 percent increase over the peak of 614 MW in July 1998. This jump in summer demand will cause Big Rivers to seek other power supply sources sooner than originally expected. During 1999, working with its member systems, Big Rivers completed a Power Requirements Study (PRS). From this document, the 1999 Integrated Resource Plan (IRP) has been created and was filed with the Kentucky Public Service Commission in March of 2000. This document will serve as a map in seeking other sources of power for its member systems' load requirements in the future.

Big Rivers has been actively working with a large industrial customer of one of the member systems on a large cogeneration project. This project is expected to be operational



Jackson Purchase Energy
BREC Commercial & Industrial Advisor Russ
Pogue and JPEC President & CEO Kelly Nuckols
meet with Computer Services Inc. President &
CEO Steve Powless and Chairman John
Williams.

### Power Supply (Continued)

in 2001 and will free up megawatts to Big Rivers that can be used to meet customer growth from that point forward. In addition, the Large Industrial Expansion Tariff approved in early 2000 by the KPSC will give Big Rivers more flexibility on the power supply side in working with its members in addressing new or expanded loads of 5 MWs or more.

In 1999, Big Rivers worked with Reliant Energy of Houston, Texas, as its market interface partner. Through Reliant, Big Rivers bought and sold power as its load and market conditions dictated. Through these efforts, the Power Supply Department helped Big Rivers end the year with its first operating margin in ten years.

### **System Operations**

Travis Housley is the vice president of system operations. System operations involves the planning, design, construction, operation and maintenance of Big Rivers' transmission system. This department must focus on the changes continuing to be driven by the developing wholesale power market.

One of the key projects in 1999 was to prepare for the rollover to 2000 without impact to service. Big Rivers, working with ECAR and NERC, was successful in reaching this goal.



Energy Control Room BREC employees Bill Higgs and Bill Payne man the energy control room at headquarters.

In 1999, Big Rivers successfully targeted several NERC-developed control center programs. All system supervisors (dispatchers) became NERC certified operators. In addition, Big Rivers successfully complied with six operating measures and 16 planning measures in the NERC Pilot Compliance Program. Transition to use of OASIS Phase 1-A was completed as well as meeting NERC electronic tagging requirements for power sales transaction into, out of or through Big Rivers' system. Success was also obtained in providing Big Rivers' system operating data to NERC Interregional Security Network computer for security coordinator functions.

Big Rivers completed the design and construction of the Bryan Road 161-69 kV substation. Approximately 8.3 miles of 69 kV line was designed and constructed to service this and three new distribution substations. In addition, to assure reliability is maintained at a high standard, more than a dozen routine maintenance procedures were performed on thousands of poles and equipment items on the Big Rivers' transmission system.

### Finance & Administrative Services

Mark Hite serves as vice president of finance and administrative services. The plan of reorganization has brought financial stability to Big Rivers.

The first full post-reorganization year results of operations were better than forecast. Margins for the year were \$4.093 million. Sales and purchases of power to and from non-member third

### Finance & Administrative Services (Continued)

parties, other than purchases of LEM contract power, are the primary reasons for the better than forecast results.

As planned, the new depreciation study, which extended the remaining service lives of utility plant in service, thereby reducing depreciation expense to \$28 million annually, a \$10 million decrease, was implemented in July of 1998. Another indication of better than forecast results was the \$27 million prepaid status of the RUS debt as of December 31, 1999.

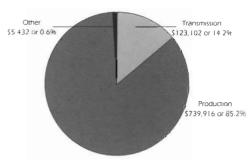
As budgeted, the three member systems' approximately 98,000 customers' loads grew 5.48 percent during 1999. This was broken down into 3.26 percent for rural loads and 8.37 percent for large industrial loads. As a result of this healthy load growth, Big Rivers is planning significant capital investments for the transmission system. Member systems' wholesale rates are competitive, averaging \$33.78 per MWh during 1999; \$36.44 per MWh for rural sales and \$30.47 per MWh for large industrial sales, the fifth consecutive annual decline.

Big Rivers has an imbedded cost of debt of 5.82 percent and a cost of capital of 7.64 percent, and plans to fund capital expenditures on a current basis in accordance with the reorganization plan. Big Rivers' TIER and DSC for 1999 were 1.06 and 1.37 respectively.

While regulatory requirements are still in flux, Big Rivers is working with WKEC to embark on a four-year capital investment plan aimed at significantly reducing  $NO_X$  emissions at the power plants, effective 2003. Big Rivers' funding share will be 20 percent, as specified in the LEC lease transaction. Big Rivers completed a leveraged lease financing of certain existing facilities on April 18, 2000. This transaction reduced annual debt service cost by approximately \$3.68 million.

### Electric Utility Plant Assets\*

In thousands of dollars



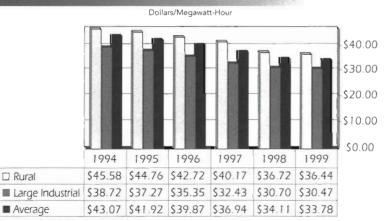
\*Net of Accumulated Depreciation of \$666,973

### Owned Electric Generation

Facilities	Type of Fuel	Net Capacity (MW)	Commercia Operation Date
Kenneth C. Coleman Plant Unit 1 Unit 2 Unit 3	Coal Coal Coal	150 150 155	1969 1970 1972
Robert D. Green Plant Unit 1 Unit 2	Coal Coal	231 223	1979 1981
Robert A. Reid Plant Unit 1 Combustion Turbine	Coal Oıl	65 65	1966 1976
D.B. Wilson Unit No. 1	Coal	420	1986
Total		1,459	

Although leased to LEC affiliates, Big Rivers continues to own its 1,459 megawatts of electric generating facilities, as described above.

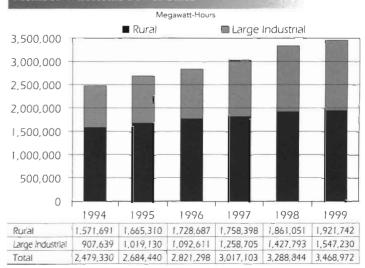
### Member Wholesale Power Rates\*



\*Excludes sales to aluminum smelters.

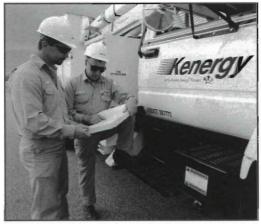
Big Rivers' wholesale rates to its members average 3.4 cents/kWh. As illustrated, rates have continued to decline the past five years, while sales to members have increased at an annual compound rate of 6.9 percent, 4.1 percent for rural loads and 11.3 percent for large industrial loads.

### Member Wholesale Power Sales



### Contract Administration & Regulatory Affairs

David Spainhoward is the vice president of contract administration and regulatory affairs. With complicated contractual relationships with certain of the LG&E Energy Corp. affiliates as well as with Big Rivers' members and with others, and, with an active regulatory arena resulting from industry changes, Big Rivers puts special emphasis on these areas.



Kenergy Corp.
Randy Dukate, a lineman, and Bill Sutley, a serviceman, of Kenergy Corp. review plans.

While the operating lease with the LEC affiliates is performing very well, operating and business issues have arisen which Big Rivers and the LEC affiliates have agreed to address generally in whole rather than in part. During 1999, Big Rivers and the LEC affiliates completed its list of larger issues and reached a general agreement regarding the resolution of those issues and, have agreed to finalize them early in 2000.

It was a busy year on the regulatory front as Big Rivers submitted a Large Industrial Customer Expansion Tariff to the Kentucky Public Service Commission (KPSC) for approval. This tariff was approved by the KPSC on a three-year pilot basis on February 25, 2000. Additionally, at the request of one of the system's large industrial customers, Big Rivers filed a Purchase and Sales Tariff for Cogeneration and Small Power Producers with the KPSC for which approval is pending.

In other KPSC activity, Big Rivers participated in the code of conduct case before the KPSC. The KPSC issued a draft Code of Conduct and draft guidelines addressing accounting requirements for cost allocation and affiliate transactions on September 3, 1998 (Administrative Case 369). An Order was issued on December 20, 1999, on cost allocation and affiliate transactions. The Code of Conduct was suspended during 1999. An order was issued on February 18, 2000, exempting cooperatives from Code of Conduct regulatory requirements.

While Big Rivers made the decision not to join the Midwest ISO during 1998, it has continued to follow the activities of the FERC regarding Regional Transmission Organizations (Docket No. RM99-02-000). In addition to following electric restructuring at the national level, Big Rivers also participated at the state level. A Task Force on Electricity Restructuring was created during 1998 by the General Assembly and was directed to "assess the desirability of deregulating and restructuring electric service delivery." The Task Force held monthly meetings during 1999 with a final recommendation that it was premature to restructure the electric industry in Kentucky at this time. Big Rivers provided information and testimony to this Task Force during the year.

Big Rivers joined the SF6 Emissions Reduction Partnership for Electric Power Systems during 1999 as a charter partner. This is a voluntary agreement between Big Rivers and the U.S. Environmental Protection Agency ("EPA") to reduce emissions of sulfur hexafluoride (SF6). Big Rivers is committed to protecting the environment when and in whatever ways it can.

### Marketing

Richard Beck, vice president of marketing in 1999, is now heading up both the Kenergy and Big Rivers marketing efforts. In 1999, Big Rivers and its member systems undertook an effort to seek out consolidated services that would provide value to all entities. This effort set the stage for a move to consolidate the marketing departments of Kenergy and Big Rivers beginning in 2000. This will result in lower costs and an improved service portfolio for the member systems.

The 1999 year saw Big Rivers and its member systems concentrate on building brand equity through its membership as part of the Touchstone Energy® cooperatives. Big Rivers pursued aggressive efforts to develop strategic alliances with other regional G&Ts to cost share Touchstone Energy® marketing costs which resulted in better economic efficiency with greater market reach.

Big Rivers, working with its member systems, improved the capabilities in serving commercial and industrial accounts through the development of a comprehensive information management system. Also, as a service to the member systems' commercial and industrial customers, Big Rivers developed a quarterly publication with articles and updates on technology and industry restructuring relative to this group of customers.

Big Rivers Electric Corporation Board of Directors (at right)
Seated are John Myers, Secretary/Treasurer,
Lee Bearden and Dick Wilson.
Standing are Leroy Humphrey, James Sills, Vice Chair,
and William C. Denton, Chair.





**Big Rivers Electric Corporation Vice Presidents** (at left)
Seated are Mark Hite, Vice President of Finance and Administrative
Services, and Travis Housley, Vice President of System Operations.
Standing are Richard Beck, Vice President of Marketing; Bill Blackburn,
Vice President of Power Supply; and David Spainhoward, Vice
President of Contract Administration and Regulatory Affairs.

### **BIG RIVERS ELECTRIC CORPORATION**

FINANCIAL STATEMENTS
AS OF DECEMBER 31, 1999 AND 1998
AND FOR EACH OF THE THREE YEARS
IN THE PERIOD ENDED DECEMBER 31, 1999
TOGETHER WITH AUDITORS' REPORT

### REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors of Big Rivers Electric Corporation:

We have audited the accompanying balance sheets of Big Rivers Electric Corporation ("Big Rivers," a Kentucky corporation) as of December 31, 1999 and 1998, and the related statements of revenues and expenses, equities (deficit) and cash flows for the period ended December 31, 1999, the period ended July 14, 1998 (pre-confirmation), the period ended December 31, 1998 (post-confirmation) and for the period ended December 31, 1997. These financial statements are the responsibility of Big Rivers' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States and the standards for financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers as of December 31, 1999 and 1998, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 1 to the financial statements, effective July 15, 1998, Big Rivers emerged from bankruptcy and adopted a new basis of accounting whereby all liabilities were adjusted to their estimated fair values. Accordingly, the financial statements for periods subsequent to the confirmation of the reorganization are not comparable to the financial statements presented for prior periods.

In accordance with Government Auditing Standards, we have also issued reports dated April 14, 2000, on our consideration of Big Rivers' internal control over financial reporting and compliance with laws and regulations.

Little Rock, Arkansas, April 14, 2000.

# BIG RIVERS ELECTRIC CORPORATION BALANCE SHEETS AS OF DECEMBER 31 (Dollars in thousands)

<u>ASSETS</u>	1999	1998
Utility plant, net Other deposits and investments, at cost	\$ 868,450 16,279	\$ 87 <u>6,647</u> 7,688
Current assets: Cash and cash equivalents Accounts receivable Non-fuel inventory Prepaid expenses Total current assets	14,074 13,663 706 721 29,164	32,016 13,614 546 1,381 47,557
Deferred charges	33,427	32,651
	\$ 947,320	\$ 964,543
EQUITIES (DEFICIT) AND LIABILITIES		
Capitalization:     Equities (deficit)     Long-term debt     Other long-term obligations     Total capitalization	\$ (355,864) 1,231,055 2,290 877,481	\$ (359,957) 1,228,837 2,904 871,784
Current liabilities: Current maturities of long-term obligations Purchased power payable Accounts payable Accrued expenses Total current liabilities	5,967 6,997 6,146 <u>6,381</u> 25,491	8,062 10,903 4,441 7,272 30,678
Deferred credits and other: Deferred lease revenue Other Total deferred credits and other	30,823 13,525 44,348	54,652 7,429 62,081
Commitments and contingencies (Note 1)	77,070	02,001
	\$ 947,320	\$ 964,543

The accompanying notes to financial statements are an integral part of these balance sheets.

# BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF REVENUES AND EXPENSES FOR THE YEARS ENDED DECEMBER 31 (Dollars in thousands)

	1999	1998	1997
Operating revenue Lease revenue	\$150,294 54,265	\$230,307 	\$304,626
Total operating revenues Operating expenses: Operations:	204,559	254,554	304,626
Fuel for electric generation  Power purchased and interchanged	- 86,288	51,876 59,586	92,966 44,916
Production, excluding fuel Other	3,929 8,747	19,684 8,600	33,409 13,997
Maintenance Depreciation	2,951 27,589	19,764 31,032	33,125 35,860
Total operating expenses	129,504	190,542	254,273
Electric operating margins	75,055	64,012	50,353
Interest expense and other: Interest Other, net	71,908 69	75,021 (184)	41,272 (192)
Total interest expense and other	71,977	74,837	41,080
Operating margin (loss) before non-operating margin (loss) and extraordinary loss, net	3,078	(10,825)	9,273
Non-operating margin (loss): Reorganization expenses Interest income and other Total non-operating margin (loss)	1,015 7,015	(17,373) 1,321 (16,052)	(18,352) 
Net margin (loss) before extraordinary loss	4,093	(26,877)	(8,054)
Extraordinary loss, net (Note 1)	-	(40,527)	-
Net margin (loss)	\$ 4,093	\$ (67,404)	\$ (8,054)

The accompanying notes to financial statements are an integral part of these statements.

### BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF EQUITIES (DEFICIT) FOR THE YEARS ENDED DECEMBER 31 (Dollars in thousands)

				Other e	quities
	Total equities (deficit)	Accumulated deficit	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1996 Net loss	\$(284,499) (8,054)	\$(416,865) (8,054)	\$ 127,921	\$764	\$3,681
Balance at December 31, 1997 Forgiveness of patronage	(292,553)	(424,919)	127,921	764	3,681
capital allocations (Note 2)	-	127,921	(127,921)	-	-
Net loss	(26,877)	(26,877)	-	-	-
Extraordinary loss, net (Note 1)	(40,527)	(40,527)	-	-	-
Balance at December 31, 1998 Net margin	(359,957) 4,093	(364,402) 4,093	-	764	3,681
Balance at December 31, 1999	\$(355,864)	\$(360,309)	-	\$764	\$3,681

The accompanying notes to financial statements are an integral part of these statements.

### BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31 (Dollars in thousands)

Cash flows from operating activities:   Net margin (loss)   \$ 4,093   \$ (67,404)   \$ (8,054)     Adjustments to reconcile net margin (loss) to net cash (used in) provided by operating activities:   Non-cash extraordinary loss, net (Note 1)   - 54,727   - 4,004   - 54,727     Non-cash extraordinary loss, net (Note 1)   - 4,004   - 4,004   - 54,004   - 6,004     Depreciation and amortization   31,944   34,125   40,542     Net change in balancing account   - (39,257)   Changes in operating assets and liabilities:   Other deposits and investments   (591)   (2,906)   (1,404)     Accounts receivable   (49)   14,261   (3,714)     Fuel inventory   - 2,524   (4,623)     Non-fuel inventory   (160)   446   31     Prepaid expenses   (660   (1,381)   1,689     Deferred charges   (2,604)   (13,820)   - (14,714)     Prepaid expenses   (552)   (2,147)   (5,602     Other long-term obligations   (552)   (2,147)   (5,602     Purchased power payable   (3,906)   (10,160   743     Accounts payable   (1,705   (11),914)   (423     Accrued expenses   (891)   (2,527)   (3,735     Deferred lease revenue   (23,829)   54,652   - (0,771   1,626   (5,771     Net cash (used in) provided by operating activities   (1,221)   74,426   (4,864)      Cash flows from investing activities:   (1,221)   74,426   (4,458)   (4,437   (4,438   (4,437   (4,437   (4,438   (4,437   (4,437   (4,438   (4,43		1999	1998	1997
Net margin (loss)	Cash flows from operating activities:			
(used in) provided by operating activities:       Non-cash extraordinary loss, net (Note 1)       -       54,727       -         Non-cash extraordinary loss, net (Note 1)       -       54,727       -         Non-cash extraordinary loss, net (Note 1)       -       -       4,004       -         Depreciation and amortization       31,944       34,125       40,542         Net change in balancing account       -       -       -       (39,257)         Changes in operating assets and liabilities:       0ther deposits and investments       (591)       (2,906)       (1,404)         Accounts receivable       (49)       14,261       (3,714)         Fuel inventory       -       2,524       (4,623)         Non-fuel inventory       (160)       446       31         Prepaid expenses       660       (1,381)       1,689         Deferred charges       (2,604)       (13,820)       -         Other long-term obligations       (552)       (2,147)       5,602         Purchased power payable       (3,906)       10,160       743         Accounts payable       1,705       (11,914)       423         Accrued expenses       (891)       (2,527)       3,735         Deferred lease revenue		\$ 4,093	\$(67,404)	\$ (8,054)
Non-cash reorganization expenses   -   4,004   -   -   54,727   Non-cash reorganization expenses   -   4,004   -   4,004   31,125   40,542   Net change in balancing account   -   -   (39,257)   Changes in operating assets and liabilities:   Other deposits and investments   (591)   (2,906)   (1,404)   Accounts receivable   (49)   14,261   (3,714)   Fuel inventory   -   2,524   (4,623)   Non-fuel inventory   (160)   446   31   Prepaid expenses   660   (1,381)   1,689   Deferred charges   (2,604)   (13,820)   -   Other long-term obligations   (552)   (2,147)   5,602   Purchased power payable   (3,906)   10,160   743   Accounts payable   (1,705   (11,914)   423   Accrued expenses   (891)   (2,527)   3,735   Deferred lease revenue   (23,829)   54,652   -   Other, net   (7,041)   1,626   (577)   Net cash (used in) provided by operating activities   (1,221)   74,426   (4,864)   (4,437)   Net cash (used in) provided by investing activities   (8,000)   -   -   -   -   -   -   -   -   -	Adjustments to reconcile net margin (loss) to net cash			
Non-cash reorganization expenses			54707	
Depreciation and amortization   31,944   34,125   40,542   Net change in balancing account   -   -   (39,257)   Changes in operating assets and liabilities:   Other deposits and investments   (591)   (2,906)   (1,404)   Accounts receivable   (49)   14,261   (3,714)   Fuel inventory   -   2,524   (4,623)   Non-fuel inventory   (160)   446   31   Prepaid expenses   (600   (1,381)   1,689   Deferred charges   (2,604)   (13,820)   -   Other long-term obligations   (552)   (2,147)   5,602   Purchased power payable   (3,906)   10,160   743   Accounts payable   (1,705   (11),914)   423   Accounts payable   (1,705   (11),914)   423   Accounts payable   (23,829)   54,652   -   Other, net   (7,041)   1,626   (577)   Net cash (used in) provided by operating activities   (1,221)   74,426   (4,864)   (4,864)   (4,864)   (4,437)   (4,458)   (4,437)   Net cash (used in) provided by investing activities   (8,782)   (4,458)   (4,437)   (4,437)   Net cash (used in) provided by investing activities   (16,782)   31,461   (4,437)   (16,782)   (16,7		-		-
Net change in balancing account		21 044		40.542
Changes in operating assets and liabilities:           Other deposits and investments         (591)         (2,906)         (1,404)           Accounts receivable         (49)         14,261         (3,714)           Fuel inventory         -         2,524         (4,623)           Non-fuel inventory         (160)         446         31           Prepaid expenses         (60)         (1,381)         1,689           Deferred charges         (2,604)         (13,820)         -           Other long-term obligations         (552)         (2,147)         5,602           Purchased power payable         (3,906)         10,160         743           Accounts payable         (1,911)         (2,527)         3,735           Deferred lease revenue         (23,829)         54,652         -           Other, net         (7,041)         1,626         (577)           Net cash (used in) provided by operating activities         (8,000)         -         -           Investment in held-to-maturity securities         (8,000)         -         -           Proceeds from sale of assets in conjunction with Lease         (4,458)         (4,458)         (4,458)           Agreement         -         (8,782)         (4,458)		31,744	34,123	
Other deposits and investments         (591)         (2,906)         (1,404)           Accounts receivable         (49)         14,261         (3,714)           Fuel inventory         -         2,524         (4,623)           Non-fuel inventory         (160)         446         31           Prepaid expenses         660         (1,381)         1,689           Deferred charges         (2,604)         (13,820)         -           Other long-term obligations         (552)         (2,147)         5,602           Purchased power payable         (3,906)         10,160         743           Accounts payable         1,705         (11,914)         423           Accrued expenses         (891)         (2,527)         3,735           Deferred lease revenue         (23,829)         54,652         -           Other, net         (7,041)         1,626         (577)           Net cash (used in) provided by operating activities         (8,000)         -         -           Investment in held-to-maturity securities         (8,000)         -         -           Proceeds from sale of assets in conjunction with Lease         -         35,919         -           Capital expenditures, net         (8,782)         (4,	Changes in operating assets and liabilities:	_	_	(37,237)
Accounts receivable (49) 14,261 (3,714) Fuel inventory - 2,524 (4,623) Non-fuel inventory (160) 446 31 Prepaid expenses 660 (1,381) 1,689 Deferred charges (2,604) (13,820) - Other long-term obligations (552) (2,147) 5,602 Purchased power payable (3,906) 10,160 743 Accounts payable 1,705 (11,914) 423 Accrued expenses (891) (2,527) 3,735 Deferred lease revenue (23,829) 54,652 - Other, net (7,041) 1,626 (577) Net cash (used in) provided by operating activities (1,221) 74,426 (4,864)  Cash flows from investing activities: Investment in held-to-maturity securities (8,000) - Proceeds from sale of assets in conjunction with Lease Agreement - 35,919 - Capital expenditures, net (8,782) (4,458) (4,437) Net cash (used in) provided by investing activities (16,782) 31,461 (4,437)  Cash flows from financing activities: (Decrease) increase in liabilities subject to compromise - (7,412) 15,728 Principal payments on long-term obligations (29,297) (89,653) - Increase in LEM Advances 25,626 8,333 - Increase in LEM Advances 25,626 8,333 - Net cash provided by (used in) financing activities 61 (88,732) 15,728  Net (decrease) increase in cash and cash equivalents (17,942) 17,155 6,427		(591)	(2,906)	(1.404)
Fuel inventory   1,60				
Prepaid expenses         660         (1,381)         1,689           Deferred charges         (2,604)         (13,820)         -           Other long-term obligations         (552)         (2,147)         5,602           Purchased power payable         (3,906)         10,160         743           Accounts payable         1,705         (11,914)         423           Accrued expenses         (891)         (2,527)         3,735           Deferred lease revenue         (23,829)         54,652         -           Other, net         (7,041)         1,626         (577)           Net cash (used in) provided by operating activities         (1,221)         74,426         (4,864)           Cash flows from investing activities:         (8,000)         -         -         -           Investment in held-to-maturity securities         (8,000)         -         -         -           Proceeds from sale of assets in conjunction with Lease         -         35,919         -         -           Agreement         -         37,822         (4,458)         (4,437)           Net cash (used in) provided by investing activities         (16,782)         31,461         (4,437)           Cash flows from financing activities:         -		-	2,524	
Deferred charges		(160)		
Other long-term obligations         (552)         (2,147)         5,602           Purchased power payable         (3,906)         10,160         743           Accounts payable         1,705         (11,914)         423           Accrued expenses         (891)         (2,527)         3,735           Deferred lease revenue         (23,829)         54,652         -           Other, net         (7,041)         1,626         (577)           Net cash (used in) provided by operating activities         (1,221)         74,426         (4,864)           Cash flows from investing activities:         (8,000)         -         -         -           Investment in held-to-maturity securities         (8,000)         -         -         -           Proceeds from sale of assets in conjunction with Lease         -         35,919         -           Agreement         -         35,919         -           Capital expenditures, net         (8,782)         (4,458)         (4,437)           Net cash (used in) provided by investing activities         (16,782)         31,461         (4,437)           Cash flows from financing activities:         -         (7,412)         15,728           Principal payments on long-term obligations         (29,297)         <				1,689
Purchased power payable         (3,906)         10,160         743           Accounts payable         1,705         (11,914)         423           Accrued expenses         (891)         (2,527)         3,735           Deferred lease revenue         (23,829)         54,652         -           Other, net         (7,041)         1,626         (577)           Net cash (used in) provided by operating activities         (1,221)         74,426         (4,864)           Cash flows from investing activities:         (8,000)         -         -         -           Proceeds from sale of assets in conjunction with Lease         -         35,919         -         -           Agreement         -         35,919         - <td></td> <td></td> <td></td> <td>-</td>				-
Accounts payable 1,705 (11,914) 423 Accrued expenses (891) (2,527) 3,735 Deferred lease revenue (23,829) 54,652 - Other, net (7,041) 1,626 (577) Net cash (used in) provided by operating activities (1,221) 74,426 (4,864)  Cash flows from investing activities: Investment in held-to-maturity securities (8,000) - Proceeds from sale of assets in conjunction with Lease Agreement - 35,919 - Capital expenditures, net (8,782) (4,458) (4,437) Net cash (used in) provided by investing activities (16,782) 31,461 (4,437)  Cash flows from financing activities: (Decrease) increase in liabilities subject to compromise - (7,412) 15,728 Principal payments on long-term obligations (29,297) (89,653) - Increase in LEM Advances 25,626 8,333 - Increase in ARVP Note 3,732 Net cash provided by (used in) financing activities (17,942) 17,155 6,427				•
Accrued expenses   (891)   (2,527)   3,735     Deferred lease revenue   (23,829)   54,652   - (7,041)   1,626   (577)     Net cash (used in) provided by operating activities   (1,221)   74,426   (4,864)      Cash flows from investing activities:				
Deferred lease revenue				
Other, net				3,/35
Net cash (used in) provided by operating activities (1,221) 74,426 (4,864)  Cash flows from investing activities: Investment in held-to-maturity securities (8,000) Proceeds from sale of assets in conjunction with Lease Agreement - 35,919 Capital expenditures, net (8,782) (4,458) (4,437) Net cash (used in) provided by investing activities (16,782) 31,461 (4,437)  Cash flows from financing activities: (Decrease) increase in liabilities subject to compromise - (7,412) 15,728 Principal payments on long-term obligations (29,297) (89,653) Increase in LEM Advances 25,626 8,333 Increase in ARVP Note 3,732 Net cash provided by (used in) financing activities 61 (88,732) 15,728  Net (decrease) increase in cash and cash equivalents (17,942) 17,155 6,427				· (C77)
Cash flows from investing activities:  Investment in held-to-maturity securities (8,000)  Proceeds from sale of assets in conjunction with Lease  Agreement  Capital expenditures, net  Net cash (used in) provided by investing activities (16,782)  Cash flows from financing activities:  (Decrease) increase in liabilities subject to compromise  Principal payments on long-term obligations (29,297) (89,653)  Increase in LEM Advances  Increase in ARVP Note  Net cash provided by (used in) financing activities  Net (decrease) increase in cash and cash equivalents (17,942)  Net (decrease) increase in cash and cash equivalents (17,942)  Agreement  - 35,919  - (4,458)  (4,458)  (4,437)  (4,437)  (4,437)  (4,437)  (4,437)  (4,437)  (7,412)  15,728  15,728				
Investment in held-to-maturity securities Proceeds from sale of assets in conjunction with Lease Agreement Capital expenditures, net Net cash (used in) provided by investing activities  (B,782) (A,458) (A,437) (A,437)  Cash flows from financing activities: (Decrease) increase in liabilities subject to compromise Principal payments on long-term obligations Principal payments on long-term obligations Increase in LEM Advances Increase in ARVP Note Net cash provided by (used in) financing activities  Net (decrease) increase in cash and cash equivalents  Net (decrease) increase in cash and cash equivalents  (8,000) 35,919 - (4,458) (4,437)  (4,437)  (4,437)  (4,437)  (7,412) 15,728  15,728  Net (decrease) increase in cash and cash equivalents  (17,942) 17,155 6,427	Net cash (used in) provided by operating activities	_(1,221)		(4,864)
Proceeds from sale of assets in conjunction with Lease Agreement Capital expenditures, net Net cash (used in) provided by investing activities  (B,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (17,412) (15,728)  Principal payments on long-term obligations (17,412) (18,728) (18,732)	Cash flows from investing activities:			
Proceeds from sale of assets in conjunction with Lease Agreement Capital expenditures, net Net cash (used in) provided by investing activities  (B,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (16,782) (17,412) (15,728)  Principal payments on long-term obligations (17,412) (18,728) (18,732)		(8,000)	-	-
Capital expenditures, net Net cash (used in) provided by investing activities       (8,782) (16,782)       (4,458) (4,437)         Cash flows from financing activities:       (Decrease) increase in liabilities subject to compromise Principal payments on long-term obligations       - (7,412) (29,297)       15,728         Principal payments on long-term obligations Increase in LEM Advances       25,626 (29,297)       (89,653) (29,297)       - (89,653) (29,297)         Increase in ARVP Note Note Net cash provided by (used in) financing activities       3,732 (88,732)       - (88,732)       15,728         Net (decrease) increase in cash and cash equivalents       (17,942)       17,155       6,427				
Net cash (used in) provided by investing activities (16,782) 31,461 (4,437)  Cash flows from financing activities:  (Decrease) increase in liabilities subject to compromise - (7,412) 15,728  Principal payments on long-term obligations (29,297) (89,653) - Increase in LEM Advances 25,626 8,333 - Increase in ARVP Note 3,732 Net cash provided by (used in) financing activities 61 (88,732) 15,728  Net (decrease) increase in cash and cash equivalents (17,942) 17,155 6,427		-		-
Cash flows from financing activities:  (Decrease) increase in liabilities subject to compromise Principal payments on long-term obligations Increase in LEM Advances Increase in ARVP Note Net cash provided by (used in) financing activities  Net (decrease) increase in cash and cash equivalents  (17,412) (89,653) - (89,653) - (88,732) (88,732) (17,412) 15,728				
(Decrease) increase in liabilities subject to compromise Principal payments on long-term obligations Increase in LEM Advances Increase in ARVP Note Net cash provided by (used in) financing activities  Net (decrease) increase in cash and cash equivalents  (7,412) (89,653) - (89,653) - (88,732) (15,728)  (88,732)  15,728	Net cash (used in) provided by investing activities	(16,782)	31,461	(4,437)
(Decrease) increase in liabilities subject to compromise Principal payments on long-term obligations Increase in LEM Advances Increase in ARVP Note Net cash provided by (used in) financing activities  Net (decrease) increase in cash and cash equivalents  (7,412) (89,653) - (89,653) - (88,732) (15,728)  (88,732)  15,728	Cash flows from financing activities:			
Principal payments on long-term obligations       (29,297)       (89,653)       -         Increase in LEM Advances       25,626       8,333       -         Increase in ARVP Note       3,732       -       -         Net cash provided by (used in) financing activities       61       (88,732)       15,728         Net (decrease) increase in cash and cash equivalents       (17,942)       17,155       6,427		-	(7,412)	15,728
Increase in LEM Advances   25,626   8,333   -	Principal payments on long-term obligations			-
Net cash provided by (used in) financing activities61(88,732)15,728Net (decrease) increase in cash and cash equivalents(17,942)17,1556,427	Increase in LEM Advances		8,333	-
Net (decrease) increase in cash and cash equivalents (17,942) 17,155 6,427			<del></del>	-
	Net cash provided by (used in) financing activities	61	(88,732)	15,728
	Net (decrease) increase in cash and cash equivalents	(17,942)	17,155	6,427
Cash and cash equivalents, beginning of year 32,016 14,861 8,434	Cash and cash equivalents, beginning of year	32,016	14,861	8,434
Cash and cash equivalents, end of year         \$14,074         \$ 32,016         \$ 14,861	Cash and cash equivalents, end of year	\$14,074	\$ 32,016	\$ 14,861
Supplemental Cash Flow Information:	Supplemental Cash Flow Information:			
Cash paid relating to interest         \$72,627         \$76,716         \$36,918	Cash paid relating to interest	\$ 72,627	\$ 76,716	\$ 36,918

The accompanying notes to financial statements are an integral part of these statements.

### BIG RIVERS ELECTRIC CORPORATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1999 (Dollars in thousands)

### CHAPTER 11 BANKRUPTCY FILING, EMERGENCE FROM BANKRUPTCY AND CONTINGENCIES:

### Chapter 11 Bankruptcy Filing:

On September 25, 1996, Big Rivers Electric Corporation ("Big Rivers" or the "Company") filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code ("Chapter 11") and the Company began operating as a debtor-in-possession under the supervision of the United States Bankruptcy Court for the Western District of Kentucky (the "Bankruptcy Court"). Big Rivers believed it was necessary to file Chapter 11 in order to, among other reasons, (a) restructure its debt obligations, upon which the Company would otherwise default in the near term; (b) relieve the Company of severely burdensome long-term coal contracts; (c) receive judicial approval in conjunction with consummating a long-term lease transaction involving the generation assets of Big Rivers; (d) sufficiently resolve other alleged claims, suits and liabilities asserted against Big Rivers such that the reorganized Company could emerge from Chapter 11 able to repay its restructured debt and (e) implement its reorganization in a timely manner. On January 22, 1997, Big Rivers filed a plan of reorganization with the Bankruptcy Court (the "Plan"). The Plan, further amended on April 18, 1997, was approved by substantially all creditors and rate payer constituents of Big Rivers and was confirmed by the Bankruptcy Court on June 9, 1997. On June 30, 1997, the Company filed an application with the Kentucky Public Service Commission (the "KPSC") for an order approving various components of the Plan (the "Rate Hearing"). In particular, the Company requested approval for the leasing of its generation assets and the related energy to certain affiliates of LG&E Energy Corporation ("LG&E Energy") (the "Lease Agreement"). The KPSC approved the Lease Agreement in principle on April 30, 1998, pending the revision of the rates associated with National Southwire Aluminum Company ("NSA") and Alcan Aluminum Corporation ("Alcan") (collectively referred to as the "Aluminum Smelters") and Big Rivers' other large industrial customers. Modifications to the rate structure were made and the Plan, as further amended, was approved by the Bankruptcy Court on June 1, 1998. The KPSC issued an order dated July 14, 1998, approving the Plan as it relates to the Lease Agreement.

### Emergence from Bankruptcy:

Big Rivers' Chapter 11 reorganization was confirmed effective July 15, 1998 (the "Effective Date"), with the closing of the Lease Agreement, whereby Big Rivers leased its generating facilities to Western Kentucky Energy Corporation ("WKEC"), a wholly-owned subsidiary of LG&E Energy. Pursuant to the Lease Agreement, WKEC will operate the generating facilities and maintain title to all energy produced. Throughout the lease term, in order to fulfill Big Rivers' obligation to supply power to its members following the Effective Date, the Company will purchase substantially all of its power requirements from LG&E Energy Marketing Corporation ("LEM"), a wholly-owned subsidiary of LG&E Energy, pursuant to a power purchase agreement.

Big Rivers will continue to operate its transmission facilities and will charge WKEC tariff rates for delivery of the energy produced by WKEC and consumed by its customers. As part of the Lease Agreement, WKEC also purchased certain property, inventory and other assets necessary for the operation of the generation facilities from Big Rivers for \$35,919. In connection with the purchase of these assets, the Company recorded a net loss of \$4,004, which is reflected as a reorganization expense in the accompanying statements of revenues and expenses in 1998. The significant terms of the Lease Agreement are as follows:

- I. WKEC will lease and operate Big Rivers' generation facilities through 2023.
- II. Big Rivers will retain ownership of the generation facilities both during and at the end of the lease term.
- III. WKEC will pay Big Rivers an annual lease payment of \$30,965 over the lease term, subject to certain adjustments.
- IV. On the Effective Date, Big Rivers received \$69,100 representing certain closing payments and the first two years of the annual lease payments. In accordance with Statement of Financial Accounting Standards ("SFAS") No. 13, "Accounting for Leases," the Company will amortize these payments into lease revenue over the lease term.
- V. Big Rivers will continue to provide power for its members, excluding the member loads serving the Aluminum Smelters, through its power purchase agreements with LEM and the Southeastern Power Administration, based on a pre-determined maximum capacity. When economically feasible, the Company may also obtain the power necessary to supply its member loads, excluding the Aluminum Smelters, in the open market. The member loads for the Aluminum Smelters will be served by LEM. To the extent the power purchased from LEM does not reach pre-determined minimums, the Company will be required to pay certain penalties. Also, to the extent additional power is available to Big Rivers under the LEM contract, Big Rivers may sell to non-members.
- VI. Through 2011, WKEC will reimburse Big Rivers approximately \$260,668 for the margins expected from the Aluminum Smelters, being defined as the net cash flows that Big Rivers anticipated receiving over the term of the Lease Agreement if the Company had continued to serve the Aluminum Smelters' load, as filed in the Rate Hearing (the "Expected Margins").
- VII. WKEC will be responsible for the operating costs of the generation facilities; however, Big Rivers will be partially responsible for ordinary capital expenditures of the generation facilities over the term of the Lease Agreement, up to a 49% maximum. This maximum is not expected to exceed \$148,000 over the Lease Agreement. At the end of the lease term, Big Rivers is obligated to fund a residual value payment to LG&E Energy for such capital additions during the lease, currently estimated to be \$125,000 (see Note 2). The Company will have title to these assets during the lease and upon lease termination. Adjustments to the residual value payment will be made based upon actual capital expenditures.
- VIII. Big Rivers entered into a note payable with LEM for \$19,676 to be repaid over the Lease Agreement, which bears interest at 8% per annum, in consideration for LEM's assumption of the risk related to unforeseen costs with respect to power to be

### . CHAPTER 11 BANKRUPTCY FILING, EMERGENCE FROM BANKRUPTCY AND CONTINGENCIES (Continued):

supplied to the Aluminum Smelters and the increased responsibility for financing capital improvements. The Company has recorded this obligation as a component of deferred charges with the related payable recorded as long-term debt in the accompanying balance sheets. This deferred charge will be amortized on a straight-line basis over the lease term.

- IX. On the Effective Date, Big Rivers paid a non-refundable marketing payment of \$5,933 to LEM, which has been recorded as a component of deferred charges. This amount will be amortized on a straight-line basis over the lease term.
- X. During the lease term, Big Rivers will be entitled to certain "billing credits" against amounts the Company owes to LEM under the power purchase agreement. Each month during the first fifty-five months of the lease term, Big Rivers will receive a credit of \$89. For the year 2011, Big Rivers will receive a credit of \$2,611 and for the years 2012 through 2023, the Company will receive a credit of \$4,111 annually. Big Rivers will recognize these credits as a reduction of power purchased as service is provided.

As disclosed in the Company's 1997 audited financial statements, the Company initially anticipated recording an impairment loss related to its generation facilities in conjunction with the consummation of the Lease Agreement, as prescribed by generally accepted accounting principles. This impairment loss was anticipated based on the estimated fair value of Big Rivers' generation facilities from a November 1997 appraisal. Management has since determined that, based upon a number of elements of the Plan which changed during the period from November 1997 to the Effective Date, including a new depreciation study completed in July 1998 which significantly extends the remaining service lives of Big Rivers' generating facilities, the fair value of Big Rivers' generating facilities on the Effective Date was such that no impairment loss was warranted in conjunction with the consummation of the Lease Agreement.

As prescribed by the Plan and in conjunction with the Effective Date, Big Rivers settled the liabilities subject to compromise as recorded in the accompanying balance sheet. Upon attaining the Effective Date, the RUS Promissory Note (see Note 4) was replaced by two separate notes. The first note (the "New RUS Promissory Note") represents a stated principal balance of \$1,022,583, net of \$78,582 paid on the Effective Date, which bears a stated interest rate of 5.75% per annum, with a varying repayment schedule over the Lease Agreement. The second note (the "ARVP Note") represents a \$265,000 obligation due to the RUS at the end of the Lease Agreement, and this obligation does not bear interest.

In accordance with Statement of Position ("SOP") 90-7, "Financial Reporting by Entities in Reorganization Under the Bankruptcy Code," at the Effective Date the Company was required to record its liabilities at fair value. In determining the fair value of Big Rivers' liabilities, the Company was required to record its long-term debt by applying a discount rate commensurate with the market rate to the future debt service payments under the New RUS Promissory Note and the ARVP Note, regardless of the stated principal and coupon rates of the obligations. In conjunction with recording the two separate notes on the Effective Date, the Company determined that the market rate associated with the New RUS Promissory Note and the ARVP Note was 5.81%. In discounting the future debt service payments using the market rate, the Company recorded a combined principal balance of \$1,077,311 for the two RUS notes, net of \$78,582 paid on the Effective Date, and recorded a \$54,727 loss as an extraordinary item in the accompanying statements of revenues and expenses for the year ended December 31, 1998. Additionally, this transaction was treated as a non-cash transaction and was excluded from the accompanying statements of cash flows. Also, in conjunction with the Plan, certain pollution control bonds (discussed herein) were secured and remarketed following the mandatory tender of the bonds by the holders thereof. The irrevocable standby letters of credit, which were supporting the bonds held by Chase Manhattan Bank and the Bank of New York were replaced with the bond insurance policies and standby bond purchase agreements issued by Ambac Assurance Corporation, each dated at the Effective Date, between Big Rivers, U.S. Bank Trust National Association, as trustee, and Credit Suisse First Boston, as the liquidity provider. In connection therewith, the Company realized cash proceeds of \$14,200 and recognized an extraordinary gain in the accompanying statements of revenues and expenses in 1998. For Big Rivers' remaining liabilities, there were no other significant differences between the carrying amounts and the respective fair values on the Effective Date.

In accordance with the power purchase agreement with LEM, the Company is allowed to purchase power in the open market, incurring penalties when the power purchased from LEM does not meet certain minimum levels, and sell excess power (power not needed to supply its jurisdictional load) in the open market (collectively referred to as "Arbitrage"). Pursuant to the New RUS Promissory Note and the ARVP Note, the total value created by Arbitrage must be divided as follows: one-third, adjusted for member sales volume and capital expenditures, will be used to make principal payments on the New RUS Promissory Note; one-third will be used to make principal payments on the ARVP Note; and the remaining value may be retained by the Company.

In connection with the Chapter 11 filing and subsequent Effective Date, certain items have been segregated and presented as reorganization expenses in the accompanying statements of revenues and expenses as costs related to transactions which were directly associated with the Chapter 11 proceedings. Reorganization expenses for the years ended December 31, were as follows:

Professional services	<u>1999</u> \$ -	1998 \$ 4,365	1997 \$ 6,362
Net loss on sale of property, inven	itory		
and other assets	-	4,004	-
Bankruptcy Court examiner fee	-	2,300	266
Employee termination benefits	-	4,979	-
Coal contract settlements	-	-	10,200
Other, net		1,725	1,524
	\$ -	\$17,373	\$18,352

During 1997, Big Rivers terminated two unfavorable coal contracts. Of the amounts settled, \$6,000 was paid upon initial settlement, \$2,328 in 1998, and \$615 in 1999. At December 31, 1999, the Company has a remaining liability of \$2,904 payable over the next nine years.

### **Contingencies:**

The initial plan of reorganization, filed January 22, 1997, included a proposed lease agreement with PacifiCorp with terms similar in nature to the Lease Agreement. Based on the Bankruptcy Court's decision to award the lease agreement to WKEC, PacifiCorp and certain related entities filed proof of claims with the Bankruptcy Court seeking damages and allowance of claims in the approximate aggregate amount of \$30,709.

### CHAPTER 11 BANKRUPTCY FILING, EMERGENCE FROM BANKRUPTCY AND CONTINGENCIES (Continued);

The Bankruptcy Court disallowed these claims, the U.S. District Court for the Western District of Kentucky affirmed this decision in 1998, and PacifiCorp and related entities appealed this decision to the U.S. Court of Appeals. In December 1999, the Company entered into a settlement agreement with PacifiCorp whereby Big Rivers would pay \$475 to resolve all such claims.

On June 5, 1997, an examiner appointed by the Bankruptcy Court filed for a \$4,410 fee. On March 26, 1999, the Company received an order from the Bankruptcy Court entitling the examiner to receive a fee of \$2,638. Management has accrued amounts under this order as a reorganization expense for the year ended December 31, 1998. Additionally, in 1999, the Company designated \$2,750 as restricted cash in the other deposits and investments caption in the accompanying financial statements as security for the bond posted with the Bankruptcy Court, and is required by the order to deposit an additional \$300 annually as continued security. Management is appealing this order and is vigorously defending this claim.

On April 5, 1999, the Bankruptcy Court issued a judgment disallowing a portion of the fees charged to Big Rivers by its professionals. Certain of the professionals have appealed the decision to the federal district court. If the professionals are successful in their appeal, the Company anticipates its liability to be limited to amounts previously billed to Big Rivers by the professionals, or approximately \$670. Accordingly, the Company has accrued these amounts in the accompanying balance sheet. If the appeals by such professionals are unsuccessful, the Company will extinguish these recorded amounts.

### 2. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

### General Information:

Big Rivers, an electric generation and transmission cooperative, supplies the power needs of its three member distribution cooperatives (excluding the power needs of the Aluminum Smelters) and markets power to non-member utilities and power marketers. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all power and energy requirements, other than for the Aluminum Smelters as discussed in Note 1. The wholesale power contracts with the members extend to the year 2023. Rates to Big Rivers' members are established by the KPSC and are subject to approval by the RUS.

### Use of Estimates:

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and disclosure of contingent assets and liabilities. The estimates and assumptions used in the accompanying financial statements are based upon management's evaluation of the relevant facts and circumstances as of the date of the financial statements. Actual results may differ from those estimates.

### System of Accounts:

Big Rivers' accrual basis accounting policies follow the Uniform System of Accounts as prescribed by the RUS Bulletin 1767B-1, as adopted by the KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters.

### Revenue Recognition:

Revenues generated from the Company's wholesale power contracts are based on month-end meter readings and are recognized as earned. In accordance with SFAS No. 13, Big Rivers' lease revenue will be recognized on a straight-line basis over the term of the lease. The major components of Big Rivers lease revenue will include the annual lease payments and the Expected Margins as discussed in Note 1.

In conjunction with the Lease Agreement, Big Rivers expects to realize the following minimum lease revenue for the years ending December 31:

Amount
\$ 52,150
52,150
52,150
52,150
52,150
775,097
\$1,035,847

### Utility Plant and Depreciation:

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, overhead and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of Big Rivers' weighted average debt to the accumulated expenditures for qualifying projects included in construction in progress.

Depreciation of utility plant in service is recorded using the straight-line method over the estimated remaining service lives, as approved by the RUS. During 1996, the RUS approved new depreciation rates, which were based on the results of a depreciation study which extended the estimated service lives of Big Rivers' utility plant. These rates were utilized from January 1995 through June 1998. During 1998, the Company commissioned another depreciation study to again evaluate the remaining economic lives of its assets. The study received the approval of the RUS and KPSC. As a result of the July 1998 study, the remaining service lives of the Company's depreciable assets were further extended. The 1998 study was adopted beginning July 1, 1998.

### 2. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

In accordance with the terms of the Lease Agreement, the Company records capital additions funded by LG&E Energy as utility plant, to which the Company maintains title. A corresponding obligation to LG&E Energy is recorded for the estimated portion of these additions attributable to the residual value payment (see Note 1). Any differences in such amounts are included as an offset to amortization expense in the accompanying financial statements. As of December 31, 1999, the Company has recorded \$11,019 for such additions in utility plant, and \$2,118 as an offset to amortization expense in the accompanying financial statements.

For the three years ended December 31, the annual composite depreciation rates used to compute depreciation expense were as follows:

	Period subsequent to	Periods prior to
	June 30, 1998	July 1, 1998
Production plant	1.60 - 2.47 %	1.45 - 4.25 %
Transmission plant	1.76 - 3.24 %	2.49 %
General plant	1.11 - 5.62 %	2.00 - 14.29 %

For 1999, 1998 and 1997, the average composite depreciation rates were 1.82%, 2.05% and 2.37%, respectively.

### Cash and Cash Equivalents:

For purposes of the statement of cash flows, Big Rivers considers all short-term, highly-liquid investments with original maturities of three months or less to be cash equivalents.

### Other Deposits and Investments:

In 1999, the Company purchased an \$8,000 National Rural Utilities Cooperative Finance Corporation medium-term note with a maturity date of March 15, 2001. The note accrues interest at a rate of 6.47% per annum. This investment has been classified as held-to-maturity.

### Patronage Capital:

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year, is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. In accordance with the Plan, all patronage capital claims were extinguished and discharged on the Effective Date.

### Reclassifications:

Certain prior year amounts have been reclassified to conform to the current year presentation.

### UTILITY PLANT:

The following summarizes utility plant at December 31:

	1999	1998
Classified plant in service:		
Electric plant - leased	\$1,326,889	\$1,313,630
Transmission plant	191,064	188,822
General plant	13,329	14,713
Other	67	67
	1,531,349	1,517,232
Less accumulated depreciation	666,973	644,358
	864,376	872,874
Construction in progress	4,074	3,773
	\$ 868,450	<u>\$ 876,647</u>

Interest capitalized for the years ended December 31, 1999, 1998 and 1997, was not significant to the Company.

### LONG-TERM DEBT:

Due to the underlying collateral value of the RUS Promissory Note, Big Rivers ceased accruing interest for all long-term debt effective September 30, 1996. Subsequently, in accordance with the Plan, Big Rivers resumed recording interest on the RUS Promissory Note effective June 9, 1997, to the extent of payments resulting from a month-end operating cash balance in excess of \$10,000. Upon achieving the Effective Date, the Company began recording interest on the RUS debt based on the fair value rate of 5.81% per annum.

Prior to the Effective Date, contractual interest related to both secured and unsecured long-term obligations not recognized as interest expense for accounting purposes totaled \$7,021 and \$54,024 in 1998 and 1997, respectively.

A detail of long-term debt is as follows at December 31:

detail of long-term debt is as follows at December 31.	1999	199 <u>8</u>
New RUS Promissory Note, stated interest rate of 5.75%, recorded at fair value (Note 1), with an interest rate of 5.81%, maturing October 2022.	\$ 975,389	\$1,003,791
RUS ARVP Note, no stated interest rate, recorded at fair value (Note 1), with interest imputed at 5.81%, maturing December 2023.	65,507	62,405
LEM Advances, interest rate of 6.98%, payable in monthly installments from August 2000 through July 2003.	34,107	8,481
LEM Settlement Note, interest rate of 8.0%, payable in monthly installments through July 2023.	19,305	19,571
County of Ohio, Kentucky, promissory note, variable interest rate (average interest rate of 3.37% and 2.89% in 1999 and 1998 respectively), maturing in October 2015.	83,300	83,300
County of Ohio, Kentucky, promissory note, variable interest rate (average interest rate of 3.37% and 2.89% in 1999 and 1998 respectively), maturing in June 2013.	58,800	58,800
Total long-term debt	1,236,408	1,236,348
Current maturities	5,353	7,511
Total long-term debt, net of current maturities	\$1,231,055	\$1,228,837

The following are estimated maturities of long-term debt at December 31:

Year	_Amount
2000	\$ 5,353
2001	14,407
2002	15,541
2003	366
2004	1,323
Thereafter	1,199,418
	\$1,236,408

### Pollution Control Bonds:

On October 31, 1985, the County of Ohio, Kentucky, issued \$83,300 of Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which are supported by a promissory note from Big Rivers, which bears the same interest rate as the bonds. These bonds bear interest at a variable rate and, prior to the Effective Date, were supported by a Chase Manhattan irrevocable standby letter of credit. These bonds are dated to mature in October 2015. Annual sinking fund payments of \$5,000 are to begin October 2001.

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which are supported by a promissory note from Big Rivers, which bears the same interest rate as the bonds. These bonds bear interest at a variable rate and, prior to the Effective Date, were supported by a Bank of New York irrevocable standby letter of credit. These bonds are dated to mature in June 2013.

Big Rivers' obligations with respect to the bonds, although secured and remarketed, were not affected by the Plan. However, the irrevocable standby letters of credit issued by the Chase Manhattan Bank and the Bank of New York were replaced on the Effective Date by two liquidity facilities issued by Credit Suisse First Boston and municipal bond insurance policies issued by Ambac Assurance Corporation (see Note 1). Big Rivers has agreed to reimburse Ambac Assurance Corporation for any payments under the municipal bond insurance policies or the surety policies.

### **LEM Settlement Note:**

On the Effective Date, Big Rivers executed the Settlement Note with LEM. The Settlement Note will require Big Rivers to pay to LEM \$19,676, plus interest at 8% per annum over the lease term. The principal and interest payment is approximately \$1,822 annually. This payment is consideration for LEM's assumption of the risk related to unforeseen costs with respect to power to be supplied to the Aluminum Smelters and the increased responsibility for financing capital improvements. The execution of the Settlement Note was treated as a non-cash transaction

### 4. LONG-TERM DEBT (Continued):

and was excluded from the accompanying statements of cash flows in 1998.

### LEM Advances:

Beginning in August 1998 (the first month after the Effective Date) and ending in July 2000, LEM will make payments totaling \$50,000 to the RUS on behalf of the Company. The Company will then make payments totaling \$60,000 to LEM over the next 36 months. All payments under this arrangement will be made on a monthly basis through July 2003. The payments made by LEM to the RUS will be applied to the New RUS Promissory Note. The Company will also recognize interest expense over the five-year life of the LEM Advances at 6.98% per annum.

### 5. RATE MATTERS:

As approved by the Bankruptcy Court and the KPSC, effective September 1997, the interim rates charged to Big Rivers' members consisted of a billing demand charge per KW and an energy charge per kWh consumed. The interim rates of Big Rivers included specific rate designs for its members' two classes of customers, the large industrial customers and the rural customers under its jurisdiction. For the large industrial customers, the demand charge is generally based on each customer's maximum demand during the current month. The remaining customers billing demand is based upon the maximum coincident demand of each member's delivery points. The demand and energy charges are not subject to adjustments for increases or decreases in fuel or environmental costs. On April 30, 1998, the KPSC modified the interim rates for the large industrial customers. On June 1, 1998, the interim rates, as modified, were approved by the Bankruptcy Court. These rates will remain in effect until changed by the KPSC. The rates resulted in a significant decrease in Big Rivers' rates for wholesale electric service to its members from the rates in effect prior to the Chapter 11 filing.

Pursuant to the Lease Agreement, LEM will supply the energy necessary to comply with the Oglethorpe Power Corporation ("Oglethorpe Power") and the two Hoosier Energy Rural Electric Company ("Hoosier Energy") contracts. In turn, Big Rivers will remit the net revenues from the contracts to LEM. The Oglethorpe Power contract originated in August 1992 for the sale of 103 MW of power for ten years. The first of the Hoosier Energy contracts is for the sale of 65 MW of capacity during a three-month summer period through the year 2000. The second Hoosier Energy contract was a peaking power contract varying from 10 MW in 1993 to 170 MW in 1999. This contract was for the summer months of June through September of each calendar year.

In accordance with the Lease Agreement, LG&E Energy will operate certain generating facilities owned by the City of Henderson, Kentucky (the "City") which were operated by Big Rivers prior to the Effective Date, pursuant to certain lease contracts between the City and Big Rivers. The Company will retain the obligation to provide transmission services under these contracts.

### 6. INCOME TAXES:

Big Rivers was initially formed as a tax-exempt cooperative organization under section 501(c)(12) of the Internal Revenue Code. To retain tax-exempt status under this section of the Internal Revenue Code, at least 85% of Big Rivers' receipts must be generated from transactions with the Company's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85% requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years, the Company would be considered a taxable organization until such year that sales to members would satisfy the 85% requirement and Big Rivers formally reapplies for tax-exempt status. Big Rivers is also subject to Kentucky income tax.

Under the provisions of SFAS No. 109, "Accounting for Income Taxes," Big Rivers is required to record deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes and amounts reported for income tax purposes. Deferred tax assets and liabilities are determined based on these temporary differences using enacted tax rates in effect for the year in which these differences are expected to reverse.

At December 31, 1999 and 1998, Big Rivers had deferred tax assets of \$399,868 and \$462,348, respectively, which primarily relate to a tax credit and net operating losses. At December 31, 1999, the tax credit and net operating losses amounted to \$1,173 and \$965,466, and the tax credit expires in 2000. The non-member portion of the net operating losses expire in 2000 through 2018. Additionally, at December 31, 1999 and 1998, Big Rivers had deferred tax liabilities of \$241,204 and \$246,862, respectively, which primarily relate to depreciation differences on utility plant. At December 31, 1999 and 1998, Big Rivers did not anticipate utilization of a portion of the deferred tax assets, thus a valuation allowance was established of \$158,664 and \$215,486, respectively.

### POWER PURCHASED:

In accordance with the Lease Agreement, Big Rivers supplies all of the members' requirements for power to serve their customers other than the Aluminum Smelters. Contract limits were established in the Lease Agreement and include minimum and maximum hourly and annual power purchase amounts. Big Rivers has the right to elect to reduce the contract limits to a certain amount. Big Rivers cannot reduce the contract limits by more than 12 MW in any year, or by more than a total of 72 MW over the lease term. In the event Big Rivers fails to take the minimum requirement during any hour or year, Big Rivers will be liable to LEM for a certain percentage of the difference between the amount of power actually taken and the applicable minimum requirement.

Although Big Rivers will be required by the Lease Agreement to purchase minimum hourly and annual amounts of power from LEM, the lease does not prevent Big Rivers from paying the associated penalty in certain hours to purchase lower cost power, if available, in the open market or reselling a portion of its purchased power to a third party.

### 8. PENSION PLANS:

Big Rivers has non-contributory defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

### PENSION PLANS (Continued):

In conjunction with the Lease Agreement, approximately 550 of the Company's employees were effectively terminated and transferred to WKEC on the Effective Date. Terminated employees will or have received distributions in the amount of their respective vested benefits. In 1998, the Company recognized a curtailment loss of \$2,086 which was recorded as a reorganization expense in the accompanying statements of revenues and expenses.

The following is an assessment of the Company's non-contributory defined benefit pension plans at December 31:

	1999	<u> 1998</u>
Projected benefit obligation Fair value of plan assets Funded status Prepaid (unfunded) accrued pension cost	\$ 8,038 7,027 \$ (1,011) \$ 610	\$ 9,700 10,005 \$ 305 \$ 1,088

Net periodic pension costs, which are calculated based on actuarial assumptions at January 1, were as follows for the years ended December 31:

	1999	1998_	_1997_
Benefit cost	\$ 478	\$ 1,686	\$3,592
Curtailment cost	-	2,086	969
Employer contribution	-	5,300	3,831
Benefits paid or transferred	2,848	29,357	5,810

Assumptions used to develop the projected benefit obligation were:

	1999	1998	1997
Discount rates Rates of increase in compensation levels	7.0% 4.0	7.0% 4.0	7.5% 4.0
Expected long-term rate of return on assets	8.5	8.5	8.5

### 9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS:

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. Big Rivers pays 80% of the cost from age 62 to 65 for all employees. For salaried employees who retired prior to December 31, 1993, from age 65, Big Rivers pays 100% of Medicare supplemental costs. For salaried employees who retire after December 31, 1993, the paid Medicare supplemental was eliminated.

The discount rate used in computing the postretirement obligation for 1999 and 1998 was 7.0%. A health care cost trend rate of 8.0% in 1999 declining to 5.5% in 2004 was utilized. The health care cost trend rate assumption had a significant effect on the amounts reported, resulting in an unrecognized net gain of \$1,196 in 1999.

The following is an assessment of the Company's postretirement plan at December 31:

	1999	_1998_
Total benefit obligation	\$(2,770)	\$(2,218)
Unfunded accrued postretirement cost	(3,536)	(3,536)

The components of net periodic postretirement benefit costs for the years ended December 31 were as follows:

	1999	1998	1997
Benefit cost	\$ 196	\$ 436	\$ 719
Benefits paid	209	389	142

As noted above, approximately 550 employees were transferred to WKEC in conjunction with the Lease Agreement, and in conjunction therewith, the Company transferred to WKEC the postretirement liability for these employees. During 1998, the Company recognized a curtailment gain of \$2,753 which was principally offset by the realization of the previously unrecognized transition obligation related to these employees totaling \$2,538.

In addition to the postretirement plan discussed above, in 1992 Big Rivers began a postretirement benefit plan which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20% of the employee's base hourly rate at the time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is \$114 and \$101 at December 31, 1999 and 1998, respectively, and the postretirement expense recorded was \$14, \$51 and \$61 for 1999, 1998 and 1997, respectively.

### 10. RELATED PARTIES AND MAJOR CUSTOMERS:

	Operating Revenues			
	1999	1998	1997	
Members:				
Kenergy Corporation	\$ 81,349	\$145,792	\$205,622	
Jackson Purchase Electric Cooperative				
Corporation	22,540	22,247	23,136	
Meade County Rural Electric Cooperative				
Corporation	13,290	12,618	12,978	
Non-members	24,739	45,742	62,452	
Lease revenue	54,265	24,247	_	
Other revenue	8,376	3,908	438	
	\$204,559	\$254,554	\$304,626	

In July 1999, Green River Electric Corporation and Henderson Union Electric Cooperative merged forming a single member doing business as Kenergy Corporation. All sales to the two former members are reflected as sales to Kenergy Corporation.

At December 31, 1999 and 1998, Big Rivers had accounts receivable from its members of \$10,127 and \$10,142, respectively.

### 11. SUBSEQUENT EVENT:

The Company completed a sale-leaseback of two of its utility plants, including the related facilities and equipment, on April 18, 2000. The sale-leaseback provides Big Rivers a fixed price purchase option at the end of each plant's lease term (25 and 27 years), if Big Rivers elects to exercise it.

This transaction will be recorded as a financing for financial reporting purposes and a sale for Federal income tax purposes. In connection therewith, Big Rivers received approximately \$867,000 of proceeds and incurred approximately \$803,000 of related obligations. Pursuant to a payment undertaking agreement with a financial institution, Big Rivers effectively extinguished approximately \$656,000 of these obligations with an equivalent portion of the proceeds. Also, the Company purchased two investments approximating \$147,000, equivalent to the remaining portion of the obligations and the fixed price purchase option. The Company will report these amounts as investments and obligations for financial accounting purposes. The approximate \$64,000 net cash benefit to Big Rivers will be deferred and amortized over the respective lease terms. Big Rivers will apply this cash benefit to the New RUS Promissory Note.

# Big Rivers Electric Corporation A Touchstone Energy\* Cooperative

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www.bigrivers.com

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# THE SWITCH ON!

New Attitude New Vision New Look



### A MESSAGE FROM THE CHAIR & CEO

he switch was definitely on for Big Rivers Electric Corporation (Big Rivers) in 1998. It was turned on with a new attitude, a new vision and a new look as Big Rivers reached a resolution to its past financial and business challenges. Effective July 15, Big Rivers implemented a bankruptcy courtapproved Plan of Reorganization (Plan) by consummating a transaction with LG&E Energy Corp. (LEC) and certain of its affiliates. The affiliates of LEC are four wholly-owned subsidiaries: Western Kentucky Energy Corp. (WKEC), WKE Station Two Inc. (Station Two Subsidiary), Western Kentucky Leasing Corp. (Leaseco), and LG&E Energy Marketing Inc. (LEM). WKEC has leased Big Rivers' generating facilities and Station Two Subsidiary is the assignee of Big Rivers' Station Two contractual obligations related to generation. WKEC operates the units and owns the output of Big Rivers' generating facilities. Station Two Subsidiary operates the units and owns that portion of Station Two output not otherwise allocated to the City of Henderson. The transaction was the completion of a nearly four-year process for Big Rivers



WILLIAM C. DENTON, CHAIR, AND MIKE CORE, PRESIDENT & CEO

In 1994, Big Rivers' board of directors established a committee to develop a resolution to the challenges that plagued the organization. The resolution process involved evaluating several alternatives and led to the selection of a partner and development of a plan. In 1996, Big Rivers filed for protection under Chapter 11 of the U.S. Bankruptcy Code in order to resolve the final details of the Plan. During that process, LEC became the new partner. The final bankruptcy Plan was approved by the court and, after final approval by the Kentucky Public Service Commission (KPSC), was implemented. Four years of hard work had paid off.

While it is very early in the life of the new Big Rivers, it is clear the new partnership with LEC is working well. In the first five plus months, Big Rivers has modestly exceeded the expectations of its financial model utilized in the Plan. These and expected similar results in 1999 will give Big Rivers a good base from which to move forward

Big Rivers is a much different corporation. During 1992, employment had reached nearly 900. Today, with the power plants leased to LEC, Big Rivers has 95 employees. While Big Rivers has the power supply responsibilities for its four member distribution cooperative systems, it no longer has most of the risks associated with generation (e.g., fuel supply). Big Rivers fulfills its power requirements from LEC, the Southeastern Power Administration (SEPA), and the wholesale market place.

Big Rivers also has a new attitude in place creating a customer-driven organization. It is dedicated to providing outstanding service to its four member systems and their respective member customers. Working leaner and smarter, Big Rivers is striving to bring positive value to its members and the 22 counties of western Kentucky served by the four member distribution systems.

We are excited about the future. It will take a strong vision, along with careful management and governance, to be successful. The board, member systems, management and staff are committed to these necessary efforts. We believe Big Rivers has the necessary flexibility and positioning to be able to navigate the uncharted waters of utility restructuring faced by the electric industry.

We hope you rejoice with us in our successes of 1998, and join with us in our optimism for 1999 and the future. Clearly, at Big Rivers the "switch is on," and the new attitude, vision and look are the lights illuminating the path to the future

William C. Denton

Chair of the Board

Mike Core

President & CEO

### THE BIG RIVERS NEW DEAL

ig Rivers is an electric generation and transmission cooperative (G&T) that provides wholesale electric service to its four member distribution systems. Those member owners are Green River Electric Corporation in Owensboro; Henderson Union Electric Cooperative in Henderson; Jackson Purchase Energy Corporation in Paducah; and Meade County Rural Electric Cooperative Corporation in Brandenburg. These four serve approximately 97,000 member consumers in 22 counties in western Kentucky

Big Rivers began a process in 1994 to find a permanent solution to an imminent financial crisis. In the two years leading up to September 1996, its careful evaluation of many alternatives led Big Rivers to pick a partner that would lease the generating plants and, in turn, sell wholesale power back to it. Because of impending default on its long-term debt obligations, troublesome litigation and the still-burdensome coal contracts, on September 25, 1996, Big Rivers filed a voluntary petition for relief under Chapter 11 bankruptcy

During the bankruptcy, LEC emerged as the new partner of Big Rivers. On June 9, 1997, the bankruptcy court confirmed the Plan proposed by Big Rivers, and on June 1, 1998, approved modifications to the Plan. The KPSC approved the Plan and the final new rate schedule that resulted in a permanent reduction in rates on July 14. On July 17, Big Rivers and LEC closed the transaction that implemented the Plan

In the transaction with LEC, Big Rivers leases, but continues to own, its 1,459 MW of generating capacity at three sites. In addition, Big Rivers assigns its capacity rights to approximately another 240 MW in the Henderson Municipal Power and Light's Station Two facility. For these rights, LEC makes monthly lease payments to Big Rivers and owns the output of the generating facilities through 2023

Through a Purchase Power Agreement (PPA) in effect through 2023, Big Rivers purchases power from LEC at fixed rates in amounts within certain contractually-established minimum and maximum hourly and annual quantities. Big Rivers also continues to purchase a contracted amount of power from the SEPA. Big Rivers will satisfy any future needs for additional power from the wholesale power market or other third-party arrangements. Big Rivers may also sell to third parties any power that it can contractually purchase from LEC.

An important change going forward for Big Rivers is the "sale" to LEC of the wholesale power requirements obligation to support retail service to the two aluminum smelters. This was accomplished by amendments to the "all-requirements" wholesale power contracts of Big Rivers' members Green River Electric Corporation and Henderson Union Electric Cooperative. The two smelters had previously purchased approximately 56 percent of the

energy sold by Big Rivers to its members.

A significant benefit of the Plan for Big Rivers was the restructuring of the Rural Utilities Service [RUS] debt. The effective interest rate on the approximately \$1.1 billion debt has been reduced from 8.0 percent to 5.8 percent, with the term of the obligation extended from 2018 to 2023. This debt restructuring results in an annualized reduction of \$24 million in interest expense. Big Rivers still retains essentially the same obligations on its other outstanding debt, \$142.1 million in pollution control bonds.

The effective date of the Plan generally resulted in the release and settlement of all existing claims and causes of actions that were pending against Big Rivers and its member systems in September of 1996.

### TERMINOLOGY REFERENCE GUIDE

FECAR: East Central Area Rehability Council FERC: Federal Energy Regulatory Commission G&T: Generation & Transmission Cooperative KPSC: Kentucky Public Service Commission Leaseco: Western Kentucky Leasing Corp LEC: LG&E Energy Corp.

LEM: LG&E Marketing, Inc

NERC: National Electric Reliability Council The Plan: Plan of Reorganization

PC Bonds: Pollution Control Bonds
PPA: Purchase Power Agreement
RUS: Rural Utilities Service

SEPA: Southeastern Power Administration WKEC: Western Kentucky Energy Corp

**Y2K**: Year 2000

Big Rivers continues to own and operate its transmission system and to provide transmission services to its members, LEC and other third parties in accordance with its open access transmission tariff. Big. Rivers is still responsible for power supply to the four member systems under its "all-requirements" wholesale power contracts, except for the previously noted smelter transactions.



### THE NEW BIG RIVERS ORGANIZATION

**OVERVIEW** or Big Rivers' structure, the "switch is on" is an apt description for 1998. From an organization of nearly 900 employees to one of less than 100, Big Rivers was significantly changed in operational characteristics and overall business culture. Gone were coal purchases, power plant operations and the inherent accompanying risks. Retained were transmission operations, power supply obligations to the member systems and services to the members. New was the culture of a leaner organization dedicated to being customer driven. It was a major transition to create the switch. With the elimination of fuel purchases and generation production responsibilities, the number of departments was reduced from seven to five. The remaining five departments were restructured to reflect the new organization. Those five are system operations, power supply, finance and administrative services, contract administration and regulatory affairs, and marketing. Four of the five departments are headed by new vice presidents, who bring with them a wealth of qualifications and experience in their respective areas.

### SYSTEM OPERATIONS

System Operations is the department that has changed the least as Big Rivers retained the operating responsibilities for its 1,190-mile transmission system. Not only does it provide transmission services to the four member systems and third-party users, it also contracts with LEC to provide services on the power plants' interfaces with the transmission system.

All but approximately 80 miles of transmission line is either at 69 kV or 161 kV. The transmission system is connected to 79 substations owned by the four member systems and it interconnects with seven surrounding utilities at 15 locations. Big Rivers has an open access transmission tariff filed with the (FERC) Federal Energy Regulatory Commission and the KPSC.

There are 54 employees utilized in the operation, maintenance and con-



TRAVIS HOUSLEY VP of System **OPERATIONS** 

struction projects for the transmission system. The organization has a work plan that will keep the system prepared for the growth of the member systems and the required needs of third-party users. In focusing on the future, Big Rivers has but special emphasis on cost-effective reliability, setting specific goals with each member system. In addition, Big Rivers works closely with the East Central Area Reliability (ECAR) Council to ensure coordination and strengthened reliability of both Big Rivers and the regional grid. ECAR, along with other

members of the National Electric Reliability Council (NERC), have put special emphasis on the Year

### POWER SUPPLY

Big Rivers, under its "all-requirements" (except smelter loads) power contracts with its members, retains responsibility to provide wholesale power to meet the members' energy needs. While this responsibility is retained, the resource mix with which Big Rivers performs this function is new

2000 concerns as they relate to power production and transmission.

Big Rivers no longer operates the plants or owns the power they produce. Instead, it has a PPA with LEC that allows Big Rivers to purchase certain minimums and maximums of energy at pre-determined costs throughout the 25-year lease agreement. In addition, Big Rivers purchases power from SEPA for the member system needs and has access to BILL BLACKBURN the wholesale market for any additional needs. The key strategy in the future for power supply is the careful management of those wholesale power resources to provide the most economic benefit to the member systems



VP OF POWER SUPPLY

Under the PPA parameters, Big Rivers can purchase and resell the power it does not need when it is economically viable to do so. It can also purchase power from other sources when the same economic viability exists. The benefits of such "arbitrage" transactions were not included in the Plan because the future value of the benefit is unknown and unpredictable. To the extent those efforts are successful, however, they offer additional financial strength to Big Rivers. The net proceeds from arbitrage sales are divided between Big Rivers (one-third) and RUS (two-thirds) in order to accelerate debt service payments.

There are contract limits on the purchases from both LEC and SEPA. As member system requirements grow, other resources will be needed. To that end, in 1999, Big Rivers will develop a power requirements study and integrated resource plan to map out directions to meet those needs efficiently and economically.

### FINANCE & ADMINISTRATIVE SERVICES



MARK HITE
VP OF FINANCE &
ADMINISTRATIVE
SERVICES

As a downsized organization, Big Rivers was able to reduce the number of departments from seven to five. Part of that reduction was the combination of the Finance and Corporate Services Departments. This consolidated department was impacted the most by the implementation of the LEC transaction, as it was involved with the transferral of 480 employees to LEC and significant financial accounting issues to reflect the new organization on Big Rivers' books

Helping to improve the financial picture of Big Rivers is the annual \$35 million LEC lease and the transmission use payments essentially resolving the historical excess capacity concerns. Further, although the obligation to serve the smelters' power requirements has shifted to LEC, Big Rivers retains the expected margins as though it had continued to supply them

In addition to the previously mentioned RUS debt restructuring, Big Rivers' obligations on its \$142.1 million of pollution control (PC) bonds, while secured and remarketed, were essentially unaffected by the reorganization. Moody's Investors Service and Standard and Poor's have assigned investment grade ratings of "Baa3" and "BBB-", respectively, to Big Rivers' PC bond reimbursement obligations

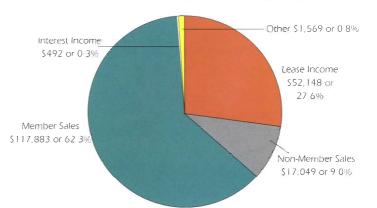
For its LEC lease, Big Rivers follows the lease accounting prescribed by Statement of Financial Accounting Standards Nos. 13 and 98. As the lease involves real estate and no transfer of ownership at the end of the lease term, the lease is properly accounted for as an operating lease rather than a capital lease.

A new depreciation study, completed in 1998, has been approved by the RUS and awaits KPSC approval. As a result, the remaining service lives of the utility plant in service on December 31, 1998, were significantly extended and depreciation reduced to \$28.1 million annually, reflecting a \$9.8 million decrease

Y2K concerns were brought to the forefront in 1998 for all businesses. Big Rivers provides information system/technology services to both itself and its four member systems. Working closely with the member systems, Big Rivers is well into making the necessary changes and updates to keep their computer billing, accounting and other functions ready for the next century. In addition, as previously mentioned, Big Rivers is coordinating closely with ECAR to address Y2K concerns in the area of transmission. Big Rivers is working with LEC and other vendors to address any other critical areas regarding Y2K readiness.

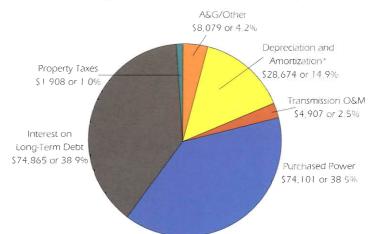
Considering the "switch" which occurred July 15, 1998, and because the financial statements accompanying this annual report do not reflect operations for the "new" Big Rivers, please focus on the two pie charts depicting the 1999 budgeted revenues and expenses, as shown on the next page. As illustrated, the 1999 budgeted loss is \$3.4 million. Our increasing member sales volume and declining wholesale power rates are two more reasons for our optimism about Big Rivers' future.

## 1999 BUDGETED REVENUES (THOUSANDS OF DOLLARS)



Total Revenues of \$189,141

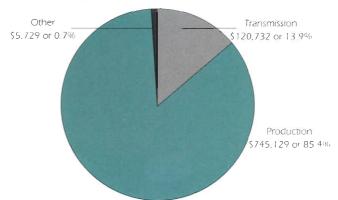
# 1999 BUDGETED EXPENSES (THOUSANDS OF DOLLARS)



Total Expenses of \$192,534 \*Includes July 14, 1998 Depreciation Study

The 1999 budgeted statement of operations is illustrated by the two pie charts of revenues and expenses. The expense chart includes the previously-mentioned depreciation study.

# ELECTRIC UTILITY PLANT ASSETS (THOUSANDS OF DOLLARS)



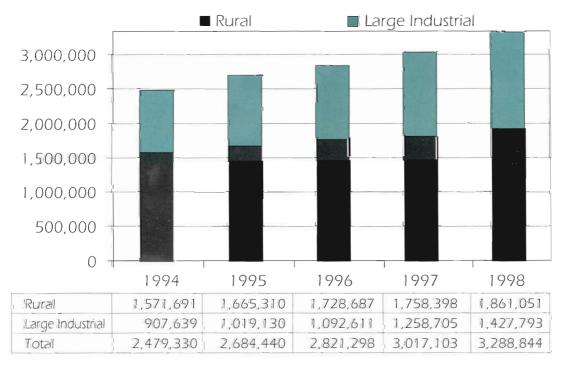
- Net of Accumulated Depreciation of \$644,358
- Includes the July 14, 1998 Depreciation Study
- Excludes Construction Work in Progress of \$3,772

### OWNED ELECTRIC GENERATION

		NET CAPACITY	COMMERCIAL
<b>FACILITIES</b>	TYPE OF FUEL	(MW)	<b>OPERATION DATE</b>
Kenneth C. Coleman	Plant		
Unit 1	Coal	150	1969
Unit 2	Coal	150	1970
Unit 3	Coal	155	1972
Robert D. Green Plan	t		
Unit 1	Coal	231	1979
Unit 2	Coal	223	1981
Robert A. Reid Plant			
Unit 1	Coal	65	1966
Combustion Turbine	Oil	65	1976
D.B. Wilson Unit No.	1 Coal	420	1986
Total		1,459	

Although leased to LEC, Big Rivers continues to own its 1,459 megawatts of electric generating facilities, as described above.

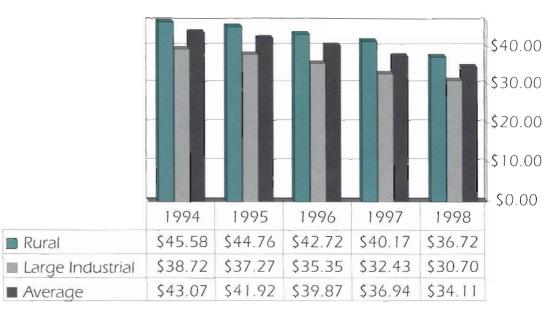
# MEMBER WHOLESALE POWER SALES (MEGAWATT-HOURS)





### MEMBER WHOLESALE POWER RATES

(DOLLARS/MEGAWATT-HOURS)



### Excludes sales to aluminum smelters.

Big Rivers' wholesale rates to its members average 3.4 cents/kWh. As illustrated, rates have continued to decline the past four years, while sales to members have increased at an annual compound rate of 7.3 percent, 4.3 percent for rural loads and 12.0 percent for industrial loads.

### CONTRACT ADMINISTRATION & REGULATORY AFFAIRS

The new Contract Administration and Regulatory Affairs Department has the responsibility and oversight for the many contracts to which Big Rivers is a party, for regulatory compliance and approval, for governmental affairs and for environmental compliance. The fease with LEC is a complex, 25-year transaction that requires constant attention. Additionally, Big Rivers has dozens of other contracts whose proper administration is a fundamental requirement.

Big Rivers' contract administration is closely tied to regulatory affairs at both the state and national level. Its rates and certain financial activities remain under the jurisdiction of the KPSC. Big Rivers also has an open access transmission tanff that was approved by the KPSC and the FERC. Many of the Big Rivers' contracts are also subject to regulatory monitoring and approval.

Governmental affairs includes having a registered lobbyist on stall who works with legislators and other lobbyists across the state and interacts with the Kentucky Association of Electric Cooperatives. Constant monitoring of proposed legislation is an important ingredient to the future of Big Rivers in a changing, competitive re-regulated business environment. While LEC has responsibility for environmental compliance with regard to the generating plants, Big Rivers is required to pay a portion of the costs associated with new environmental laws. Additionally, Big Rivers must remain compliant with environmental laws and regulations regarding its transmission system and other operations.



DAVID
SPAINHOWARD
VP OF CONTRACT
ADMINISTRATION &
REGULATORY
AFFAIRS

### MARKETING



RICHARD BECK VP OF MARKETING

In the restructuring of Big Rivers, the retained function of marketing was elevated to the level of a department. While this department is involved with the marketing and image building of Big Rivers, the bulk of its efforts is in working with the member systems in building and strengthening relationships with their residential and commercial/industrial customers. Marketing has taken on an added focus with the member systems, especially in light of the potential restructuring of the electric utility industry. To that end, a marketing strategic plan was developed at the end of 1998 by the member systems and Big Rivers.

To further that plan, Big Rivers and its members have become part of the Touchstone® Energy partners. This is an alliance of more than 500 rural electric cooperatives across the country to promote the benefits of the cooperatively-owned brand of electricity and other services. "The

Power of Human Connections" is a powerful approach to the opportunities created by customer choice within the electric utility industry

Big Rivers also created a "new look" in 1998 with a change in its logo and the roll out of "The Switch Is On" program. Choosing not to change its name, rather Big Rivers changed its look to emphasize the new nature of the organization

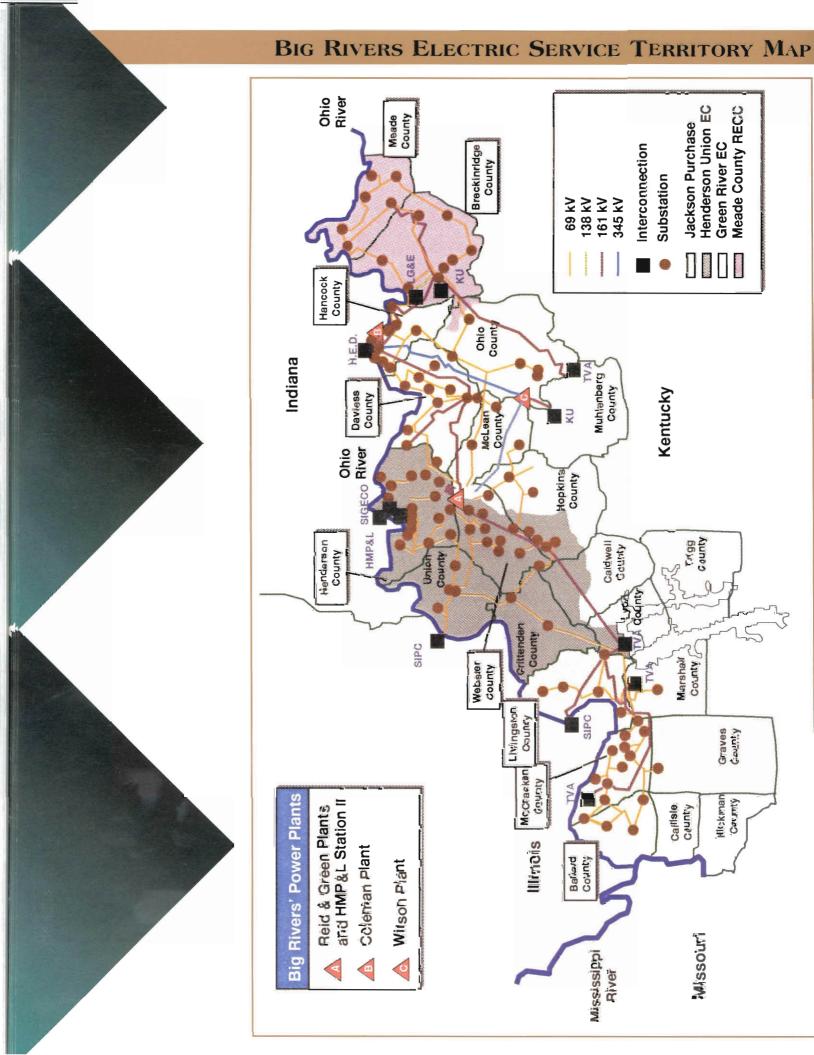
### Poised for the Future

Three years ago, Big Rivers faced the possibility of no future. High debt service, high coal costs, excess capacity and high rates had all combined to paint a bleak picture for its future. Thanks to the efforts of the board, member systems, staff, creditors and others, Big Rivers overcame those challenges. Today at Big Rivers, the switch is on; there is a new attitude, a new vision, and a new look that does indeed see a future

### THE BIG RIVERS BOARD OF DIRECTORS



SEATED LEFT TO RIGHT: DR. H.M. "BO" SMITH; DICK WILSON; AND JOHN MYERS, SECRETARY-TREASURER. STANDING LEFT TO RIGHT: DR. JAMES SILLS, VICE CHAIR; LEE BEARDEN; JIM MOUNTS; JOSEPH HAMILTON; AND WILLIAM C. DENTON, CHAIR.



### Report of Independent Public Accountants

To the Board of Directors of

Big Rivers Electric Corporation:

We have audited the accompanying balance sheets of Big Rivers Electric Corporation (Big Rivers, a Kentucky corporation) as of December 31, 1998 and 1997, and the related statements of revenues and expenses, equities (deficit) and cash flows for the period ended July 14, 1998 (pre-confirmation), the period ended December 31, 1997. These financial statements are the responsibility of Big Rivers' management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and the standards for financial audits contained in Government Auditing Standards (1994 Revision), issued by the Comptroller General of the United States. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers as of December 31, 1998 and 1997, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1998, in conformity with generally accepted accounting principles.

As discussed in Note 1 to the financial statements, effective July 15, 1998, Big Rivers emerged from bankruptcy and adopted a new basis of accounting whereby all liabilities were adjusted to their estimated fair values. Accordingly, the financial statements for periods subsequent to the confirmation of the reorganization are not comparable to the financial statements presented for prior periods.

As explained in Note 2 to the financial statements, for the year ended December 31, 1996, Big Rivers discontinued the accounting principles prescribed by Statement of Financial Accounting Standards No. 71, "Accounting for the Effects of Certain Types of Regulation."

In accordance with Government Auditing Standards, we have also issued reports dated March 26, 1999, on our consideration of Big Rivers' internal control structure and compliance with laws and regulations.

Onther aderin LLF

Little Rock, Arkansas, March 26, 1999

# BIG RIVERS ELECTRIC CORPORATION BALANCE SHEETS AS OF DECEMBER 31 (Dollars in thousands)

<u>ASSETS</u>	1998	1997
Utility plant, net Deferred charges	\$ 875,362 32,651	\$ 914,429
Other deposits and investments, at cost	8,973	6,067
Current assets:  Cash and cash equivalents  Accounts receivable  Fuel inventory  Non-fuel inventory  Prepaid expenses	32,016 13,614 546 1,381	14,861 27,875 17,522 15,672
Total current assets	47,557	75,930
	\$ 964,543	\$ 996,426
EQUITIES (DEFICIT) AND LIABILITIES		
Capitalization:		
Equities (deficit) Liabilities subject to compromise	\$ (359.957)	\$ (292,553) 1,250,677
Long-term debt	1,228,837	# = 1 mm
Other long-tæm obligations Total capitalization	2,90 <del>4</del> 871,784	<u>4,449</u> <u>962,573</u>
Current liabilities:		
Current maturities of long-term obligations and		*****
liabilities subject to compromise  Purchased power payable	8,062 10,903	1,153 743
Accounts payable	4.441	16,355
Accrued expenses	7,272	9,799
Total current liabilities	30,678	<u> 28,050</u>
Deferred credits and other		
Deferred lease revenue Other	54,652 7,429	5,803
Totali disferred credits and other	62,081	5,803
Commitments and contingencies		
	\$ 964,543	\$ 996,426

The accompanying notes to financial statements are an integral part of these balance sheets

# BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF REVENUES AND EXPENSES FOR THE YEARS ENDED DECEMBER 3 I (Dollars in thousands)

	1998_	1997	1996
Operating revenue	\$230,307	\$304,626	\$321,988
Lease revenue	24,247	-	=
Total operating revenues	254,554	304,626	321,988
Operating expenses:			
Operations:			
Fuel for electric generation	51,876	92,966	109,695
Power purchased and interchanged	59,586	44,916	45,864
Production, excluding fuel	19,684	33,409	36,818
Other	8,600	13,997	18,506
Maintenance	19.764	33,125	27,913
Depreciation	31,032	35,860	36,141
Total operating expenses	190,542	254,273	274,937
Electric operating margins	64,012	50,353	47,051
Interest expense and other:			
Interest	75,021	41,272	70,041
Other, net	(184)	(192)	(9,659)
Total interest expense and other	74,837	41,080	60,382
Operating (loss) margin before non-operating		2000	
(loss) margin and extraordinary (loss) gain, net	(10,825)	9,273	(13,331)
Non-operating (loss) margin:			
Reorganization expenses	(17,373)	(18, 352)	(10,335)
Interest income and other	1,321	1,025	1,296
Total non-operating loss	(16,052)	(17,327)	(9,039)
Net loss before extraordinary (loss) gain	(26,877)	(8,054)	(22,370)
Extraordinary (loss) gain, net (Notes 1 and 2)	(40,527)		31,244
Net (loss) margin	\$ (67,404)	\$ (8.054)	\$ 8,874

The accompanying notes to financial statements are an integral part of these statements.

# BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF EQUITIES (DEFICIT) FOR THE YEARS ENDED DECEMBER 31 (Dollars in thousands)

			Other equities		
	Total equities (deficit)	Accumulated deficit	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1995 Margins for 1996:	\$(293,373)	\$(425,739)	\$ 127,921	\$764	\$3,681
Operating	(13,331)	(13,331)	~	H <sub>2</sub>	
Non-operating	(9,039)	(9,039)	-	-	
Extraordinary gain (Note 2)	31,244	31,244			
Balance at December 31, 1996	[284,499]	[416,865]	127,921	764	3,681
Margins for 1997:					
Operating	9,273	9,273			
Non-operating	(17,327)	(17,327)	-		
Balance at December 31, 1997	[292,553]	(424,919)	127,921	764	3,681
Margins for 1998:					
Forgiveness of patronage		10.7272.000	Name and Address of		
capital allocations (Note 3)		127,921	(127,921)		7
Operating	(10,825)	(10,825)	- 3		=
Non-operating	(16,052)	(16,052)		-	-
Extraordinary loss, net (Note 1)	(40,527)	(40,527)		77/4	63.401
Balance at December 31, 1998	\$(359,957)	\$(364,402)	<u> </u>	\$764	\$3,681

The accompanying notes to financial statements are an integral part of these statements.

# BIG RIVERS ELECTRIC CORPORATION STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31 (Dollars in thousands)

	1998	1997	1996
Cash flows from operating activities:			
Net (loss) margin	\$(67,404)	\$ (8,054)	\$ 8,874
Adjustments to reconcile net (loss) margin to net cash	4(4)	1 (2/22.)	
provided by (used in) operating activities:			
Non-cash extraordinary loss (gain), net (Notes 1 and 2)	54,727		(31,244)
Non-cash reorganization expenses	4,004		4,210
Depreciation and amortization	34,125	40,542	32,513
Net change in balancing account	-	(39,257)	(38, 344)
Changes in operating assets and liabilities		T-MANAGE MANAGE	
Deferred charges	(13.820)		-
Other deposits and investments	(2,906)	(1,404)	63
Accounts receivable	14,261	(3,714)	7,619
Fuel inventory	2,524	(4,623)	8,053
Non-fuel inventory	446	31	(857)
Prepaid expenses	(1,381)	1,689	(1,529)
Other long-term obligations	(2,147)	5.602	
Purchased power payable	10,160	743	
Accounts payable	(11,914)	423	(7,218)
Accrued expenses	(2,527)	3,735	(214)
Deferred lease revenue	54,652		
Other, net	1,626	(577)	(3,395)
Net cash provided by (used in) operating activities	74,426	(4,864)	(21,469)
		<del></del>	
Cash flows from investing activities:			
Proceeds from sale of assets in conjunction with Lease			
Agreement	35,919	E Constant and	3.5
Capital expenditures, net	(4,458)	(4,437)	(5,259)
Net cash provided by (used in) investing activities	31,461	(4,437)	(5,259)
Cash flows from financing activities:	4.00.0000000	15.300	25.032
(Decrease) increase in liabilities subject to compromise	(7,412)	15,728	25,039
Principal payments on long-term obligations	(89,653)		17
Increase in LEM Advances	8,333	45.720	25.020
Net cash (used in) provided by financing activities	(88,732)	15,728	25,039
Net increase (decrease) in cash and cash equivalents	17,155	6,427	(1,689)
Cash and cash equivalents, beginning of year	14,861	8,434	10,123
Cash and cash equivalents, end of year	\$ 32,016	\$ 14,861	\$ 8,434
Supplemental Cash Flow Information			
Cash paid relating to interest	\$ 76,716	\$ 36,918	\$ 48,420

The accompanying notes to financial statements are an integral part of these statements

### BIG RIVERS ELECTRIC CORPORATION NOTES TO FINANCIAL STATEMENTS **DECEMBER 31, 1998** (Dollars in thousands)

### CHAPTER 11 BANKRUPTCY FILING, EMERGENCE FROM BANKRUPTCY AND CONTINGENCIES:

### Chapter 11 Bankruptcy Filing:

1.

On September 25, 1996, Big Rivers Electric Corporation (Big Rivers or the Company) filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code (hereinafter referred to as Chapter 11) and the Company began operating as a debtor-in-possession under the supervision of the United States Bankruptcy Court for the Western District of Kentucky (the Bankruptcy Court). Big Rivers believed it was necessary to file Chapter 11 in order to, among other reasons, (a) restructure its debt obligations, upon which the Company would otherwise default in the near term; (b) relieve the Company of severely burdensome long-term coal contracts; (c) receive judicial approval in conjunction with consummating a long-term lease transaction involving the generation assets of Big Rivers; (d) sufficiently resolve other alleged claims, suits and liabilities assets ed against Big Rivers such that the reorganized Company could emerge from Chapter 11 able to repay its restructured debt and (e) implement its reorganization in a timely manner. On January 22, 1997, Big Rivers filed a plan of reorganization with the Bankruptcy Court (the Plan). The Plan, further amended on April 18, 1997, was approved by substantially all creditors and rate payer constituents of Big Rivers and was approved by the Bankruptcy Court on June 9, 1997. On June 30, 1997, the Company filed an application with the Kentucky Public Service Commission (the KPSC for an order approving various components of the Plan (the Rate Hearing). In particular, the Company requested approval for the leaving of the Plan (the Rate Hearing). for an order approving various components of the Plan (the Rate Hearing). In particular, the Company requested approval for the leasing of its generation assets and the related energy to certain affiliates of LG&E Energy Corporation (LG&E Energy) (the Lease Agreement). The KPSC approved the Lease Agreement in principle on April 30, 1998, pending the revision of the rates associated with National Southwire Aluminum Company (NSA) and Alcan Aluminum Corporation (Alcan) (collectively referred to as the Aluminum Smelters) and Big Rivers' other large industrial customers. Modifications to the rate structure were made and the Plan, as further amended, was approved by the Bankruptcy Court on June 1, 1998. The KPSC issued an order dated July 14, 1998, approving the Plan as it relates to the Lease Agreement.

### Emergence from Bankruptcy:

Big Rivers' Chapter 11 reorganization was confirmed effective July 15, 1998 (the Effective Date), with the closing of the Lease Agreement, whereb Big Rivers will lease its generating facilities to Western Kentucky Energy Corporation (WKEC), a wholly-owned subsidiary of LG&E Energy. Pursuan to the Lease Agreement, WKEC will operate the generating facilities and maintain title to all energy produced. Throughout the lease term, in order to fulfill Big Rivers' obligation to supply power to its members following the Effective Date, the Company will substantially purchase its power requirements from LG&E Energy Marketing Corporation (LEM), a wholly-owned subsidiary of LG&E Energy, pursuant to a power purchase agreement. Big Rivers will continue to operate its transmission facilities and will charge WKEC tariff rates for delivery of the energy produced and consumed by WKEC and its customers. As part of the Lease Agreement, WKEC also purchased certain property, inventory and other assets necessary for the operation of the generation facilities from Big Rivers for \$35,919. In connection with the purchase of these assets, the Company recorded a net loss of \$4,004 which is reflected as a reorganization expense in the accompanying statements of revenues and expenses. The significant terms of the Lease Agreement are as follows:

- WKEC will lease and operate Big Rivers' generation facilities for a 25-year term, beginning on the Effective Date.
- 11 Big Rivers will retain ownership of the generation facilities at the end of the lease term.
- 111
- WKEC will pay Big Rivers an annual lease payment of \$30,965 over the lease term, subject to certain adjustments. On the Effective Date, Big Rivers received \$69,100 representing certain closing payments and the first two years of the annual IV. lease payments. In accordance with Statement of Financial Accounting Standards (SFAS) No. 13, Accounting for Leases, the Company will amortize these payments into lease revenue over the lease term.
- Big Rivers will continue to provide power for its members, excluding the member loads serving the Aluminum Smelters, through the power purchase agreement with LEM, based on a pre-determined maximum capacity. When possible, the Company may also obtain the power necessary to supply its member loads, excluding the Aluminum Smelters, in the open market. The member loads for the Aluminum Smelters will be served by LEM. To the extent the power purchased from LEM does not reach predetermined minimums, the Company will be required to pay certain penalties. Also, to the extent additional power is available to Big Rivers under the LEM contract, Big Rivers may also sell to non-members.
- Through 2011, WKEC will reimburse Big Rivers approximately \$260,668 for the "expected margins" of the Aluminum Smelters, being defined as the net cash flows that Big Rivers would have received over the term of the Lease Agreement if the Company had continued to serve the Aluminum Smelters' load, as filed in the Rate Hearing (the Expected Margins)
- VII WKEC will be responsible for the operating costs of the generation facilities; however, Big Rivers will be partially responsible for ordinary capital expenditures of the generation facilities over the term of the Lease Agreement, up to a 49% maximum, as defined. This maximum is not expected to exceed \$148,000 over the Lease Agreement.
- Big Rivers entered into a note payable with LEM for \$19,676 to be repaid over the Lease Agreement, which bears interest at 8% per annum, in consideration for LEM's assumption of the risk related to unforeseen costs with respect to power to be supplied to VIII the Aluminum Smelters and the increased responsibility for financing capital improvements. The Company has recorded this obligation as a component of deferred charges with the related payable recorded as long-term debt in the accompanying balance sheets. This deferred charge will be amortized straight-line over the lease term
- On the Effective Date, Big Rivers paid a non-refundable marketing payment of \$5,933 to LEM, which has been recorded as a IX component of deferred charges. This amount will be amortized straight-line over the lease term.
- During the lease term, Big Rivers will be entitled to certain "billing credits" against amounts the Company owes to LEM under the power purchase agreement. Each month during the first fifty-five months of the lease term, Big Rivers will receive a credit of \$89. For the year 2011, Big Rivers will receive a credit of \$2,611 and for the years 2012 through 2023, the Company will receive a credit of \$4,111 annually. Big Rivers will recognize these credits as a reduction of power purchased as service is provided

As disclosed in the Company's 1997 audited financial statements, the Company initially anticipated recording an impairment loss related to its ger eration facilities in conjunction with the consummation of the Lease Agreement, as prescribed by generally accepted accounting principles. This impairment loss was anticipated due to the estimated fair value of Big Rivers' generation facilities based on a November 1997 appraisal. Management has since determined that, based upon a number of elements of the Plan which changed during the period from November 1997 to the Effective Date, including a new depreciation study completed in July 1998 which significantly extends the remaining service lives of Big Rivers' generating facilities, the fair value of Big Rivers' generating facilities on the Effective Date was such that no impairment loss was warranted in conjunction with the consummation of the Lease Agreement.

### CHAPTER 1.1 BANKRUPTCY FILING, EMERGENCE FROM BANKRUPTCY AND CONTINGENCIES (Continued):

As prescribed by the Plan and in conjunction with the Effective Date, Big Rivers settled the liabilities subject to compromise as recorded in the accompanying balance sheet. Upon attaining the Effective Date, the Rural Utilities Service (RUS) Promissory Note (see Note 6) was replaced by two separate notes. The first note (the New RUS Promissory Note) represents a stated principal balance of \$1,022,583, net of \$78,582 paid on the Effective Date, which bears a stated interest rate of 5.75% per annum, respectively, with a varying repayment schedule over the Lease Agreement. The second note (the ARVP Note) represents a \$265,000 obligation due to the RUS at the end of the Lease Agreement, and this obligation does not bear interest.

In accordance with Statement of Position (SOP) 90-7, "Financial Reporting by Entities in Reorganization Under the Bankruptcy Code," at the Effective Date the Company was required to record its liabilities at fair value. In determining the fair value of Big Rivers' liabilities, the Company was required to record its long-term debt by applying a discount rate commensurate with the market rate to the future debt service payments under the New RUS Promissory Note and the ARVP Note, regardless of the stated principal and coupon rates of the obligations. In conjunction with recording the two separate notes on the Effective Date, the Company determined that the market rate associated with the New RUS Promissory Note and the ARVP Note was 5.81%. In discounting the future debt service payments using the market rate, the Company recorded a combined principal balance of \$1,077,311 for the two RUS notes, net of \$78,582 paid on the Effective Date, and recorded a \$54,727 loss as an extraordinary item in the accompanying statements of revenues and expenses for the year ended December 31, 1998. Additionally, this transaction was treated as a non-cash transaction and was excluded from the accompanying statements of cash flows. Also, in conjunction with the Plan, certain pollution control bonds (discussed herein) were secured and remarketed following the mandatory tender of the bonds by the holders thereof. The irrevocable standby letters of credit, which were supporting the bonds held by Chase Manhattan Bank and the Bank of New York were replaced with the bond insurance policies and standby bond purchase agreements issued by Ambac Assurance Corporation, each dated at the Effective Date between Big Rivers, U.S. Bank Trust National Association, as trustee, and Credit Suisse First Boston, as the liquidity provider. In connection therewith, the Company realized cash proceeds of \$14,200 and recognized an extraordinary gain in the accompanying statements of revenues and expenses. For Big Rivers' remaining liabilities, there were no o

In accordance with the Lease Agreement, the Company is allowed to purchase power in the open market, incurring penalties when the power purchased from LEM does not meet certain minimum levels, and sell excess power (power not needed to supply its jurisdictional load) in the open market (collectively referred to as Arbitrage). Pursuant to the New RUS Promissory Note and the ARVP Note, the total value created by Arbitrage must be divided as follows: one-third, adjusted for member sales volume and capital expenditures, will be used to make principal payments on the New RUS Promissory Note; one-third will be used to make principal payments on the ARVP Note; and the remaining payments received may be retained by the Company.

In connection with the Chapter 11 filing and subsequent Effective Date, certain items have been segregated and presented as reorganization expenses in the accompanying statements of revenues and expenses as costs related to transactions which were directly associated with the Chapter 11 proceedings. Reorganization expenses for the years ended December 31, were as follows:

	1998	1997	1996
Professional services	\$ 4,365	\$ 6,362	\$ 1,733
Net loss on sale of property, inventory			
and other assets	4,004	-	-
Loss on coal prepayment-			4,210
Bankruptcy Court examiner fee	2,300	266	72
Employee termination benefits	4,979	-	1.737
Expected allowed claim	*	-	1,583
Coal contract settlements	:-	10,200	1,000
Other, net	1,725	1,524	
	\$17,373	\$18,352	\$10,335

During 1997, Big Rivers terminated two unfavorable coal contracts with pending lawsuits. Of the amounts settled, \$6,000 was paid upon initial settlement. During 1998, the Company paid \$2,328 and has a remaining liability of \$3,455 at December 31, 1998.

### Contingencies

The initial plan of reorganization, filed January 22, 1997, included a proposed lease agreement with PacifiCorp Kentucky Energy Corporation (PKEC), with terms similar in nature to the Lease Agreement. Based on the Bankruptcy Court's decision to award the lease agreement to WKEC, PKEC and certain related entities filed proof of claims with the Bankruptcy Court seeking damages and allowance of claims in the approximate aggregate amount of \$30,709. The Bankruptcy Court disallowed these claims, the U.S. District Court for the Western District of Kentucky affirmed this decision in 1998, and PKEC and related entities have appealed this decision to the U.S. Court of Appeals. Management intends to vigorously defend these claims. Management is unable to predict the outcome of these matters, and accordingly, no adjustments have been recorded to reflect these uncertainties in the accompanying financial statements.

On June 5, 1997, an examiner appointed by the Bankruptcy Court filed for a \$4,410 fee. On March 26, 1999, the Company received an order from the Bankruptcy Court entitling the examiner to receive a fee of \$2,638. Management has accrued amounts under this order as a reorganization expense for the year ended December 31, 1998. However, management intends to appeal this order and vigorously defend this claim.

In 1997, employees of Big Rivers discovered that certain wastes subject to 40 CFR Part 760 had been stored at a Company facility in excess of the regulatory time limits for such storage. This situation was subsequently disclosed to the United States Environmental Protection Agency (USEPA), Region IV, in accordance with regulatory requirements. The USEPA has not asserted a claim for damages at this time. Management is unable to predict the damages, if any, that may be imposed by the USEPA. Accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

### DISCONTINUATION OF ACCOUNTING FOR RATE REGULATED ENTITIES:

During 1996, Big Rivers determined the Company was no longer eligible for the continued application of the accounting required by SFAS No. 71, "Accounting for the Effects of Certain Types of Regulation." In conjunction with the decision to discontinue the regulatory accounting principles as prescribed by SFAS No. 71, Big Rivers recorded a non-cash extraordinary gain of \$31,244 for the year ended December 31, 1996.

### ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

#### General Information:

Big Rivers, an electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives (excluding the power needs of the Aluminum Smelters) and markets power to non-member utilities and power marketers. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has whole-sale power contracts with each of its members which require the members to buy and receive from Big Rivers all power and energy requirements other than as discussed in Note 1. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the KPSC and are subject to approval by the RUS.

#### Financial Statement Presentation:

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and disclosure of contingent assets and liabilities. The estimates and assumptions used in the accompanying financial statements are based upon management's evaluation of the relevant facts and circumstances as of the date of the financial statements. Actual results may differ from those estimates.

### System of Accounts:

Big Rivers' accrual basis accounting policies follow the Uniform System of Accounts as prescribed by the RUS Bulletin 1767B-1, as adopted by the KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters.

### Revenue Recognition:

Revenues generated from the Company's wholesale power contracts are based on month-end meter readings and are recognized as earned. In accordance with SFAS No. 13, Big Rivers lease revenue will be recognized straight-line over the expected benefit period. The major components of Big Rivers lease revenue will include the annual lease payments and the Expected Margins as discussed in Note 1.

In conjunction with the Lease Agreement, Big Rivers expects to realize the following minimum lease revenue for the years ending December 31:

<u>Year</u>	Amount	
1999	\$ 52,150	
2000	52,150	
2001	52,150	
2002	52,150	
2003	52,150	
Thereafter	851,219	
	\$1,111,969	

#### Utility Plant and Depreciation:

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, overhead and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of Big Rivers' weighted average debt to the accumulated expenditures for qualifying projects included in construction in progress.

Depreciation of utility plant in service is recorded using the straight-line method over the estimated remaining service lives, as approved by the RUDuring 1996, the RUS approved new depreciation rates, which were based on the results of a depreciation study which extended the estimated service lives of Big Rivers' utility plant. These rates were utilized from January 1995 through June 1998. During 1998, the Company commissioned another depreciation study to again evaluate the remaining economic lives of its assets. The study received the approval of the RUS and is pending approval from the KPSC (expected in 1999). As a result of the July 1998 study, the remaining service lives of the Company's depreciable assets were further extended. The 1998 study has been adopted beginning with the Effective Date for purposes of recording depreciation expense. For 1998, the difference between the depreciation rates prescribed by the 1996 study as compared to the 1998 study resulted in decreased depreciation expense of approximately \$4,900.

For the three years ended December 31, the annual composite depreciation rates used to compute depreciation expense were as follows:

	Periods prior to	Period subsequent to
	July 15, 1998	July 15, 1998
Production plant	1.45 - 4.25%	1.6 - 2.5%
Transmission plant	2.49%	1.8 - 3.2%
Station equipment	2.49%	2.2 - 2.9%
General plant	2.00 - 14.29%	1.1 - 5.4%

For 1998, 1997 and 1996, the average composite depreciation rates were 2.05%, 2.37% and 2.54%, respectively.

### Cash and Cash Equivalents:

For purposes of the statement of cash flows, Big Rivers considers all short-term, highly-liquid investments with original maturities of three months less to be cash equivalents.

### ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

### Patronage Capital:

3

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year, is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. In accordance with the Plan, all patronage capital claims were extinguished and discharged on the Effective Date.

#### 4. UTILITY PLANT:

The following summarizes utility plant at December 31:

	1998	1997
Classified plant in service:		
Electric plant - leased	\$1,312,345	\$ -
Production plant	-	1,329,593
Transmission plant	84,350	84,067
Station equipment	101,982	101,888
General plant	14,713	18,229
Other	67	190
Unclassified plant in service	2,490	1,679
	\$1,515,947	\$ 1,535,646
Less accumulated depreciation	644,358	622,926
	871,589	912,720
Construction in progress	3,773	1,709
	\$ 875,362	\$ 914,429

Interest capitalized for the years ended December 31, 1998, 1997 and 1996, was not significant to the Company

### 5. UNAMORTIZED DEBT EXPENSES AND COAL PREPAYMENTS:

In prior years, Big Rivers refinanced portions of its long-term obligations at lower interest rates and incurred refinancing expenses. These costs were being amortized over the term of the RUS Promissory Note; however, as discussed in Note 2, in conjunction with Big Rivers' discontinuing the application of SFAS No. 71, the remaining unamortized debt expenses of \$3,525 were recognized as a component of an extraordinary gain in the accompanying statements of revenues and expenses for the year ended December 31, 1996.

On July 18, 1989, Big Rivers endeavored to enter into an agreement with a coal supplier to buy out a high-cost, long-term coal supply contract. On September 24, 1991, a contract for substitution of coal was executed with this coal supplier. In connection therewith, Big Rivers made fuel prepayments of \$7,000, which Big Rivers was withholding from payment to the supplier at a rate of one dollar per ton of coal shipped. In October 1996, the Bankruptcy Court determined that the contract with the supplier was unfavorable to Big Rivers and allowed the Company to reject the contract. Based on this decision, and due to the uncertainty associated with realizing this prepayment, Big Rivers reserved for the remaining prepayment balance and recorded \$4,210 as a reorganization expense in the accompanying statements of revenues and expenses for the year ended December 31, 1996.

#### LONG-TERM DEBT:

Due to the underlying collateral value of the RUS Promissory Note, Big Rivers ceased accruing interest for all long-term debt effective September 30, 1996. However, in accordance with the Plan, Big Rivers resumed recording interest on the RUS Promissory Note effective June 9, 1997, to the extent of payments resulting from a month-end operating cash balance in excess of \$10,000. However, upon achieving the Effective Date, the Company began recording interest based on the fair value rate of 5.81% per annum.

Contractual interest related to both secured and unsecured long-term obligations not recognized as interest expense for accounting purposes totaled \$7,021, \$54,024 and \$24,702 for the years ended December 31, 1998, 1997 and 1996, respectively.

A detail of long-term debt and liabilities subject to compromise is as follows at December 31:

Long-term debt:	1998
New RUS Promissory Note, stated interest rate of 5.75%, recorded at fair value (Note 1), with an interest rate of 5.81%	\$1,003,791
RUS ARVP Note, no stated interest rate, recorded at fair value (Note 1), with interest imputed at 5.81%	62,405
LEM Advances, interest rate of 6.98%, payable in monthly installments beginning in August 2000 (Due July 2003)	8,481
LEM Settlement Note, interest rate of 8.0%	19,571
County of Ohio, Kentucky, promissory note, variable interest rate of 4.20%	83,300
County of Ohio, Kentucky, promissory note, variable interest rate of 4.20%	58,800
Total long-term debt	1,236,348
Current maturities	7,511
Total long-term debt, net of current maturities	\$1,228,837

### 6 LONG-TERM DEBT (Continued):

Liabilities subject to compromise:	_	1997
Promissory Note - RUS 8.0% Unamortized premium	\$	530,905 570,260
County of Ohio, Kentucky, promissory note, with variable interest rate of 4.5%		83,300
County of Ohio, Kentucky, promissory note, with variable interest rate of 4.5%		58,800
Accounts payable	_	7,412
Total liabilities subject to compromise	\$	1,250,677

The following are estimated maturities of long-term debt at December 31 (excluding the LEM Advances):

Year	A	mount
1999	\$	7,511
2000		4,520
2001		4,041
2002		2,053
2003		366
Thereafter	1,	209,376
	\$1,	227,867

### **RUS Promissory Note:**

On February 25, 1988, Big Rivers refinanced \$319,426 of high interest rate debt. As a result of this refinancing, a gain of \$37,734 was realized. As prescribed by regulatory guidelines, this gain was deferred and was being amortized into income over the term of the RUS Promissory Note. However, in conjunction with Big Rivers discontinuing the application of SFAS No. 71, the remaining unamortized gain was recognized as a component of an extraordinary gain in the accompanying statements of revenues and expenses for the year ended December 31, 1996.

### Pollution Control Bonds:

On October 31, 1985, the County of Ohio, Kentucky, issued \$83,300 of Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which are supported by a promissory note from Big Rivers, which bears the same interest rate as the bonds. These bonds bear interest at a variable rate and, prior to the Effective Date, were supported by a Chase Manhattan irrevocable standby letter of credit. These bonds are dated to mature on October 1, 2015.

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which are supported to a promissory note from Big Rivers, which bears the same interest rate as the bonds. These bonds bear interest at a variable rate and, prior to the Effective Date, were supported by a Bank of New York irrevocable standby letter of credit. These bonds are dated to mature on June 1, 2013.

Big Rivers' obligations with respect to the bonds, although secured and remarketed, were not affected by the Plan. However, the irrevocable standby letters of credit issued by the Chase Manhattan Bank and the Bank of New York were replaced on the Effective Date by two liquidity facilities issued by Credit Suisse First Boston and municipal bond insurance policies issued by Ambac Assurance Corporation (see Note 1). Big Rivers has agreed to reimburse Ambac Assurance Corporation for any payments under the municipal bond insurance policies or the surety policies.

### LEM Settlement Note.

On the Effective Date, Big Rivers executed the Settlement Note with LEM. The Settlement Note will require Big Rivers to pay to LEM \$19,676, plus interest at 8% per annum over the lease term (the LEM Advances). The estimated principal and interest payment is approximately \$1,822 annually. This payment is consideration for LEMs assumption of the risk related to unforeseen costs with respect to power to be supplied to the Aluminum Smelters and the increased responsibility for financing capital improvements. The execution of the Settlement Note was treated as a non-cash transaction and was excluded from the accompanying statements of cash flows.

#### LEM Advances:

Beginning in August 1998 (the first month after the Effective Date) and ending in July 2000, LEM will make monthly payments totaling \$50 to the RUS on behalf of the Company. The Company will then make monthly payments of \$60 to LEM over the next 36 months. The payments made by LEM to the RUS will be applied to the New RUS Promissory Note. The Company will also recognize interest expense over the five-year life of the LEM Advances at 6.98% per annum.

### 7. RATE MATTERS:

As approved by the Bankruptcy Court and the KPSC, effective September 1997, the interim rates charged to Big Rivers' members consist of a billin demand charge per kW and an energy charge per kWh consumed. The interim rates of Big Rivers included specific rate designs for its members' two classes of customers, the large industrial customers and the rural customers under their jurisdiction. For the large industrial customers, the demand charge is based on each customers' maximum demand during the current month. The remaining customers billing demand is based upon the maximum coincident demand of each member's delivery points. The demand and energy charges are not subject to adjustments for increases or decreases in fuel or environmental costs. On April 30, 1998, the KPSC modified the interim rates for the large industrial customers. On June 1, 1998, the modified rates were approved by the Bankruptcy Court. These rates will remain in effect until revoked or modified by the KPSC. The rates resulted in a significant decrease in Big Rivers' rates for wholesale electric service to certain members from the rates in effect prior to the Chapter 11 filing.

### 7. RATE MATTERS (Continued):

Pursuant to the Lease Agreement, LEM will supply the energy necessary to comply with the Oglethorpe Power Corporation (Oglethorpe Power) and the two Hoosier Energy Rural Electric Company (Hoosier Energy) contracts. In turn, Big Rivers will remit the net revenues from the contracts to LEM. The Oglethorpe Power contract originated in August 1992 for the sale of 103 MW of power for ten years. The first of the Hoosier Energy contracts is for the sale of 65 MW of capacity during a three-month summer period through the year 2000. The second Hoosier Energy contract is a peaking power contract varying from 10 MW in 1993 to 170 MW in 1999. This contract is for the summer months of June through September of each calendar year.

In accordance with the Lease Agreement, LG&E Energy will operate certain generating facilities owned by the City of Henderson, Kentucky [the City] which were operated by Big Rivers prior to the Effective Date, pursuant to certain lease contracts between the City and Big Rivers. The Company will retain the service obligation under these contracts to provide transmission services, as defined.

#### 8. INCOME TAXES:

Big Rivers was initially formed as a tax-exempt cooperative organization under section 501(c)(12) of the Internal Revenue Code. To retain tax-exempt status under this section of the Internal Revenue Code, at least 85% of Big Rivers' revenues must be generated from sales to the Company's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85% requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years, the Company would be considered a taxable organization until such year that sales to members would satisfy the 85% requirement and Big Rivers formally reapplies for tax-exempt status. Big Rivers is also subject to Kentucky income tax.

Under the provisions of SFAS No. 109, "Accounting for Income Taxes," Big Rivers is required to record deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes as compared to amounts reported for income tax purposes. Deferred tax assets and liabilities are determined based on these temporary differences using enacted tax rates in effect for the year in which these differences are expected to reverse.

At December 31, 1998 and 1997, Big Rivers had deferred tax assets of \$462,348 and \$468,557, respectively, which primarily relate to tax credits and net operating losses. At December 31, 1998, the tax credits and net operating losses amounted to \$57,468 and \$1,049,072, and the tax credits expire in 1999 through 2000. The non-member portion of the net operating losses expire in 1999 through 2018. Additionally, at December 31, 1998 and 1997, Big Rivers had deferred tax liabilities of \$246,862 and \$281,545, respectively, which primarily relate to depreciation differences on utility plant. At December 31, 1998 and 1997, Big Rivers did not anticipate utilization of a portion of the deferred tax assets, thus a valuation allowance was established of \$215,486 and \$187,012, respectively.

### POWER PURCHASED:

In accordance with the Lease Agreement, Big Rivers will supply all of the members' requirements for power to serve their customers other than the Aluminum Smelters, including Big Rivers' existing wholesale power contracts. Contract limits were established in the Lease Agreement and include minimum and maximum hourly and annual power purchase amounts. At any time after December 31, 1998, Big Rivers has the right to elect to reduce the contract limits up to a certain extent. However, Big Rivers cannot reduce the contract limits by more than 12 MW in any year, or by more than a total of 72 MW over the lease term. In the event Big Rivers fails to take the minimum requirement during any hour or year, Big Rivers will be liable to LEM for a certain percentage of the difference between the amount of power actually taken and the applicable minimum requirement.

Although Big Rivers will be required by the Lease Agreement to purchase minimum hourly and annual amounts of power from LEM, the lease does not prevent Big Rivers from paying the associated penalty in certain hours to purchase lower cost power, if available, in the open market or reselling a portion of its purchased power to a third party.

### 10. PENSION AND DEFERRED COMPENSATION PLANS:

Big Rivers has non-contributory defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974. Also, Big Rivers has executed non-contributory defined compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. The deferred compensation plan is fully funded and has been suspended since 1995.

In conjunction with the Lease Agreement, approximately 550 of the Company's employees were effectively terminated and transferred to WKEC on the Effective Date. Terminated employees will or have received distributions in the amount of their respective vested benefits. The Company recognized a curtailment loss of \$2,086 which was recorded as a reorganization expense in the accompanying statements of revenues and expenses.

The following is an assessment of the Company's non-contributory defined benefit pension plans at December 31:

	1998_	<u> 1997</u>
Projected benefit obligation	\$ 9,700	\$40,735
Fair value of plan assets	10,005	32,060
Funded status	\$ (305)	\$ 8,675
Prepaid (unfunded) accrued pension cost	\$ 1,088	\$ (440)

Net periodic pension costs, which are calculated based on actuarial assumptions at January 1, were as follows for the years ended December 31:

	1998	1997	1996
Benefit cost	\$ 1.686	\$3,592	\$2,861
Curtailment cost	2,086	9.69	- 1 100
Employer contribution	5,300	3,831	3,268
Benefits paid or transferred	29,357	5,810	4.301

### 10. PENSION AND DEFERRED COMPENSATION PLANS (Continued):

Assumptions used to develop the projected benefit obligation were:

	1998	1997	1996
Discount rates	7.0%	7.5%	7.5%
Rates of increase in compensation levels	4.0	4.0	4.0
Expected long-term rate of return on assets	8.5	8.5	8.5

### 11. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS:

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. For all employees who retired prior to 1994, Big Rivers pays 80% of the cost from age 62 to 65; and from age 65, for salaried employees, Big Rivers pays 100% of Medicare supplemental cost. For salaried employees who retire after December 31, 1993, the paid Medicare supplemental was eliminated.

The discount rate used in computing the postretirement obligation for 1998 and 1997 was 7.0% and 7.5%, respectively. A health care cost trend rate of 9.0% in 1998 declining to 5.5% in 2004 was utilized. The health care cost trend rate assumption had a significant effect on the amounts reported, resulting in an unrecognized net gain of \$1,215 in 1998. A 1.0% increase in the health care trend rate each future year would increase the aggregate service and interest costs by \$51 and the accumulated other postretirement benefit obligation by \$667.

The following is an assessment of the Company's postretirement plan at December 31:

	1998	1997
Total benefit obligation	\$[2,218]	\$(5,245)
Unfunded accrued postretirement cost	(3,536)	(3,519)

The components of net periodic postretirement benefit costs for the years ended December 31 were as follows:

	1998	1997	1996
Benefit cost	\$ 436	\$ 719	\$ 811
Benefits paid	389	142	172

As noted above, approximately 550 employees were transferred to WKEC in conjunction with the Lease Agreement, and in conjunction therewith the Company transferred to WKEC the postretirement liability for these employees. During 1998, the Company recognized a curtailment gain of \$2,753 which was principally offset by the realization of the previously unrecognized transition obligation related to these employees totaling \$2,538.

In addition to the postretirement plan discussed above, in 1992 Big Rivers began a postretirement benefit plan which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20% of the employee's base hourly rate at time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is \$101 and \$362 at December 31, 1998 and 1997, respectively, and the postretirement expense recorded was \$51, \$61 and \$93 for 1998, 1997 and 1996, respectively.

### 12. RELATED PARTIES AND MAJOR CUSTOMERS:

	Operating Revenues		
	1998	1997	1996
Members	100000000000000000000000000000000000000	-	
Green River Electric Corporation	5 95,942	\$130,318	\$132,589
Henderson Union Electric Cooperative	49,850	75,304	82,226
Jackson Purchase Electric Cooperative			
Corporation	22,247	23,136	24,511
Meade County Rural Electric Cooperative			
Corporation	12,618	12,978	13,329
KPSC Ordered Fuel Cost Refund			(427)
Non-members	45,742	62,452	69,694
Lease revenue	24,247	-	
Other revenue	3,908	438	66
	\$254,554	\$304,626	\$321,988

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and requiring payments for power consumed and only such other payments as each member receives from its customers.

At December 31, 1998 and 1997, Big Rivers had accounts receivable from its members of approximately \$10,142 and \$20,552, respectively.

### 13. YEAR 2000:

With the approach of the year 2000, there has been concern over the impact of this event on computer systems worldwide. Big Rivers has assessed the impact of the year 2000 on its business and has developed a project plan to remediate its current status of systems not yet deemed year 2000 compliant.

Big Rivers is an electric generation and transmission company and is dependent upon outside parties whose performance could affect the Company. Through the Lease Agreement, the Company relies on LG&E Energy and Southeastern Power Administration for power supply. Big Rivers' other dependence includes telephone companies, internet companies, and external businesses that supply them with goods and services such as equipment supplies and maintenance.

Additionally, risk exists regarding the non-compliance of third parties with key business or operational importance to the Company. Year 2000 problems affecting key customers, interconnected utilities, telecommunications providers or financial institutions could result in lost power sales, reduced power transmission capabilities or internal operational or administrative difficulties. The Company is not presently aware of any such situations; however, occurrences of this type could have an effect upon the business, operating results or financial condition of the Company. There can be no assurance that the Company will be able to identify and correct all aspects of the year 2000 problems among these third parties in sufficient time.

The Company has begun developing a formal contingency plan for year 2000 non-compliance and expects the contingency plan to be completed by the second quarter of 1999. In the event of the Company's non-compliance, management does not believe the Company's operations will be adversely affected.



# **BIG RIVERS ELECTRIC** CORPORATION ANNUAL REPORT

Winning **combinations** 



### About the Cover

- Turbine blades only one component of many necessary to generate electricity.
- No single component is insignificant. Electricity is created only when all elements of the process are successfully working together.
- Meeting the challenges Big Rivers faced in 1995 required a similar process one which utilized all the best resources of the company.
- The winning combination of Big 'Rivers and 'PacifiCorp will create a stronger company one which will successfully compete in a challenging and changing industry.

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# Financial Highlights (Dollars in thousands)

	<u>1995</u>	<u>1994</u>	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	339,910	315,571	24,339	7 7
Operating Expenses	293,456	288,422	5,034	1 7
Net Margins	(44,315)	(63,652)	19,337	30.4
Capital Expenditures	10,822	29,875	(19,053)	(63.8)
Cost of Fuel Used	118,901	115,365	3,536	3.1
System Peak Demand (Megawatts)	1,166	1,190	(24)	(2.0)
Energy Sold to Members (MWh)	7,712,052	7,454,426	257,626	3.5
Energy Sold to Others (MWh)	3,021,540	2,587,896	433,644	16.8
Revenue per kWh Sold (Mills)	31.66	31 41	.25	.8

## President's and General Manager's Message

ynergy – it's a term coined to represent the idea of combining each other's strengths to create something stronger than either unit could ever be alone. Big Rivers Electric Corporation is in the midst of forging a new partnership based on our personal strengths as well as those of a west coast utility. This will allow our members to emerge as healthy competitors in the electric utility industry. This union brings together the winning combinations of insight and individual talent matched by state-of-the-art electric utility technology, and, most significantly, the teaming of two entities driven by the will to succeed.

In forming this exciting combination, Big Rivers intends to have as our partner PacifiCorp, a multi-billion dollar electric and telephone utility based in Portland, Oregon. The transition has already begun after year-long reviews and negotiations. However, the process of arriving at this point deserves a brief reflection.

In August 1994, the Special Committee on Financial Planning implemented the mechanisms designed to facilitate this important change. The Committee, as well as the Board of Directors, wanted to leverage the utility's assets to form a business relationship that would best benefit the 90,000-plus member ratepayers who demand and deserve reliable, low-cost electric power. As the Committee began the task of overcoming the company's financial obstacles, one challenge after another emerged in the months that followed.

Many utilities from across the country contacted the Committee about establishing a business relationship. Suitors called. Suitors left. Ultimately, the Committee successfully recruited business proposals from six highly-respected energy companies.

Analysis of the proposals proved almost as complex as the solicitation process itself. There were financial considerations. There were regulatory considerations. There were rate considerations for consumers, industrial and residential, along with employee considerations. At the end of the process the proposals varied. However, they all shared a common thread: the member rate payers and the economic well-being of western Kentucky would be protected – something the Committee had insisted upon.





### About the Cover

- Turbine blades only one component of many necessary to generate electricity.
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- The winning combination of Big 'Rivers and PacifiCorp will create a stronger company — one which will successfully compete in a challenging and changing industry.

The next step in the company's new direction was nearly complete. We were moving from a partnership of four distribution cooperatives that gave it life more than 30 years ago, into a partnership with the co-ops and another entity in hopes of sustaining life for the next 30 years.

In December 1995, the Board of Directors recommended that the Committee continue to pursue negotiations with PacifiCorp. Under the terms of PacifiCorp's proposal, Big Rivers would retain ownership of its generation assets, and PacifiCorp would lease and manage the facilities, selling power to Big Rivers for the member co-ops and on the wholesale open market for the life of the lease. Big Rivers would continue to own and operate the transmission system and would receive revenue from members, PacifiCorp, and other utilities for the provision of transmission services to accommodate both on-system and off-system energy sales.

Under details of the plan, Big Rivers would generate sufficient revenue to retire most of its debt, while maintaining autonomy as a transmission company and service provider. Most importantly, Big Rivers would survive as an economic presence in western Kentucky into the 21st century and beyond.



**Seated l. to r.** William C. Denton, Al Robison (Acting General Manager) **Standing l. to r.** Jimmy Mounts, Johnny L. Hamm, Edward F. Johnson, J. D. Cooper, John Myers, Sandra B. Wood (Board President), James Sills, Ralph Hardin, H. M. "Bo" Smith, Morton Henshaw, Joseph Hamilton.

On January 30, 1996, the Board of Directors entered into a non-binding letter of intent with PacifiCorp – the next critical step in developing this partnership and transforming Big Rivers into a new energy services company poised to compete in the industry.

A great deal of effort will still be required to obtain the necessary endorsements of a final agreement. But it is encouraging that the cooperative has made these remarkable strides in an adversarial environment where naysayers downplayed the possibility of Big Rivers surviving; where critics openly questioned the viability of the process; and where detractors scoffed at the suggestion that the Board of Directors, management, and employees of this proud company had the wherewithal to change.

The systematic process the Committee and Board of Directors has taken represents their dedication to transform this organization from a position of financial vulnerability to a position of economic strength. In so doing, the company has recommitted to the historic mission of meeting the needs of our member cooperatives and the customers they serve.

On behalf of the Special Committee and the Board of Directors, we would like to extend our most sincere thanks to the employees of Big Rivers who have refused to let unsettling headlines and uncertainty compromise the efficient production of safe, reliable electricity or the delivery of other valuable services to the co-ops. We would also like to extend regards and thanks to the distribution cooperatives, their boards, management, and employees for the valuable input they offered during the screening and selection processes. And most importantly, we salute the many customers who stand as constant reminders of why this company was founded and whose interests the operation was created to serve.

The challenges that lie ahead are significant. Yet 1995 showed that challenge often presents equally significant opportunity: opportunity for growth, opportunity for change, opportunity to establish a new vision, and opportunity to create more winning combinations.

Sandra B., Wood

President and Chairperson of the Board

Landra Wood

01 Bobin

A. J. Robison

General Manager



### Corporate Report

Big Rivers Electric Corporation was the embodiment of winning combinations in 1995 – and not just in the potential partnership being forged with PacifiCorp.

There was the combination of innovation and financial insight manifested in cost savings to consumers.

There was the combination of technology and talent that made for a cleaner environment in western Kentucky.

There was the combination of service and attention to customer satisfaction represented by a number of new initiatives aimed at all user classes, on-system and off.

And there was the combination of corporate citizenry and community responsibility that kept Big Rivers an integral part of western Kentucky's economy.

These winning combinations were made possible by the leadership of the Board of Directors, management, and employees whose contributions to the system are chronicled on the pages that follow.

The foundation has been laid. The key is to maintain 1995's momentum into 1996 and beyond, assuring a future of winning combinations.

### Performance & Delivery

A new summer peak. Stable sales on-system and off. Compliance with increasingly stringent environmental regulations. These are among the key issues that highlighted 1995's power production and transmission performance.

During 1995, the company sold 7,712,052 MWh of energy to its four member distribution cooperatives, representing an increase of 3.45 percent compared to 1994. Off-system sales totaled 3,021,540 MWh for the year, up 16.75 percent from the previous year.

Energy consumption is in direct proportion to the need for capacity created by customer demand. At 4:00 p.m. on August 18, demand hit a summer peak of 1,166 MW - the highest level on the system since January 1994, when demand topped out at 1,190 MW. At the time of the August peak, Alcan Aluminum was operating its Sebree smelter at a load level about 75 MW lower than normal full capacity.

In evaluating the system requirements and the capacity installed, it's important to remember that the reserve capacity represents a commodity that will become valuable in meeting the needs of the four distribution cooperatives, attracting new industry, and positioning Big Rivers to compete in a deregulated market. That's why the partnership with PacifiCorp is so important and why Big Rivers is attractive as a partner with the west coast utility.

The Oregon-based utility has established a reputation for environmental responsibility and overall efficient operations – a reputation mirrored by Big Rivers and demonstrated by several major initiatives in 1995.

- Flue Gas Desulfurization systems (scrubbers) were installed on Unit One and Unit Two of the Henderson Municipal Power and Light Station Two (HMP&L). The scrubber installation will allow HMP&L to burn the higher sulfur coal mined in western Kentucky and the Illinois basin while meeting the lowered sulfur dioxide emission requirements of the Clean Air Act Amendments of 1990 (CAAA-90).
- Low-NOx burner retrofit projects were completed on the Kenneth C. Coleman
  Plant Unit One and Unit Two. These burners reduce the amount of nitrogen oxide
  (NOx) emitted to the atmosphere and are part of compliance with the CAAA-90.
  Emissions thus far have been well below federal standards at 0.5 pounds per
  million BTU of fuel burned. In addition, a second low-NOx project was begun at
  HMP&L Unit Two, and planning began for the burner changeout on the Kenneth
  C. Coleman units.
- Another component of compliance with the Clean Air Act involved the installation of continuous emission monitoring equipment on the Robert A. Reid and D.B. Wilson stations.
- Plant efficiency remains at high levels for the system. According to the Utility Data Institute, Big Rivers' plants were ranked 60, 71, 184, and 213 out of 718 utilities listed across the country in the area of production cost per net megawatt hour produced, including fuel.
- An upgrade of nearly nine miles of 69-kV line in Meade County strengthens the system. In addition, a new interconnection is under way with Kentucky Utilities. This will relieve peak overloads and provide for more reliable export of power during high load situations.

The winning combination of technology and talent that goes into the efficient production and transmission of reliable electric power has been a tradition at Big Rivers for over thirty years. It's a tradition that will continue in the years to come as we partner with another industry leader – PacifiCorp.



### Cost Competitiveness

Renegotiated contracts, cost containment programs, and collaboration with member systems are leading to savings and benefits that can be shared with the distribution co-ops and the consumers.



In ensuring a future for Big Rivers, the Board of Directors, management, and employees have all made cost competitiveness a high priority. Renegotiated contracts, cost containment programs, and collaboration with member systems are leading to savings and benefits to be shared with distribution co-ops and their consumers.

But cost containment and competitive positioning do not preclude expenses that must be incurred and passed along in some manner. That was the case with the scrubber installation at HMP&L during 1995. The federally mandated Clean Air Act of 1990 required a reduction in emissions. But rather than add the expense of the technology into base rates, Big Rivers joined several other utilities in benefiting from an environmental cost pass-through formula established by the Kentucky General Assembly.

In addition, steps were taken in the following areas to improve Big Rivers' position in an increasingly competitive industry.

- The Corporation terminated a contract with Costain Coal and opened new bids for supplying coal to the HMP&L station since scrubbers allow the use of high-sulfur coal. This action will result in savings of \$22.5 million over the next three years.
- A depreciation study completed during 1995 pointed to increased margins in future years as a result of extending the useful life of plant assets, resulting in reduced depreciation rates and associated depreciation expense by as much as \$10 million armually.



- The company is holding the line on operations and maintenance costs (O&M) by moving scheduled plant maintenance outages from a 12-month cycle to an 18-month cycle. This is consistent with changing industry standards and practices.
- Another key component in Big Rivers' strategy to become more competitive is
  to involve distribution cooperatives in rate-setting discussions. Several such
  discussions were held during 1995. More are anticipated in 1996. This newlyenergized partnership with the co-ops is exploring innovative rate design so
  that more competitive rates can be established for rural, residential,
  commercial, and industrial customers.

The electric cooperatives that comprise the Big Rivers system are the engines driving the economy of western Kentucky. They, themselves, are laying the groundwork for a competitive environment. With Big Rivers joining in a collaborative effort to design rates aimed at customer growth and retention, all five systems and, most importantly, the consumer will benefit. That's a winning combination of skills and abilities that will be utilized to its fullest in further developing the new direction for this utility.







### Priority on Service

There is no greater role for this company than serving its member cooperatives and helping them serve their customers. That is precisely the mission that sparked the creation of this company more than three decades ago; it is the same mission that will drive this company through the successful negotiation of its many challenges.

Key to that mission is unmatched customer service: to the co-ops themselves, and to customers that are served on- and off-system. Here again is where Big Rivers has established a winning combination of technology and talent to assure a greater measure of success in completing the tasks at hand.

- An important first step in demonstrating better service to the co-ops and in
  establishing future operations was the delivery of engineering services to the
  distribution systems. Activities undertaken included substation upgrade, design,
  and construction. Already, future work requests include the design of two new
  substations.
- During 1995, Big Rivers established a commercial and industrial energy audit team to assist the co-ops in providing additional service to this important class of consumers. One facet of the program explores the development of energy

conservation strategies which may be implemented by the consumer. Another examines power quality and explores solutions for any deficiencies. The service is provided to member systems at no charge.

 Another important advance undertaken in 1995 was to generate more input from operations and

maintenance personnel of the large industrial customers. Topics of discussion have included coordinating maintenance activities, exploring solutions for operating problems, and establishing development strategies for load expansion.

• From the distribution cooperatives to the aluminum smelter load to the many commercial and industrial accounts, no customer is any more important than

the rural, residential members. They represent a small share of the total power requirements of the system, but are important and deeply entrenched in the history of the system. During 1995, Big Rivers and the member systems reavowed their commitment to assure that high levels of customer satisfaction were maintained across the system. Valuable monthly tracking surveys were conducted and reported – an action common to investor-owned utilities, but unique to cooperative utilities in the region.

- Another activity launched for the benefit of member cooperatives and their residential members was a system-wide data base. Already, more than 40,000 records have been established linking end-use appliance saturation with customer demographics. The data base allows Big Rivers and its member coops to make marketing communication tools more efficient and cost effective. This, too, is fairly common among investor-owned utilities, but unique to cooperative utilities.
- The year also saw Big Rivers become more sophisticated in engaging another type of consumer the off-system buyer. In 1995, Big Rivers became one of 16 companies involved in the Continental Power Exchange (CPEX™), an electronic energy exchange similar to commodity and stock exchanges. The system allows a computer network to monitor available energy resources and facilitate trading of electricity.

The electric cooperatives that comprise the Big Rivers system are the engines driving the economy of western Kentucky.

One generation and transmission cooperative serving four distribution systems which serve over 90,000 consumers – that certainly is the most important facet of this company's core business. Big Rivers has its roots in being a reliable power producer. As the future continues to unfold, we will break new ground with the opportunity to serve power marketing agents around the nation who, in turn, serve thousands of customers. This dual role in customer service represents another winning combination about which Big Rivers can boast.

### Priority on Community

From its inception more than thirty years ago, Big Rivers Electric Corporation has played a central part in the economic life of western Kentucky. That was true when the company attracted the large and important aluminum smelter load to the region as a result of its abundant, low-cost power. That remains true today as Big Rivers continues its role as a beacon for industry, a conduit for good-paying jobs, and a contributor to the livelihoods of the communities in which it conducts business.

For that, the 820 employees of this company can be extremely proud. They can be proud of the significant contributions the company has made toward the betterment of civic and charitable organizations, as well as the economy of western Kentucky.

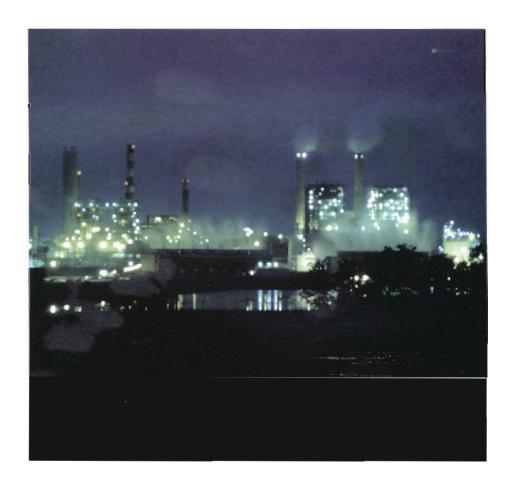


- Long recognizing that employees represent the single, greatest asset of any company, Big Rivers took a more aggressive approach in 1995 by providing its employees with increased training and appropriate compensation. More than \$75,000 was devoted to technical training and educational assistance for employees. A new 401(k) savings plan was initiated, and a pre-tax flexible-spending benefits plan was put into place for bargaining unit employees, greatly reducing the employees' tax burden.
- Big Rivers shared its leadership skills with another of our member systems by presenting a FrontLine Leadership training program at Meade County RECC. As a result, those participating employees now have additional valuable communication skills relating to employee supervision and management.
- Big Rivers long ago made a promise to support those communities in which it conducted business. This past year, contributions of employee time and talent replaced some of the financial donations that have been apparent in previous years. Still, the utility carries its unwavering commitment to being

a community partner as evident when the company and its employees established a record for the annual United Way campaign with nearly \$70,000 in pledges.

• Of course, the employees of Big Rivers and their communities will only continue to thrive if sufficient economic growth is sustained. Economic growth successes were achieved during 1995 as they have been during every year of Big Rivers' operations. Hudson Foods began construction of a major poultry processing facility. Willamette Industries undertook major expansion at its paper mill. Alcoa CMI will take advantage of the molten aluminum available from nearby smelters and in so doing, create 400 jobs for the region.

These are but a few of the success stories Big Rivers can tell about its employees, their hometowns, and the industries that provide their neighbors with jobs. In the future, Big Rivers will be in a position to combine its documented skills in economic development with those of PacifiCorp to bring even more economic growth to western Kentucky.



### Challenges

A turning point in the life of Big Rivers was reached in 1995. There is renewed spirit among employees to make the company's four power plants as efficient as possible.

There is a renewed sense of empowerment to the employees from a Board of Directors and management equally intent to see this company not only survive, but thrive as a premier provider of electric service.

There are challenges – numerous challenges. But in each there exists an opportunity to demonstrate that the employees of Big Rivers Electric Corporation have unyielding resolve – willing to face adversities, and collectively striving to emerge stronger than any one of us could ever be alone.

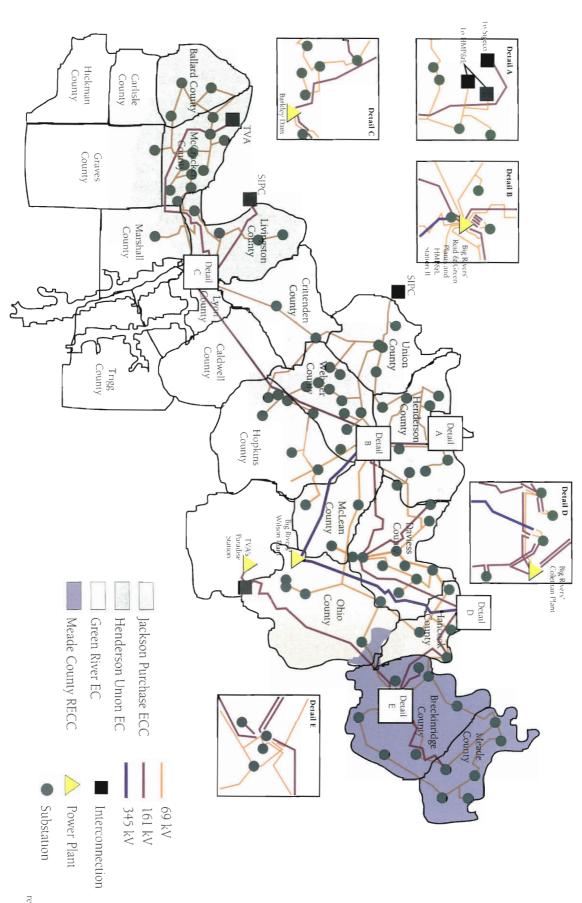
The winning combination of corporate allegiance and personal pride shared between ourselves and the members of PacifiCorp will provide for a sustained, successful future – one of growth with a focus on the communities and customers we serve.

The best way to predict the future is to create it.

At Big Rivers,

that's precisely

what we're doing.



twelve

## Corporate Directory

Officers

Sandra B. Wood

President

William C. Denton

Vice President

Johnny L. Hamm

Secretary-Treasurer

John Myers

Assistant Secretary-Treasurer

General Manager

Al Robison

**Directors** 

Green River Electric Corporation

Sandra B. Wood

Edward F. Johnson

Jimmy Mounts

Henderson Union Electric Cooperative

William C. Denton

Morton Henshaw

H. M. Smith

Jackson Purchase Electric Cooperative Corporation

Johnny L. Harron

John Myers

Ralph Hardin

Meade County Rural Electric Cooperative Corporation

J. D. Cooper

Joseph Hamilton

James Sills

Vice General Managers

Ed Dolezal

Energy Supply

Mike Dotson

**Fuels** 

Richard P. Greenwell

Production

Ronald W. Johnson

Administrative Services and

Human Resources

James H. Jones

Public Relations

B. Scott Reed

Engineering and Transmission

John J. West

Finance

Superintendents

Steve Moss

D. B. Wilson Plant

Bruce Shelton

Kenneth C. Coleman Plant

Barry Wood

Robert A. Reid Plant

Robert D. Green Plant

Virgil Mitchell

Transmission and Substations

Corporate Attorney

James Miller

Sullivan, Mountjoy,

Stainback, and Miller P.S.C.

Corporate Auditors

Arthur Anderson LLP

Little Rock, Arkansas



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# ARTHUR ANDERSEN LLP Report of Independent Public Accountants

To the Board of Directors of Big Rivers Electric Corporation:

We have audited the accompanying balance sheets of Big Rivers Electric Corporation (Big Rivers, a Kentucky corporation) as of December 31, 1995 and 1994, and the related statements of revenues and expenses, equities (deficit) and cash flows for the years then ended. These financial statements are the responsibility of Big Rivers' management. Our responsibility is to express an opinion on these financial statements based on our audits. The financial statements of Big Rivers for the year ended December 31, 1993, were audited by other auditors whose report dated February 25, 1994, expressed an unqualified opinion on those statements with an explanatory paragraph related to Big Rivers' ability to continue as a going concern.

We conducted our audits in accordance with generally accepted auditing standards and the standards for financial audits contained in *Government Auditing Standards* (1994 Revision), issued by the Comptroller General of the United States. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers as of December 31, 1995 and 1994, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that Big Rivers will continue as a going concern. As discussed in Note 1 to the financial statements, Big Rivers continues to sustain negative net margins which will eventually cause the cooperative to default on certain provisions under the Debt Restructuring Agreement, is potentially subject to working capital liquidity problems, and is subject to a significant amount of litigation. These conditions raise substantial doubt about Big Rivers' ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

In accordance with *Government Auditing Standards*, we have also issued reports dated February 9, 1996, on our consideration of Big Rivers' internal control structure and compliance with laws and regulations.

Little Rock, Arkansas, February 9, 1996.

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### STATEMENTS OF REVENUES AND EXPENSES

For the Years ended December 31 (Dollars in thousands)

	<u>1995</u>	<u>1994</u>	<u>1993</u>
Operating revenues	\$ 339,910	\$ 315,571	\$ 350,946
Operating expenses:			
Operations:			
Fuel for electric generation	118,901	115,365	117,400
Power purchased and interchanged	42,682	39,174	45,151
Production, excluding fuel	29,844	28,369	26,161
Other	28,990	26,766	25,205
Maintenance	23,019	28,981	27,783
Depreciation	45,423	45,106	45,257
Taxes, other than income taxes	4,597	4,661	4,505
Total operating expenses	293,456	288,422	291,462
Electric operating margins	46,454	27,149	59,484
Interest expense and other:			
Interest, net of capitalized interest	94,983	93,236	92,707
Other, net	(2,653)	(1,065)	(1,043)
Total interest expense and other	92,330	92,171	91,664
Operating margin (loss)	(45,876)	(65,022)	(32,180)
Non-operating margins:			
Interest income and other	1,561	1,370	1,546
Net margin (loss)	\$ (44,315)	\$ (63,652)	\$ (30,634)

The accompanying notes to financial statements are an integral part of these statements.

### BALANCE SHEETS

# As of December 31 (Dollars in thousands)

Assets	<u>1995</u>	<u>1994</u>
Utility plant, net	\$ 1,008,292	\$ 1,048,904
Other deposits and investments, at cost	4,726	6,207
Current assets:		
Cash and cash equivalents	10,123	10,103
Accounts receivable	31,780	28,251
Fuel inventory	20,952	20,489
Non-fuel inventory	14,846	15,123
Total current assets	77,701	73,966
Deferred charges	6,305	6,766
Coal prepayments	4,600	5,130
	\$ 1,101,624	\$ 1,140,973
Equities (Deficit) and Liabilities	1995	<u>1994</u>
Capitalization:		
Equities (deficit)	\$ (293,373)	\$ (249,058)
Long-term obligations	1,228,507	1,245,267
Total capitalization	935,134	996,209
Current liabilities:		
Current maturities of long-term obligations	8,085	15,144
Accounts payable	23,150	27,785
Accrued expenses	6,278	17,754
Total current liabilities	37,513	60,683
Deferred credits:		
Balancing account	77,601	30,878
Unamortized gain on reacquired debt	21,711	23,172
Other	29,665	30,091
Total deferred credits	128,977	84,081
Commitments and contingencies (Notes 1, 2, 6, 8, and 11)		
	<u>\$ 1,101,624</u>	\$ 1,140,973

The accompanying notes to financial statements are an integral part of these statements.

### STATEMENTS OF EQUITIES (DEFICIT)

For the Years ended December 31 (Dollars in thousands)

				Other e	quities
	Total equities (deficit)	Accumulated deficit	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1992	\$ (154,772)	\$ (287,138)	\$ 127,921	\$ 764	\$ 3,681
Margins for 1993:					
Operating	(32,180)	(32,180)		_	_
Non-operating	1,546	1,546			
Balance at December 31, 1993	(185,406)	(317,772)	127,921	764	3,681
Margins for 1994:					
Operating	(65,022)	(65,022)	_	_	-
Non-operating	1,370	1,370	_	_	_
Balance at December 31, 1994	(249,058)	(381,424)	127,921	764	3,681
Margins for 1995:					
Operating	(45,876)	(45,876)	-	_	_
Non-operating	1,561	1,561	_	_	_
Balance at December 31, 1995	\$ (293,373)	\$ (425,739)	\$ 127,921	\$ 764	\$ 3,681

### STATEMENTS OF CASH FLOWS

# For the Years ended December 31 (Dollars in thousands)

(Donars in thousands)	<u>1995</u>	1994	<u>1993</u>
Cash flows from operating activities:			
Net margin (loss)	\$ (44,315)	\$ (63,652)	\$ (30,634)
Adjustments to reconcile net			
margin (loss) to net cash provided by			
operating activities:			
Depreciation and amortization	47,933	46,880	46,979
Net change in balancing account	46,723	21,692	(16,064)
Amortization of gain on reacquired debt	(1,401)	(1,613)	(1,612)
Amortization of gain on sale of pollution control allowances	(1,745)	-	_
Changes in operating assets and liabilities:			
Accounts receivable	(3,529)	2,682	(7,768)
Fuel inventory	(463)	(2,093)	6,076
Non-fuel inventory	277	(357)	(99)
Accounts payable	(4,635)	6,434	6,591
Accrued expenses	(11,476)	13,835	(556)
Other, net	2,865_	3,178	516
Net cash provided by	22.22.4		2 420
operating activities	30,234	26,986	3,429
Cash flows from investing activities:	()		4
Capital expenditures, net	(10,822)	(29,875)	(16,404)
Sale of pollution control allowances		188_	23,150
Net cash provided by (used in)			
investing activities	(10,822)	(29,687)	6,746
mresting activities		(==,===)	
Cash flows from financing activities:			
Increase (decrease) in RUS Promissory Note	(15,028)	6,003	(5,817)
Principal payments on other long-term obligations	(4,364)	(3,272)	(4,364)
Net cash provided by (used in) financing			
activities	(19,392)	2,731	(10,181)
Net increase (decrease) in cash			
	20	20	(6)
and cash equivalents	20	30	(6)
Cash and cash equivalents, beginning of year	10,103	10,073	10,079
Cash and cash equivalents, end of year	\$ 10,123	\$ 10,103	\$ 10,073
,			
Supplemental Cash Flow Information:			
Cash paid relating to interest expense, net of capitalized amounts	\$ 108,406	\$ 86,165	\$ 97,594
The accompanying notes to financial statements			

The accompanying notes to financial statements are an integral part of these statements.

### **NOTES TO FINANCIAL STATEMENTS**

December 31, 1995 (Dollars in thousands)

1

Minimum Debt Service Payments, Liquidity Risk and Contingencies

Management has prepared the accompanying financial statements on the basis that Big Rivers Electric Corporation (Big Rivers) will continue as a going concern, and while management expects to maintain positive cash flows from operations, current rates and current sales levels will cause Big Rivers to continue to sustain negative net margins and to eventually default on certain provisions under the Debt Restructuring Agreement (see Note 5).

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments for cash flows generated in excess of a month-end working capital cash balance of \$10,000, as defined by the Debt Restructuring Agreement. The monthly cash flows of Big Rivers are primarily dependent upon payments received under the Settlement Agreement (see Note 6) between Big Rivers, National Southwire Aluminum Company (NSA) and Alcan Aluminum Corporation (Alcan) (collectively referred to as the Aluminum Smelters). The Settlement Agreement requires the Aluminum Smelters to pay a variable rate from 1.81 cents per kWh to 4.4 cents per kWh based on the market price of aluminum. The market price of aluminum is subject to volatility. Additionally, pursuant to the Settlement Agreement, if Big Rivers collects in the aggregate an amount equal to the demand charge calculated over the term of the contract period, the remaining energy sold to the Aluminum Smelters will be based on 1.81 cents per kWh. Under this criterion, management anticipates that Big Rivers will collect the aggregate demand charge under the Settlement Agreement by the first quarter of 1996. Due to the Debt Restructuring Agreement requiring additional debt service payments for cash flows generated in excess of a month-end working capital cash balance of \$10,000, coupled by Big Rivers' reliance on the fluctuating variable rate under the Settlement Agreement, there can be no assurance that Big Rivers will not experience working capital liquidity problems in the near term.

On January 20, 1995, NSA filed suit derivatively on behalf of Green River Electric Corporation (Green River) and Big Rivers, and Alcan filed suit derivatively on behalf of Henderson Union Electric Cooperative (Henderson Union) and Big Rivers, as plaintiffs, versus Big Rivers' Board of Directors, Big Rivers, Green River, and Henderson Union in Henderson Circuit Court. This action seeks to dissolve Big Rivers and recover damages in excess of \$83,000 from the individual directors of Big Rivers. Big Rivers has provided indemnification to its directors for the legal expenses in successfully defending this type of claim. Associated with this indemnification, Big Rivers owns a directors' and officers' liability policy which has an aggregate limit of \$2,500. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter, and accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

The U.S. Environmental Protection Agency (EPA) has informed Big Rivers that it may be liable for damages with respect to the Green River Disposal Superfund Site, as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980. A remedial/feasibility study has been completed and approved by the EPA. The EPA issued its Record of Decision in this matter on December 14, 1994, which prescribes the remedies that the EPA has found appropriate for the site. Big Rivers' share of the cost, based on volume waste calculations, will be less than one percent. Management is of the opinion that the ultimate outcome of this matter will not have a material impact on the financial position or results of operations of Big Rivers.

On March 14, 1994, the Aluminum Smelters sued Big Rivers, Henderson Union, and Green River seeking to set aside the Settlement Agreement (see Note 6), to which all parties to the lawsuit were signatories. Big Rivers has filed a motion to dismiss for lack of jurisdiction, failure to state a claim and improper venue. This motion is pending before the Hancock Circuit Court. Also, Big Rivers, Henderson Union, and Green River have filed suit against the Aluminum Smelters on April 20, 1994, claiming that the Aluminum Smelters have breached their covenants not to challenge the Settlement Agreement. This suit has been stayed pending the Hancock Circuit Court's decision on the pending motions. Management is of the opinion that the ultimate outcome of this matter will not have a material impact on the financial position or results of operations of Big Rivers.



On January 27, 1994, a coal supplier sued Big Rivers seeking damages of approximately \$3,000. In addition to the damages claimed, the coal supplier has asserted that Big Rivers is also responsible for the cost of closing a mine. The coal supplier's latest valuation of its claim, made August 18, 1994, was \$13,283. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter, and accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

On January 10, 1995, a complaint case was filed with the Kentucky Public Service Commission (KPSC) by the Aluminum Smelters and Commonwealth Aluminum requesting a refund of \$5,993 plus interest for unreasonable fuel costs incurred for the period January 1, 1988 to October 31, 1990. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter, and accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

The Aluminum Smelters and Commonwealth Aluminum are requesting that the KPSC order a refund for certain costs to jurisdictional customers contending that Big Rivers' fuel costs were being improperly allocated for the period November 1, 1992 to October 31, 1995. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter, and accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

Big Rivers has a long-term coal contract with Green River Coal Company (Green River Coal). The contract requires Big Rivers to annually purchase 1,020,000 tons of coal through 2004. Big Rivers believes the Green River Coal contract was unlawfully procured and that Big Rivers is entitled to rescind the contract and recover damages including coal prepayments (see Note 4). When Big Rivers informed Green River Coal of its claim, Green River Coal filed for bankruptcy protection on July 8, 1993. Additionally, Green River Coal has countersued Big Rivers stating the amounts being withheld from payment to Green River Coal (see Note 4) are in violation of its bankruptcy protection. In connection with this contract, a criminal trial for a former general manager of Big Rivers is scheduled for August 1996. As a result, the Bankruptcy Court has stayed discovery pending the outcome of this trial. Management is unable to predict the outcome of this matter, and accordingly, no adustments have been recorded to reflect this uncertainty in the accompanying financial statements.

On October 20, 1995, the Franklin Circuit Court entered a judgment affirming a portion of the KPSC's previous orders for unreasonable fuel costs from November 1, 1990 to April 30, 1993 (see Note 6), and remanding a portion of that order to the KPSC for determination of whether certain remaining fuel costs comply with the regulatory requirements for rate recovery. Big Rivers filed a notice of appeal on November 15, 1995. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter, and accordingly, no adjustments have been recorded to reflect this uncertainty in the accompanying financial statements.

Big Rivers is either a defendant or a plaintiff in various other legal actions and claims, which management believes will not have a material impact on Big Rivers' financial position or results of operations.

During 1994, the Board of Directors formed a Special Financial Planning Committee (Committee), which is comprised of four board members. The Committee was given the assignment of proposing a solution to Big Rivers' financial difficulties by the end of 1995. The Committee employed legal advisors, financial advisors, and a turnaround specialist to evaluate possible alternatives. This process has culminated in the Committee recommending to the Board of Directors that a lease arrangement be executed with PacifiCorp Holdings, Inc. (PacifiCorp), an Oregon-based utility. On January 30, 1996, Big Rivers and PacifiCorp approved a letter of intent which commits the entities to work toward a long-term lease and operating agreement. Under this arrangement, Big Rivers would retain ownership of its generation facilities and would continue to provide transmission services to its four distribution cooperatives. PacifiCorp would lease and operate Big Rivers' generation facilities for 25 years in exchange for annual lease payments of approximately \$30,000. Big Rivers would continue to serve its members in buying wholesale power from PacifiCorp for the term of the lease which would result in reduced rates and provide long-term stability to Big Rivers' four distribution cooperatives and their industrial customers. Additionally, PacifiCorp would be allowed to market and sell Big Rivers' excess capacity and energy to non-members for the term of the lease. However, the proposed agreement, among other factors, stipulates the forgiveness of debt and requires certain long-term coal contracts to reflect market conditions. Additionally, the proposed agreement is subject to various approvals from creditors, certain regulatory bodies, and certain customers. If the letter of intent does in fact result in an executed lease agreement, the financial impact of such lease could alleviate some of the financial difficulties discussed in the aforementioned paragraphs.

# Organization and Summary of Significant Accounting Policies

### General Information:

Big Rivers, an electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives and markets power to non-member utilities and power marketers. The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all of their power and energy requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the KPSC and are subject to approval by the U.S. Department of Agriculture Rural Utilities Service (RUS).

#### Financial Statement Presentation:

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and disclosure of contingent assets and liabilities. The estimates and assumptions used in the accompanying financial statements are based upon management's evaluation of the relevant facts and circumstances as of the date of the financial statements. Actual results may differ from the estimates and assumptions used in preparing the accompanying financial statements.

### System of Accounts:

Big Rivers' accrual basis accounting policies follow the Uniform System of Accounts prescribed by the RUS Bulletin 1767B-1, as adopted by the KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters.

### Revenue Recognition:

Revenues are based on month-end meter readings and are recognized as earned.

### Utility Plant and Depreciation:

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal and salvage value, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of the RUS Promissory Note (see Note 5) to the to-date accumulated expenditures for qualifying projects included in construction in progress. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant in service is provided using the straight-line method over the estimated service lives of depreciable assets. The annual RUS-prescribed rates used to compute depreciation are as follows:

Production plant	3.00 - 3.10%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2.00 - 20.00%

For 1995, 1994, and 1993, the average composite depreciation rates were 3.16, 3.03, and 3.06 percent, respectively.

### Cash and Cash Equivalents:

For purposes of the statement of cash flows, Big Rivers considers all short-term, highly-liquid investments with original maturities of three months or less to be cash equivalents.



### Inventories:

Fuel inventory primarily consists of coal, which is recorded at weighted average cost. Non-fuel inventory primarily consists of materials and supplies related to generating plants and is recorded at weighted average cost. Big Rivers has entered into several long-term coal contracts extending through 2006. Fuel purchased under these contracts in 1995, 1994, and 1993 was \$96,525, \$98,574, and \$101,123, respectively. In 1996, Big Rivers is obligated to purchase a minimum of 3,912 tons of coal.

### Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Non-operating margins are used to offset any accumulated non-operating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the non-operating margins against accumulated non-operating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor non-operating losses are allocated to the patrons. In accordance with the Restated Mortgage and Security Agreement (see Note 5), patronage capital cannot be retired if such amounts are less than 40 percent of the total assets.

### Reclassifications:

Certain prior year amounts have been reclassified for comparability with the 1995 presentation.

### 3 Utility Plant

The following summarizes utility plant at December 31:

	1995	<u>1994</u>
Classified plant in service:		
Production plant	\$ 1,315,574	\$ 1,318,097
Transmission plant	83,486	81,571
Station equipment	100,646	100,691
General plant	17,833	17,654
Other	190	190
Unclassified plant in service	37,090	2,115
	1,554,819	1,520,318
Less accumulated depreciation	549,612	504,460
	1,005,207	1,015,858
Construction in progress	3,085	33,046
	\$ 1,008,292	\$ 1,048,904

The average rate used for the capitalization of interest during construction was 8.0 percent in 1995, 1994, and 1993. Interest capitalized was approximately \$1,024, \$1,100, and \$400 for the years ended December 31, 1995, 1994, and 1993, respectively.

### Deferred Charges and Coal Prepayments

The following summarizes deferred charges and coal prepayments at December 31:

	1995	<u> 1994</u>
Unamortized debt expenses	\$ 6,145	\$ 6,541
Other	160	225
	\$ 6,305	\$ 6,766
Green River Coal Company prepayments	\$ 4,600	\$ 5,130

In prior years, Big Rivers refinanced portions of its long-term obligations at lower interest rates and incurred refinancing expenses. These costs are being amortized over the term of the RUS Promissory Note (see Note 5).

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. On September 24, 1991, a contract for substitution of coal was executed with Green River Coal. In connection therewith, Big Rivers made fuel prepayments of \$7,000, which Big Rivers is withholding from payment to Green River Coal at a rate of one dollar per ton of coal shipped. Interest on the outstanding balance is based on the prime rate as established by Chemical Bank of New York plus two percent.

5 Long-Term Obligations

A summary of long-term obligations at December 31 is as follows:

	1995	1994
Promissory Note - RUS 8.0 percent	\$ 546,519	\$ 600,542
Unamortized premium	521,291	482,296
	1,067,810	1,082,838
County of Ohio, Kentucky, promissory note,		
with variable interest rate of 5.45 percent and		
5.85 percent at 1995 and 1994, respectively	83,300	83,300
County of Ohio, Kentucky, promissory note,		
with variable interest rate of 5.45 percent and		
5.85 percent at 1995 and 1994, respectively	58,800	58,800
Obligation under power purchased contract (see Note 8)	26,682	31,109
Bank of New York, bank loan 8.0 percent	-	1,806
Chemical Bank, bank loam 8.0 percent	_	2,558
Total long-term obligations	1,236,592	1,260,411
Less cutrent maturities	8,085	15,144
	\$1,228,507	\$1,245,267

### Debt Restructuring Agreement:

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated March 30, 1988, which was executed as part of a Debt Restructuring Agreement. The impact of the Debt Restructuring Agreement was accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers accounted for the effects of the restructuring prospectively as a change in the effective interest rate and did not adjust the carrying amount of the debt.

### Promissory Note - RUS:

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner to that provided by a conventional loan amortization schedule) at an effective interest rate of 8.0 percent for the RUS Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by the RUS (RUS Debt). For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference between the reverse amortization repayment schedule and the conventional loan amortization schedule is reflected as unamortized premium and will be adjusted throughout the term of the RUS Promissory Note. Any unpaid interest is added to the unamortized premium. In return for Big Rivers making all payments on the RUS Promissory Note, the RUS will make all payments required on all prior debt on a timely basis and will not seek to collect additional funds from Big Rivers.

In connection with the Settlement Agreement (see Note 6), the Debt Restructuring Agreement was amended as of January 1, 1990. The amendment provided that if the variable rates to the Aluminum Smelters specified in the Settlement Agreement and in effect on April 1, 1990, remain continuously in effect and unmodified through August 31, 1997, and if during this period, the RUS Promissory Note never exceeds by more than \$18,000 what the RUS Promissory Note would be if only the scheduled annual amounts were paid, then no event of default shall be deemed to have occurred through December 31, 1997. Using this criteria, the principal balance of the RUS Promissory Note cannot exceed \$460,948 at December 31, 1997.

### Other Long-term Obligations:

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds (Interim Bonds), Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky, issued \$83,300 of Pollution Control Refunding Demand Bonds (Refunding Bonds), Series 1985, the proceeds of which were used to refinance the Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent nor greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Chemical Bank irrevocable standby letter of credit, which is due to expire October 15, 1997, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Chemical Bank to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Amounts borrowed against the letter of credit would bear interest at prime plus two percent and become bank amounts as defined by the Debt Restructuring Agreement. The bank amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement. Big Rivers is obligated to fully fund these bonds or bank amounts by January 31, 2010.

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. These bonds bear a variable rate of interest, determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 1, 1996, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Bank of New York to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Amounts borrowed

against the letter of credit would bear interest at prime plus two percent and become bank amounts as defined by the Debt Restructuring Agreement. The bank amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or bank amounts by January 31, 2010.

On February 25, 1988, Big Rivers refinanced \$319,426 of high interest rate debt. As a result of this refinancing, a gain of \$37,734 was realized. As prescribed by regulatory guidelines, this gain is reflected as an unamortized gain on reacquired debt in the accompanying balance sheets and is being amortized into income over the term of the RUS Promissory Note.

#### Debt Maturities:

At December 31, 1995. Big Rivers had, since September 1987, paid total debt service on the RUS Promissory Note in such a manner that principal payments exceeded the required minimum level of such payments by \$51,533. This amount of excess principal payments represents a decrease of \$20,350 during 1995.

Based on the overpayments to date and the required RUS Promissory Note principal balance on December 31, 1997, Big Rivers has calculated the annual payments necessary to avoid an event of default through December 31, 1997, and minimum scheduled payments thereafter. Actual payments may be more or less than the scheduled amounts below. Under this calculation, the maturities of long-term obligations for each of the five years ending subsequent to December 31, 1995, are estimated to be as follows:

<u>Year</u>	RUS Promissory Note	Unamortized Premium	Other Debt	Financial Statement Change in Principal
1996	\$ 44,502	\$ (39,553)	\$ 3,136	\$ 8,085
1997	41,068	(35,705)	3,275	8,638
1998	45,928	(20,158)	3,439	29,209
1999	57,797	11,642	3,544	72,983
2000	53,338	21,908	3,548	78,794

6 Rate Matters

Big Rivers' rates include a ratchet billing demand charge (where current billing units are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers (the Aluminum Smelters) of certain Big Rivers' members. A Settlement Agreement effective January 1, 1990, was reached between Big Rivers, the Aluminum Smelters, and Big Rivers' creditors. The Settlement Agreement preserves the variable aluminum smelter rate based on the market price of aluminum within a defined minimum (1.81 cents per kWh) and maximum (4.4 cents per kWh) as the method of calculating the cash payments to be made by the Aluminum Smelters to Big Rivers. The Settlement Agreement, however, fixes the revenue to be recognized by Big Rivers at 2.91 cents per kWh based on an approximate 99 percent load factor over the term of the agreement. The variable rate will be effective through August 1997 or at which time Big Rivers collects in the aggregate an amount equal to the demand charge calculated over the term of the contract period as discussed in Note 1. Any payments in excess of or under the 2.91 cents per kWh brought about by the variable aluminum smelter rate are recorded as a component of the balancing account in the accompanying balance sheets. Amounts recorded in the balancing account will be used to increase or discrease operating revenues over the term of the agreement to the level of 2.91 cents per kWh. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the Aluminum Smelters to pay at or near the maximum rate of 4.4 cents per kWh.

The Clean Air Act Amendments of 1990 (CAAA-90) require significant reductions in the emission of sulfur dioxide and nitrogen oxide by fossil-fueled electric generating units. The CAAA-90 requires that sulfur dioxide emissions be reduced at generating units in two phases over a ten-year period. In order to meet the requirements, the City of Henderson, Kentucky (the City) and Big Rivers constructed pollution control equipment on the two units owned by the City (see Note 8). On August 31, 1994, the KPSC approved Big Rivers' compliance plan and environmental surcharge tariff, which is designed to recover costs associated with the compliance of CAAA-90. Big Rivers implemented the environmental surcharge in July 1995.

The KPSC has supervised a focused management audit of Big Rivers' fuel procurement policies and procedures. During 1994, the KPSC issued three separate orders directing Big Rivers to refund \$15,460 plus interest related to the period November 1, 1990 to April 30, 1994. For 1995 and 1994, Big Rivers recorded \$312 and \$18,044, respectively, as a reduction in revenues from jurisdictional customers, which represents the rate refund orders in 1994, including an estimate for certain fuel costs currently under review. In addition, the KPSC disallowed prospectively from fuel rate recovery approximately \$6,760 per year related to the Green River Coal contract over the remaining life of the contract. Of the \$6,760 disallowance, a portion is refunded to members prorata based on the jurisdictional energy sold as a percentage of total energy sold.

Intersystem power sales to non-members are a component of full cost recovery under Big Rivers' rate design. A long-term contract has been signed with Oglethorpe Power Corporation (Oglethorpe Power) for the sale of 103 MW of firm power for ten years, beginning in August 1992. Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority.

Two long-term contracts have been signed with Hoosier Energy Rural Electric Cooperative (Hoosier Energy). The first is for the sale of 65 MW of capacity from Big Rivers' combustion turbine during a three-month summer period through year 2000. The second is a peaking power agreement varying from 10 MW in 1993 to 170 MW in 1999. This agreement covers June through September of each calendar year. Hoosier Energy is a RUS cooperative interconnected with Big Rivers. On January 5, 1996, the Hoosier Energy contracts received KPSC approval.

# Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under section 501 (c) (12) of the Internal Revenue Code. To retain tax-exempt status under this section of the Internal Revenue Code, at least 85 percent of the Big Rivers' revenues must be generated from sales to the cooperative's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years, Big Rivers would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax-exempt status. Big Rivers is also subject to Kentucky income tax.

Under the provisions of Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes," Big Rivers is required to record deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes as compared to amounts reported for income tax purposes. Deferred tax assets and liabilities are determined based on these temporary differences using enacted tax rates in effect for the year in which these differences are expected to reverse.

At December 31, 1995 and 1994, Big Rivers had deferred tax assets of \$463,495 and \$396,485, respectively, which primarily relate to tax credits and net non-member operating losses. At December 31, 1995, the tax credits and net non-member operating losses amounted to \$57,735 and \$376,559, and begin expiring in 1998 through 2000 and 1999 through 2010, respectively. Additionally, at December 31, 1995 and 1994, Big Rivers had deferred tax liabilities of \$276,045 and \$220,954, respectively, which primarily relate to depreciation differences on utility plant. At December 31, 1995 and 1994, Big Rivers did not anticipate utilization of a portion of the deferred tax assets, thus a valuation allowance was established of \$187,450 and \$175,531, respectively.

# Power Purchased

Big Rivers, under contracts with the City, leases and operates the City-owned 312 MW generation station (Station Two) and agrees to purchase an allocated portion of the output Big Rivers' portion of Station Two capacity is currently 82 percent, which is expected to decrease to 80 percent by 1997 The contracts expire in 2003, subject to options for extensions, including the option of extending the contracts through the economic life of the power plants.

In order to comply with the CAAA-90, Big Rivers and the City installed pollution control equipment on the Station Two facilities. The existing contracts with the City have been amended to include the cost of installing, operating, and maintaining this equipment. The contract amendments were approved on March 31, 1995 by the KPSC. In 1993, the City and Big Rivers sold emission allowances previously awarded by the EPA which offsets approximately 60 percent of the cost to install the pollution control equipment. Big Rivers' portion of the sale of allowances was approximately \$23,340, which was recorded as a regulatory liability in other deferred credits in the accompanying balance sheets. On August 31, 1994, the KPSC approved the compliance plan and environmental surcharge tariff (see Note 6).

Pursuant to the KPSC order, the allowance proceeds, plus accrued interest, are being refunded prorata to jurisdictional customers in the same year in which the allowances are first available for use, beginning in 1995. For the year ended December 31, 1995, Big Rivers refunded approximately \$1,745 of allowance proceeds and interest. The refund will be completed by December 31, 2002. In addition, Big Rivers would expect to incur additional costs to replace the allowances sold.

Under the terms of the contracts and amendments thereto with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include Big Rivers' respective share of debt service payments necessary to retire the principal and interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded the portion of the principal payments that it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a corresponding amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. Total remaining payments under the lease, including the amounts disclosed as other debt in the debt maturities section in Note 5, were as follows at December 31, 1995:

1996	\$ 4,713
1997	4,654
1998	4,619
1999	4,501
2000	4,260
Thereafter	10,590
	\$ 33,337

The total operating costs under the contracts for 1995, 1994, and 1993 were \$32,776, \$31,996, and \$33,563, respectively. Such costs are accounted for as power purchased in the accompanying statements of revenues and expenses.

# Pension and Deferred Compensation Plans

Big Rivers has non-contributory defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974. Also, Big Rivers has executed non-contributory defined compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. The deferred compensation plan is fully funded and has been suspended for 1995 and 1996.

A reconciliation of the projected benefit obligation and the funded status of the benefit plans at December 31 is as follows:

Actuarial present value of the benefit obligation:	<u>1995</u>	<u>1994</u>	
Accumulated benefit obligation, including vested benefits of \$21,911, and \$19,189	\$ (21,979)	\$ (19,246)	
Projected benefit obligation for services rendered	\$ (36,630)	\$ (32,927)	
Plan assets at fair value, primarily listed stocks			
and U.S. Treasury Bonds	26,020	19,902	
Projected benefit obligation in excess of plan assets	(10,610)	(13,025)	
Unrecognized net transition assets	(1,321)	(1,541)	
Unrecognized prior service costs	1,900	2,128	
Unrecognized net loss	5,718	9,368	
Unfunded accrued pension cost	\$ (4,313)	\$ (3,070)	
Net periodic pension costs, which are calculated based on			
actuarial assumptions at January 1, were as follows			
for the years ended December 31:	<u>1995</u>	<u>1994</u>	<u>1993</u>
Service cost ~ benefits earned during the year	\$ 2,173	\$ 2,233	\$ 1,660
Interest cost on projected benefit obligation	2,369	2,147	1,726
Expected return on plan assets	(1,801)	(1,655)	(1,415)
Amortization of transition assets	(220)	(220)	(220)
Amortization of prior service costs	228	228	230
Amortization of net loss	179	230	30
Special termination benefits			396
Net periodic pension costs	\$ 2,928	\$ 2,963	\$ 2,407
Assumptions used to develop the projected benefit			
obligation were:	<u>1995</u>	<u>1994</u>	<u>1993</u>
Discount rates	7.5%	7 5%	7.5%
Rates of increase in compensation levels	4.0	4.0	4.0
Expected long-term rate of return on assets	8.5	8.5	8.5

Total expense related to the pension and deferred compensation plans was \$2,966, \$3,290. and \$3,108 in 1995, 1994, and 1993, respectively.



# Postretirement Benefits Other Than Pensions

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. For all employees who retired prior to 1994, Big Rivers pays 80 percent of the cost from age 62-65, and from age 65, for salaried employees, Big Rivers pays 100 percent of Medicare supplement cost. For salaried employees who retire after December 31, 1993, the paid Medicare supplement was eliminated.

The discount rate used in computing the postretirement obligation for 1995 and 1994 was 8.0 percent. A health care cost trend rate of 10.0 percent in 1995 declining to 6.0 percent in 2004 was utilized. The health care cost trend rate assumption had a significant effect on the amounts reported resulting in an unrecognized net gain of \$590 for 1995. A 1.0 percent increase in the health care trend rate each year would increase the aggregate service and interest costs for 1995 by \$92 and the accumulated other postretirement benefit obligation by \$719.

The components of net periodic postretirement benefit costs for the years ended December 31 were as follows:

	<u>1995</u>	1994
Service cost ~ benefits earned during the year	\$ 230	\$ 246
Interest cost on projected benefit obligation	376	331
Amortization of transition obligation	207	207
Amortization of gain	(2)	_
Net periodic postretirement benefit costs	\$ 811	\$ 784

A reconciliation of the postretirement benefit obligation and funded status of the plan at December 31 is as follows:

	1995	1994
Accumulated postretirement benefit obligation ~		
retirees	\$ (1,417)	\$ (1,683)
Other eligible active participarits	(493)	(558)
Other active participants	(3,317)	(3,062)
Total benefit obligation	(5,227)	(5,303)
Unrecognized transition obligation	3,514	3,721
Unrecognized net gain	(590)	
Unfunded accrued postretirement cost	\$ (2,303)	\$ (1,582)

In addition to the postretirement plan discussed above, in 1992 Big Rivers began a postretirement benefit which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20 percent of the employee's base hourly rate at time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is \$365 and \$601 at December 31, 1995 and 1994, respectively, and the postretirement expense recorded was \$267, and \$130, for 1994, and 1993, respectively. No postretirement expense related to the sick leave benefit was recorded for 1995.

# Related Parties and Major Customers

	Ope	Operating Revenues			
Members.	1995	1994	1993		
Green River Electric Corporation Henderson Union Electric Cooperative Jackson Purchase Electric Cooperative Corporation	\$ 137,203 90,724 24,833	\$ 132,400 92,167 23,960	\$ 133,194 106,018 23,709		
Meade County Rural Electric Cooperative Corporation KPSC Ordered Fuel Cost Refund (see Note 6)	13,436 (312)	12,758 (18,044)	12,463		
Non-members	73,930	72,173	75,456		
Other revenue	96	157	106		
	\$ 339,910	\$ 315,571	\$ 350,946		

NSA and Alcan purchase substantial amounts of electric energy under contracts with Big Rivers' members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for NSA and Henderson Union Electric Cooperative for Alcan) were as follows:

<u>Year</u>	Green River	Henderson <u>Union</u>	Combined
1995	\$ 85,518	\$ 67,029	\$152,547
1994	84,217	69,151	153,368
1993	86,428	83,432	169,860

In 1994, Alcan closed 80,000 kilowatts of its smelter operation capacity at Sebree, Kentucky. Alcan is required by contract to continue paying the fixed demand cost at the tariff rate of \$10.15 per kW month. All energy associated with this capacity will be sold when possible on the open market by Big Rivers. Alcan will receive a credit for all power sold in excess of Big Rivers' energy cost.

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and requiring payments for power consumed and only such other payments as each member receives from its customers.

At December 31, 1995 and 1994, Big Rivers had accounts receivable from its members of approximately \$25,669, and \$24,040, respectively.

# 12 Disclosure of the Fair Value of Financial Instruments

The carrying amounts of Big Rivers' cash and cash equivalents approximate the fair value due to the short maturity of these financial instruments. The assumption used in determining the fair value of Big Rivers' long-term variable interest rate debt is that the fair value approximates the carrying value, as the debt reprices weekly. Due to the uncertainties described in Notes 1 and 5, the ability of Big Rivers to obtain new debt or replace its existing debt is indeterminable. Accordingly, it is not practicable for Big Rivers to estimate the fair value of its long-term fixed interest rate debt. The fair value of all other financial instruments is estimated by management to approximate the carrying value.

# Comparative Statistical Analysis

Operating Revenues         \$ 339,910,431         315,570,913         350,945,862         319,907,499           Expenses:         Operation and Maintenance         200,753,719         199,481,485         196,548,190         183,693,972           Purchased Power and Interchanged, Net         42,682,480         39,173,662         45,150,914         33,373,0825           Deprecation         45,422,648         45,106,596         45,257,415         44,980,616           Taxes         4,998,231         93,235,749         92,708,822         335,746,61           Interest         94,983,231         93,235,749         92,708,822         393,876,61           Other         (2,652,823)         (1,065,405)         (1,043,154)         (999,831)           Total         385,786,521         380,592,671         383,125,652         359,138,518           Operating Margins (Loss)         (45,876,090)         (65,021,738)         (32,179,790)         (39,231,099)           Non-operating Margins (Loss)         \$1,561,103         1,369,775         1,545,675         1,275,827           Net Margins (Loss)         \$4,4314,987)         (65,651,938)         (30,634,115)         (37,955,232)           Utility Plant at Cost         \$1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,5		1995	1994	1993	1992
Operation and Maintenance Purchased Power and Interchanged, Net Interchanged, N	1 0	\$ 339,910,431	315,570,913	350,945,862	319,907,459
Interchanged, Net   42,682,480   39,173,662   45,150,914   33,730,825   Depreciation   45,422,648   45,106,596   45,257,415   44,980,616   Taxes   44,972,606   46,005,844   4,005,465   43,74,765   10,745,765   1	Operation and Maintenance	200,753,719	199,481,485	196,548,190	183,693,972
Depreciation         45,422,648         45,106,596         45,257,415         44,880,616           Taxes         4,597,266         4,660,384         4,505,465         4,37,765           Interest         94,883,231         93,235,749         92,706,822         93,358,171           Other         (2,652,823)         (1,065,405)         (1,043,154)         (999,83)           Total         385,786,521         380,592,671         383,125,652         359,138,518           Operating Margins (Loss)         (45,876,090)         (65,021,758)         (32,179,790)         (39,231,059)           Non-operating Margins (Loss)         1,561,103         1,369,775         1,545,675         1,275,827           Net Margins (Loss)         \$ (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost         \$ 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Construction Work in Progress         3,085,344         33,046,229         4,975,491         10,563,767           Total Electric Plant         1,557,904,520         1,533,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         \$ 1,082,293         1,049,394,417         1,050,620,960         1,087,899,561		42,682,480	39,173,662	45,150,914	33,730,825
Taxes Interest Interest         4,597,266         4,606,584         4,505,465         4,374,765           Interest Other         94,983,231         93,235,749         92,706,822         93,338,171           Other         (2,652,823)         (1,065,405)         (1,043,154)         (999,831)           Total         385,786,521         380,592,671         383,125,652         359,138,518           Operating Margins (Loss)         (45,876,090)         (65,021,758)         (32,179,790)         (39,231,059)           Non-operating Margins (Loss)         5 (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost         \$ 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Construction Work in Progress         3,085,344         33,046,229         4,975,491         10,563,767           Total Electric Plant         1,557,904,520         1,553,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         \$ 1,082,992,338         1,046,904,417         1,050,620,960         1,087,399,561           Total Assets         \$ 1,016,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,166         1,190         1,217	<u> </u>				
Other         (2,652,823)         (1,065,405)         (1,043,154)         (999,831)           Total         385,786,521         380,592,671         383,125,652         359,138,518           Operating Margins (Loss)         (45,876,090)         (65,021,758)         (32,179,790)         (39,231,059)           Non-operating Margins (Loss)         1,561,103         1,369,775         1,545,675         1,275,827           Net Margins (Loss)         5 (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost         5 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Construction Work in Progress         3,085,344         33,046,229         4,975,491         10,563,767           Total Electric Plant         1,579,04,520         1,533,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         549,612,182         504,460,557         461,496,317         419,709,707           Utility Plant Net         5 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         5 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,459         1,459         1,459	-	4,597,266	4,660,584	4,505,465	4,374,765
Total         385.786.521         380.592.671         383.125.652         359.138.518           Operating Margins (Loss)         (45.876.090)         (65.021.758)         (32.179.790)         (39.231.059)           Non-operating Margins (Loss)         1.561,103         1.369.775         1.543.675         1,275.827           Net Margins (Loss)         \$ (44,314.987)         (63.651.983)         (30.634.115)         (37.955.232)           Utility Plant at Cost         \$ 1.554.819.176         1.520.318.745         1.507.141.786         1.497.045.501           Construction Work in Progress         3.085.344         33.046.229         4.975.491         10.563.767           Total Electric Plant         1.557.904.520         1.533.364.974         1.512.117.277         1.507.609.268           Less Accumulated Depreciation         549.612.182         504.460.557         461.496.317         419.709.707           Utility Plant Net         \$ 1,008.292.338         1,048.904.417         1.050.620.960         1.087.899.561           Total Assets         \$ 1,101.623.898         1,140.973.124         1,143.388.554         1,180.152.394           System Peak Demand - MW         1,166         1,190         1.217         1.166           Net Generating Capacity Owned - MW         1,459         1,459	Interest	94,983,231	93,235,749	92,706,822	93,358,171
Operating Margins (Loss)         (45,876,090)         (65,021.758)         (32,179,790)         (39,231,059)           Non-operating Margins (Loss)         1,561,103         1,369,775         1,545,675         1,275,827           Net Margins (Loss)         5 (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost         5 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Construction Work in Progress         3,085,344         33,046,229         4,975,491         10,563,767           Total Electric Plant         1,557,904,520         1,533,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         549,612,182         504,460,557         461,496,317         419,709,707           Utility Plant Net         \$ 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         \$ 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,459         1,459         1,459         1,459           Net Generating Capacity Owned - MW         1,459         1,459         1,459         1,459           Net Generating Capacity Owned - MW         1,720         7,454 42 <t< td=""><td>Other</td><td>(2,652,823)</td><td>(1,065,405)</td><td>(1,043,154)</td><td>(999,831)</td></t<>	Other	(2,652,823)	(1,065,405)	(1,043,154)	(999,831)
Non-operating Margins (Loss)         1.561,103         1,369,775         1.545,675         1,275,827           Net Margins (Loss)         \$ (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost Construction Work in Progress         \$ 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Total Electric Plant Less Accumulated Depreciation         1,557,904,520         1,553,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         \$ 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         \$ 1,010,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,166         1,190         1,217         1,166           Net Generating Capacity Owned - MW         1,459         1,459         1,459         1,459           Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178           Sales to Members - GWh         7,712.05         7,454 42         8,445.13         8,326,34           Sales to Non-Members - GWh         3,021.54         2,587.90         2,802,33 <t< td=""><td>Total</td><td>385,786,521</td><td>380,592,671</td><td>383,125,652</td><td>359,138,518</td></t<>	Total	385,786,521	380,592,671	383,125,652	359,138,518
Net Margins (Loss)         \$ (44,314,987)         (63,651,983)         (30,634,115)         (37,955,232)           Utility Plant at Cost Construction Work in Progress         \$ 1,554,819,176         1,520,318,745         1,507,141,786         1,497,045,501           Total Electric Plant Less Accumulated Depreciation         1,557,904,520         1,553,364,974         1,512,117,277         1,507,609,268           Less Accumulated Depreciation         549,612,182         504,460,557         461,496,317         419,709,707           Utility Plant Net         \$ 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         \$ 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,459         1,459         1,459         1,459         1,459           Net Generating Capacity Owned - MW         1,78         178         178         178           Sales to Members - GWh         2,54         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454+42         8,445,13         8,326,34         8,18,27           Purchased HMP&L Energy - GWh         1,368,26 <td< td=""><td>Operating Margins (Loss)</td><td>(45,876,090)</td><td>(65,021,758)</td><td>(32,179,790)</td><td>(39,231,059)</td></td<>	Operating Margins (Loss)	(45,876,090)	(65,021,758)	(32,179,790)	(39,231,059)
Utility Plant at Cost \$1,554,819,176 1,520,318,745 1,507,141,786 1,497,045,501 10,563,767  Total Electric Plant 1,557,904,520 1,553,364,974 1,512,117,277 1,507,609,268 1,497,097,070  Utility Plant Net \$1,008,292,338 1,048,904,417 1,050,620,960 1,087,899,561  Total Assets \$1,101,623,898 1,140,973,124 1,143,388,554 1,180,152,394  System Peak Demand - MW 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,459 1,78 1,78 1,78 1,78 1,78 1,78 1,78 1,78		1,561,103	1,369,775	1,545,675	
Construction Work in Progress         3.085,344         33.046,229         4.975,491         10.563,767           Total Electric Plant Less Accumulated Depreciation         1.557,904,520         1.553,364,974         1.512,117,277         1.507,609,268           Less Accumulated Depreciation         \$1,008,292,338         1.048,904,417         1.050,620,960         1.087,899,561           Total Assets         \$1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,459         1,459         1,459         1,459           Net Generating Capacity Owned - MW         1,459         1,459         1,459           Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454,42         8,445.13         8,326,34           Sales to Non-Members - GWh         3,021.54         2,587,90         2,802.33         1,463,50           Generated - GWh         9,019.02         8,655.83         9,206,67         8,418,27           Purchased HMP&L Energy - GWh         1,368,26         1,344,70         1,670,12         1,211,98           Other Purchased Ener	Net Margins (Loss)	\$ (44,314,987)	(63,651,983)	(30,634,115)	(37,955,232)
Construction Work in Progress         3.085,344         33.046,229         4.975,491         10.563,767           Total Electric Plant Less Accumulated Depreciation         1.557,904,520         1.553,364,974         1.512,117,277         1.507,609,268           Less Accumulated Depreciation         549,612,182         504,460,557         461,496,317         419,709,707           Utility Plant Net         5 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         5 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,459         1,459         1,459         1,459         1,459         1,459           Net Generating Capacity Owned - MW         1,78         178         178         178         178           Sales to Members - Gwh         254         258         261         262         Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454,42         8,445,13         8,326,34         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30         36,30 </td <td>Utility Plant at Cost</td> <td>\$ 1,554,819,176</td> <td>1,520,318,745</td> <td>1,507,141,786</td> <td>1,497,045,501</td>	Utility Plant at Cost	\$ 1,554,819,176	1,520,318,745	1,507,141,786	1,497,045,501
Less Accumulated Depreciation         549,612,182         504,460,557         461,496,317         419,709,707           Utility Plant Net         \$ 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         \$ 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,166         1,190         1,217         1,166           Net Generating Capacity Owned - MW         1,459         1,459         1,459           Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454 42         8,445,13         8,326,34           Sales to Non-Members - GWh         3,021.54         2,587,90         2,802.33         1,463.50           Generated - GWh         9,019.02         8,655.83         9,206.67         8,418.27           Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8	•	3,085,344	33,046,229	4,975,491	10,563,767
Less Accumulated Depreciation         549,612,182         504,660,557         461,496,317         419,709,707           Utility Plant Net         \$ 1,008,292,338         1,048,904,417         1,050,620,960         1,087,899,561           Total Assets         \$ 1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,166         1.190         1.217         1,166           Net Generating Capacity Owned - MW         1,459         1,459         1,459           Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454 42         8,445.13         8,326.34           Sales to Non-Members - GWh         3,021.54         2,587.90         2,802.33         1,463.50           Generated - GWh         9,019.02         8,655.83         9,206.67         8,418.27           Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8	Total Electric Plant	1,557,904,520	1,553,364.974	1,512,117,277	1,507,609,268
Total Assets         \$1,101,623,898         1,140,973,124         1,143,388,554         1,180,152,394           System Peak Demand - MW         1,166         1,190         1,217         1,166           Net Generating Capacity Owned - MW         1,459         1,459         1,459         1,459           Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454 42         8,445.13         8,326.34           Sales to Non-Members - GWh         3,021.54         2,587 90         2,802.33         1,463.50           Generated - GWh         9,019.02         8,655.83         9,206.67         8,418.27           Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8         81.3         82.7           Permanent Employees at Year-End         820         837         847         846           Average Cost of Coal Used         29.26         28.27         27.92      <		549,612,182	504,460,557	461,496,317	419,709,707
System Peak Demand - MW       1,166       1,190       1,217       1,166         Net Generating Capacity Owned - MW       1,459       1,262       2,802,33       1,463.50       3,261.34       3,261.34       3,21.34       1,450.50       3,21.54       2,587,90       2,802.33       1,463.50       3,21.24 <td>Utility Plant Net</td> <td>\$ 1,008,292,338</td> <td>1,048,904,417</td> <td>1,050,620,960</td> <td>1,087,899,561</td>	Utility Plant Net	\$ 1,008,292,338	1,048,904,417	1,050,620,960	1,087,899,561
Net Generating Capacity Owned - MW         1,459         1,261         262         201         202         3,447         3,447         3,263,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34         3,261,34	Total Assets	\$ 1,101,623,898	1,140,973,124	1,143,388,554	1,180,152,394
Net Generating Capacity Owned - MW Net HMP&L Capacity Purchased - MW Net HMP&L Capacity Purchased - MW 254 Other Purchased Capacity - MW 178 178 178 178 262 Other Purchased Capacity - MW 178 Sales to Members - GWh Sales to Non-Members - GWh 3,021.54 2,587.90 2,802.33 1,463.50  Generated - GWh Purchased HMP&L Energy - GWh 1,368.26 Other Purchased Energy - GWh 576.00 76.5 73.8 81.3 82.7  Permanent Employees at Year-End 820 837 847 846  Average Cost of Coal Used Price Per Ton - S c/MM BTU 127.9 129.4 125.6 1,344.70 1,459 1,45					
Net HMP&L Capacity Purchased - MW         254         258         261         262           Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454.42         8,445.13         8,326.34           Sales to Non-Members - GWh         3,021.54         2,587.90         2,802.33         1,463.50           Generated - GWh         9,019.02         8,655.83         9,206.67         8,418.27           Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8         81.3         82.7           Permanent Employees at Year-End         820         837         847         846           Average Cost of Coal Used         29.32         29.26         28.27         27.92           c/MM BTU         127.9         129.4         125.6         125.5	System Peak Demand - MW	1,166	1,190	1,217	1,166
Other Purchased Capacity - MW         178         178         178         178           Sales to Members - GWh         7,712.05         7,454 42         8,445.13         8,326.34           Sales to Non-Members - GWh         3,021.54         2,587 90         2,802.33         1,463.50           Generated - GWh         9,019.02         8,655.83         9,206.67         8,418.27           Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8         81.3         82.7           Permanent Employees at Year-End         820         837         847         846           Average Cost of Coal Used         29.32         29.26         28.27         27.92           c/MM BTU         127.9         129.4         125.6         125.5	Net Generating Capacity Owned - MW	1,459	1,459	1,459	1,459
Sales to Members - GWh       7,712.05       7,454 42       8,445.13       8,326.34         Sales to Non-Members - GWh       3,021.54       2,587 90       2,802.33       1,463.50         Generated - GWh       9,019.02       8,655.83       9,206.67       8,418.27         Purchased HMP&L Energy - GWh       1,368.26       1,344.70       1,670.12       1,211.98         Other Purchased Energy - GWh       576.00       277.69       588.60       305.91         System Load Factor - %       76.5       73.8       81.3       82.7         Permanent Employees at Year-End       820       837       847       846         Average Cost of Coal Used       29.32       29.26       28.27       27.92         c/MM BTU       127.9       129.4       125.6       125.5		254	258	261	262
Sales to Non-Members - GWh       3,021.54       2,587 90       2,802.33       1,463.50         Generated - GWh Purchased HMP&L Energy - GWh Other Purchased Energy - GWh       1,368.26       1,344.70       1,670.12       1,211.98         Other Purchased Energy - GWh       576.00       277.69       588.60       305.91         System Load Factor - %       76.5       73.8       81.3       82.7         Permanent Employees at Year-End       820       837       847       846         Average Cost of Coal Used Price Per Ton - \$       29.32       29.26       28.27       27.92         c/MM BTU       127.9       129.4       125.6       125.5	Other Purchased Capacity - MW	178	178	178	178
Generated - GWh Purchased HMP&L Energy - GWh Other Purchased Energy - GWh Other Purchased Energy - GWh System Load Factor - %  Permanent Employees at Year-End  Average Cost of Coal Used Price Per Ton - \$ 29.32 29.26 2,56736  2,50736  8,418.27  8,418.27  1,211.98  1,368.26 1,344.70 1,670.12 1,211.98  305.91  82.7  82.7  82.7  846  847  846  846  847  846		7,712.05	7,454 42	8,445.13	8,326.34
Purchased HMP&L Energy - GWh         1,368.26         1,344.70         1,670.12         1,211.98           Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8         81.3         82.7           Permanent Employees at Year-End         820         837         847         846           Average Cost of Coal Used             Price Per Ton - \$             29.32         29.26         28.27         27.92           c/MM BTU         127.9         129.4         125.6         125.5	Sales to Non-Members - GWh	3,021.54	2,587 90	2,802.33	1,463.50
Other Purchased Energy - GWh         576.00         277.69         588.60         305.91           System Load Factor - %         76.5         73.8         81.3         82.7           Permanent Employees at Year-End         820         837         847         846           Average Cost of Coal Used         Price Per Ton - \$               29.32         29.26         28.27         27.92           ¢/MM BTU         127.9         129.4         125.6         125.5		9,019.02	8,655.83	9,206.67	8,418.27
System Load Factor - %       76.5       73.8       81.3       82.7         Permanent Employees at Year-End       820       837       847       846         Average Cost of Coal Used         Price Per Ton - \$		1,368.26	1,344.70	1,670.12	1,211.98
Permanent Employees at Year-End 820 837 847 846  Average Cost of Coal Used  Price Per Ton - \$ 29.32 29.26 28.27 27.92  ©/MM BTU 127.9 129 4 125.6 125.5	Other Purchased Energy - GWh	576.00	277.69	588.60	305.91
Average Cost of Coal Used  Price Per Ton - \$ 29.32 29.26 28.27 27.92  ©/MM BTU 127.9 129.4 125.6 125.5	System Load Factor - %	76.5	73.8	81.3	82.7
Price Per Ton - \$ 29.32 29.26 28.27 27.92 c/MM BTU 127.9 129.4 125.6 125.5	Permanent Employees at Year-End	820	837	847	846
©/MM BTU 127.9 129.4 125.6 125.5	9				
				28.27	27.92
thirty-twe	¢/MM BTU	127.9	129 4	125.6	125.5
		thirty-tree			

Ten-Year Summary

1991	1990	1989	1988	1987	1986
331,334,709	331,736,393	389,976,759	399,277,507	300,084,362	227,664,219
193,288,174	191,389,914	170,941,916	187,344,006	169,931,331	130,991,511
39,248,839	40,263,144	35,434,879	39,158,896	39,146,440	38,214,277
44,809,522	44,564,475	44,333,598	49,310,860	53,555,259	18,798,750
4,365,522	4,201,594	4,011,142	3,906,621	3,817,850	2,515,787
95,071,442	97,222,523	101,748,177	103,607,079	124,351,304	51,520,808
(1,008,592)	682,563	752,017	612,200	597,187	233,931
375,774,907	378,324,213	357,221,729	383,939,662	391,399,371	242,275,064
(44,440,198)	(46,587,820)	32,755,030	15,337,845	(91,315,009)	(14,610,845)
1,505,489	2,113,282	2,378,289	3,471,174	2,684,163	(26,614,194)
(42,934,709)	(44,474,538)	35,133,319	18,809,019	(88,630,846)	(41,225,039)
1,466,355,537	1,462,170,906	1,454,882,990	1,451,937,802	1,448,581,890	1,452,144,009
11,986,253	9,204,400	4,162,708	1,226,596	1,448,505	2,080,925
1,478,341,790	1,471,375,306	1,459,045,698	1,453,164,398	1,450,030,395	1,454,224,934
376,616,976	331,805,315	288,884,804	245,556,080	196,710,029	143,479,823
1,101,724,814	1,139,569,991	1,170,160,894	1,207,608,318	1,253,320,366	1,310,745,111
1,225,216,359	1,267,340,928	1,322,367,888	1,386,197,045	1,421,349,400	1,438,564,861
1,168	1,174	1,177	1,157	990	993
1,459	1,459	1,459	1,459	1,459	1,448
263	264	264	264	270	271
178	178	178	178	178	178
8,314.32	8,191.46	8,072.76	7,814.61	6,271.32	6,211.79
2,055.13	2,592.86	1,500.96	3,188.51	3,993.08	3,303.68
8,664.31	9,010.66	8,047.11	9,270.21	8,321.80	6,609.70
1,480.77	1,668.90	1,388.66	1,716.20	1,932.61	1,631.87
415.91	337.14	314.14	262.04	284.69	336.38
83.1	81.9	80.0	77.6	75.5	74.1
875	868	857	855	856	863
28.51	28.73	27.82	28.05	27.48	27.83
129.2	129.2	126.5	125.7	124.3	127.6

# 1994 ANNUAL REPORT



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# PROFILE

Headquartered in Henderson, Kentucky, Big Rivers Electric Corporation is a generation and transmission cooperative owned by the members it serves. Since its origination in 1961, Big Rivers has remained committed to providing reliable wholesale electric service on a not-for-profit basis to its four member cooperatives. In turn, these cooperatives, owned by their 85,000 consumer-members, distribute the electricity at retail, on a not-for-profit basis, in portions of 22 counties located in western Kentucky.

Green River Electric Corporation		
----------------------------------	--	--

3111 Fairview Drive

Owensboro, Kentucky

Henderson Union Electric Cooperative

6402 Old Corydon Road

Henderson, Kentucky

Meade County Rural Electric Cooperative Corporation

1351 Highway 79

Brandenburg, Kentucky

Jackson Purchase Electric Cooperative Corporation

2900 Irvin Cobb Drive

Paducah, Kentucky

# FINANCIAL HIGHLIGHTS

(Dollars in thousands)

	1994	1993	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	315,571	350,946	(35,375)	(10.1)
Operating Expenses	288,422	291,462	(3,040)	(1.0)
Net Margins	(63,652)	(30,634)	(33,018)	(107.8)
Capital Expenditures	29,875	16,404	13,471	82.1
Cost of Fuel Used	115,365	117,400	(2,035)	(1.7)
System Peak Demand (Megawatts)	1,190	1,21 <i>7</i>	(27)	(2.2)
Energy Sold to Members (MWh)	7,454,426	8,445,136	(990,710)	(11.7)
Energy Sold to Others (MWh)	2,587,896	2,802,328	(214,432)	(7.7)
Revenue per kWh Sold (Mills)	31.41	31.19	.22	.7

# YEAR IN REVIEW

### DISCUSSIONS OF 1994

he year began with the continuation of investigations by the Federal Bureau of Investigation and the Internal Revenue Service of the company's former general manager, W. H. Thorpe, certain coal suppliers, and other individuals not related to the company. Big Rivers Electric Corporation is not, and has not been, a target of these investigations and continues to fully cooperate with the investigators.

On June 28, 1994, Thorpe was indicted and charged with various counts including mail fraud, racketeering, and tax fraud. Also charged in the indictment were Green River Coal Company (GRCC) and Clyde Brown, Jr., an owner of GRCC. Thorpe continues to maintain his innocence and a trial has been scheduled to begin in April 1995.

Two of the individuals under investigation, Eddie R. Brown (not related to Clyde Brown, Jr.) and Shirley Pritchett, were indicted, pleaded guilty, and were convicted on charges relating to corruption in the western Kentucky coal industry.

In a plea agreement in the U.S. District Court for Western Kentucky, Pritchett agreed to pay Big Rivers approximately \$1 million in restitution. Big Rivers filed a claim with, and received \$490,000 from, its fiduciary insurance company for the alleged wrongful acts of Thorpe related to which Eddie R. Brown and Pritchett pleaded guilty.

The company has also filed civil law-suits against the wrongdoers to recover damages. During the year, a settlement was negotiated with Eddie R. Brown for the payment of \$900,000 plus interest over 20 months. Through December 31, 1994, Brown has paid \$578,314 on the claim which includes \$28,314 of interest. The remaining civil actions were pending at year end.

Big Rivers has filed a lawsuit seeking a declaratory judgement to set aside three coal contracts with Costain Coal, Inc. The contracts were entered into in 1981, 1983, and 1984 with Jim Smith Contracting Company. Smith sold the coal contracts and other coal properties to Costain in 1987. In 1988, Smith paid Thorpe \$500,000 for advice associated with the sale of a railroad line.

During 1993, the Kentucky Public Service Commission (KPSC) conducted a "focused management audit" of Big Rivers' fuel procurement practices and procedures, as discussed in more detail elsewhere in this report. The auditor expressed an opinion that Big Rivers had approximately \$6 million in unreasonable fuel costs during the period under review. Of these unreasonable costs, \$5.2 million related to a 1988 amendment modifying the productivity index provisions of Big Rivers' coal contract with GRCC. Big Rivers notified GRCC that it would seek to recover those costs from GRCC.

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Following Big Rivers' notification, GRCC filed for bankruptcy protection under Chapter 11 The Bankruptcy Court stayed discovery procedures until the case could either be heard or disputes settled through the assistance of a courtappointed examiner.

On February 18, 1994, Big Rivers, the Kentucky Attorney General, and the intervenors, including Alcan Aluminum Corporation (Alacan), National Southwire Aluminum Company (NSA), and Commonwealth Aluminum Corporation, filed a Settlement Stipulation with the KPSC to be effective January 1, 1994 The agreement proposed to resolve all issues related to the Fuel Adjustment Clause (FAC) and/or fuel procurement practices of Big Rivers prior to the date thereof and the effect of such practices on allowable fuel costs for all past, present, and future periods. The Setilement Stipulation provided that GRCC be paid \$3.61 per ton over the price it pays for coal received from its substitute coal supplier, and that Big Rivers not include \$1.80 per ton of that amount in the FAC. The ratepayers would have received a reduction in fuel costs, including the \$1.80 not passed through the FAC, of approximately \$9 per ton, or approximately \$100 million during the remaining 11 years of the contract. Subsequent to the filing of the Settlement Stipulation, the aluminum companies who were parties to the agreement, notified the KPSC of their attempt to withdraw the agreement. On March 18, 1994, the KPSC rejected the Settlement Stipulation.

As previously mentioned, the KPSC ordered a "focused management audit" of Big Rivers' fuel procurement activities and held a public hearing from October 26 to November 5, 1993. Although the auditor expressed an opinion that Big Rivers had approximately \$6 million in unreasonable fuel costs during the period under review, on July 21, 1994, the KPSC ordered Big Rivers to:

- (1) refund \$10.8 million beginning with services provided in August 1994 and continuing each month thereafter for the following 11 months by crediting \$900,000 plus interest to fuel costs:
- (2) generally, adjust the cost recoverable through the FAC for coal purchased from GRCC to the amount paid to the substitute supplier under the GRCC contract, plus \$4.52 a ton, and
- (3) within 90 days, develop a mechanism to distribute to customers amounts received by Big Rivers as damages or awards in various judicial proceedings involving its coal contracts and fuel procurement practices.

On August 9 and November 1, 1994, the KPSC issued additional orders regarding the application of the FAC for the six-month periods ending October 31, 1993, and April 30, 1994, directing Big Rivers to refund approximately \$2.3 million plus interest for each of the two periods.

The amounts ordered to be refunded consisted of the KPSC's determinations of unreasonable fuel costs associated with the GRCC contract.

Those determinations relate to the amendment

regarding the productivity index and the implementation of the substitution clause under the contract. The KPSC ordered that only \$4.52 of the approximate \$11.15 per ton Big Rivers paid GRCC above the amount GRCC paid the substitute supplier could be included in the FAC. Big Rivers has appealed this order to the Franklin Circuit Court.

In 1993, Webster County Coal Corporation, a subsidiary of MAPCO Coal, Inc. (MAPCO), filed suit against Big Rivers in the Webster County Circuit Court claiming that its costplus contract for the Retiki Mine entitles it to recover mine closing costs. Big Rivers contends that the contract does not provide for mine closing costs. Since September of 1993, Big Rivers has withheld mine closing costs from MAPCO's monthly billings. According to MAPCO's counsel, these closing costs are estimated to be from \$10 million to \$15 million.

Because of the low-quality coal being delivered from the Retiki Mine, Big Rivers and Webster County Coal agreed to the closure of that mine effective January 27, 1995, with the provision for MAPCO to provide substitute coal from other mines to Big Rivers until January 13, 1996, the end of the contract term. This agreement does not affect the lawsuit relating to mine closing costs. The suit is still pending and a trial date in October 1995 has been set.

In 1993, the U.S District Court of Southern Indiana rendered a decision in favor of Big Rivers in a lawsuit involving Delta Mining Corporation. This former coal supplier alleged that Big Rivers owed \$15.7 million in damages for not

accepting the total quantity of coal required under a 10-year contract made in 1977 Delta Mining appealed the decision and in March 1994, the U.S. Court of Appeals for the Seventh Circuit upheld the decision of the U.S. District Court in favor of Big Rivers.

On January 20, 1995, NSA and Alcan filed a derivative action suit in Henderson Circuit Court against Big Rivers and its individual directors. The action seeks the dissolution of Big Rivers as a corporation, contending that persons in control of the corporation, including the directors, have acted, are acting, or will act in a manner that is illegal or fraudulent. The suit further claims damages of more than \$83 million from the individual directors, whom the Aluminum Smelters allege breached various duties owed to Big Rivers.

In September, Morton Holbrook retired after serving more than 20 years as Big Rivers' general counsel. Holbrook was replaced by Jim Miller, a partner in the Owensboro, Kentucky, law firm of Holbrook, Sullivan, Mountjoy and Stainback. Miller was selected after an extensive search by Big Rivers' legal committee.

#### FUELS

The cost of fuel consumed in generating electricity is Big Rivers' single largest expenditure. About three-fourths of the coal requirements come from Kentucky mines located in the service areas of the member cooperatives.

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During 1994, 4.5 million tons of coal were burned in generating electricity, an average of 12,417 tons per day. This compares to 4.9 million tons, 13,470 tons per day, in 1993. Fuel costs for the year (including Big Rivers' share of Henderson Municipal Power and Light [HMP&L] Station Two, reported as purchased power) were \$133.6 million, a decrease of \$6.1 million from 1993.

The average cost of coal was \$29.26 per ton, equivalent to 129.4 cents per million Btu. This compares to \$28.27 per ton, or 125.6 cents per million Btu last year.

Big Rivers' Board of Directors approved changes in the Fuels Department bidding procedures and reestablished a Fuels Committee. The committee consists of one board member from each of the four member distribution cooperatives. The new bidding procedures require that all formal sealed bids be opened in public with at least three Big Rivers' employees present. All contracts for coal and coal transportation are still approved by the Board of Directors. General procedures were established for the procurement of coal on long-term, medium-term, and short-term purchases, as well as for supplemental purchase orders, and emergency or "distress" coal purchases.

With the installation of the scrubbers on HMP&L Station Two, Big Rivers will be able to use coal of less-stringent quality specifications, thereby reducing fuel costs at that facility.

### **HUMAN RESOURCES**

A three-year contract with the International Brotherhood of Electrical Workers (I.B.E.W. Local 1701), representing approximately 498 employees, was negotiated and approved by the union membership, and became effective October 15, 1994. This contract, coupled with several non-negotiated improvements to the savings plan and life insurance program, will help pave the way for improved employee and labor relations in the coming years.

The focus of Big Rivers' safety programs is directed toward maintaining a safe working environment for the employees. The success of these efforts was evident when Wilson plant personnel completed 1,229 days of work prior to a lost workday incident in 1994

At year end, Big Rivers established a record low of nine lost-time injuries. The 38 reported injuries tied the record lowest reported injury rate since 1978. The 1994 excellent safety record reflects a continuing commitment to safety by the employees and management.

#### CAPITAL EXPENDITURES

Total capital expenditures for construction in 1994 were \$29.9 million, up \$13.5 million from 1993. As discussed below, \$24.2 million of the expenditures in 1994 were incurred for the installation of the scrubber on HMP&L Station Two.

# ENVIRONMENTAL COMPLIANCE

Compliance with environmental regulations relating to the Clean Air Act Amendments of 1990 (CAAA-90) continues to be a priority for Big Rivers. In 1993, applications were filed for Phase I Acid Rain Permits. During 1994, plans were completed for complying with the requirements of the CAAA-90. Big Rivers' diversified compliance plan involves installing flue gas desulfunzation (FGD) scrubbers on HMP&L Station Two, and switching the Coleman plant to lower sulfur fuel.

The scrubber construction at HMP&L progressed orderly during 1994, and all major equipment was delivered and installed. At year end, the construction was on schedule and under budget. The scrubbers are slated to be in commercial operation by June 1995

In further response to the CAAA-90, continuous emissions monitoring equipment is being installed on the Reid and Wilson units.

The KPSC held extensive hearings during the year regarding Big Rivers' compliance plan and the environmental surcharge to recover the cost of compliance with the CAAA-90. On August 31, 1994, the KPSC approved the compliance plan and a modified surcharge. The surcharge will become effective on July 1, 1995.

#### POWER SUPPLY SOURCES

All Big Rivers generating units are coal fired except for a 65-megawatt (MW) combustion turbine used for peaking and emergency purposes.

Big Rivers owns and operates four generating plants and operates HMP&L Station Two. Statistics concerning those plants are as follows:

# MEGAWATT-HOURS GENERATED IN 1994

Kenneth C. Coleman Plant Hawesville, Kentucky Three units totaling

455-MW net capability 2,599,813.6

Robert D. Green Plant Sebree, Kentucky Two units totaling

454-MW net capability 2,951,475.0

Robert D. Reid Plant

Sebree, Kentucky

One 65-MW net combustion turbine 1,841.0
One 65-MW net steam turbine 192,197 8

D.B. Wilson Plant Centertown, Kentucky One unit with

420-MW net capability 2,910,498.0

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Henderson Municipal Power and Light
Station Two
Sebree, Kentucky
Two units totaling
315-MW net capability

(Big Rivers' share)

1,344,697.6

Big Rivers has contracted to take all the Station Two capacity in excess of HMP&L's needs. During 1994, Big Rivers' share was approximately 83 percent.

The Southeastern Power Administration provides 178 MW of hydroelectric peaking capacity to the corporation through a long-term contract.

Big Rivers and East Kentucky Power Cooperative have a unit back-up power agreement in which each party will furnish (when requested) up to 200 MW upon the loss of the other's largest generating unit (Big Rivers' Wilson unit and East Kentucky's Spurlock No. 2 unit)

#### TRANSMISSION NETWORK

Almost 1,200 miles of line comprise Big Rivers' transmission system.

Lines.

- <u>345 kV</u> 67 4 miles, interconnecting power plants
- <u>161 kV</u> 327.3 miles, bulk power transmission, interconnections, and service to large industries

- <u>138 kV</u> 14.4 miles, bulk power transmission and interconnetions
- <u>69 kV</u> 773.2 miles, subtransmission power delivery

### Substations:

- Power plant step-up capacity -1,821,400 kVa
- Other 3,475,400 kVa

#### INTERCONNECTIONS

Big Rivers has physical interconnections with the following utilities:

- 1 Tennessee Valley Authority
- 2. Kentucky Utilities Company
- 3 Louisville Gas and Electric Company
- 4. Southern Indiana Gas and Electric Company
- 5. Hoosier Energy REC
- 6. Southern Illinois Power Cooperative
- 7. Henderson Municipal Power and Light

In February 1994, Big Rivers and East Kentucky Power Cooperative filed an application for a Certificate of Public Convenience and Necessity to construct approximately 32 miles of 161 kV transmission line. On January 26, 1995, the KPSC denied the application without prejudice to its resubmission at a later date, citing that the cost of the interconnection could not be economically justified.

#### SALES

Big Rivers' system peaked at 1,190 MW on January 18 This was 27 MW below the record of 1,217 MW recorded on July 28, 1993

Total energy sales in 1994 were 10,042,322 megawatt-hours (MWh), a decrease of 1,205,142 MWh from 1993. These decreased sales represent a reduction of 990,710 MWh in native load and a reduction of 214,432 MWh in intersystem sales.

The heating and cooling degree days in 1994 were 5,669, compared to 6,266 in 1993. In addition to the reduction of energy consumption resulting from the lower heating and cooling degree days, Alcan and NSA, reduced their energy consumption from 1993 by 1,023,907 MWh. On February 1, 1994, Alcan removed a potline from service, reducing its load by approximately 80 MW. NSA reduced its power requirements by approximately 35 MW.

As discussed in previous annual reports, in 1987 the KPSC ordered a variable tariff rate for energy sold by Big Rivers to Henderson Union Electric Cooperative and Green River Electric Corporation for delivery to the Aluminum Smelters. The variable rate requires Big Rivers to collect from a high of 4.4 cents per kWh to a low of 1.8 cents per kWh, as primary aluminum prices fluctuate between 80 and 45 cents a pound.

During 1994, the market price for aluminum averaged 71.97 cents a pound, as compared to an average of 53.85 cents a pound the previous year. Cash collections for energy delivered to the smelters averaged 3.7 cents per kWh, as opposed to 2.6 cents per kWh in 1993. A tariff settlement with the smelters, more fully discussed in footnote 6 to the financial statements, assures that Big Rivers will receive an average of 2.91285 cents per kWh through August 1997, to the extent the smelters operate at a 99 percent load factor.

The variable rate, as set by the KPSC, was designed to assure that the Aluminum Smelters could continue to operate economically even during periods of low aluminum prices.

On March 14, 1994, the Aluminum Smelters filed a suit with the Hancock Circuit Court to set aside the settlement agreement which establishes the above variable rate, on the basis that the agreement and the underlying rate increases were tainted by illegal influence. In a pending motion the company has moved to dismiss this suit.

#### **MARGINS**

Big Rivers in 1994 recorded a \$63.7 million net loss for the year. This is the second largest loss in the history of the company. Included in the loss were KPSC ordered fuel cost refunds of \$18.0 million and fuel costs of \$2.4 million which were incurred by Big Rivers but not recovered through the fuel adjust-

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ment clause Even with this large loss, Big Rivers was able to maintain a positive cash flow as cash receipts exceeded cash expenditures by \$85.7 million which was used to service its long-term debt.

#### STRATEGIC ALTERNATIVES

In August, the Board of Directors appointed a Special Committee on Financial Planning to assist the Board in considering strategic alternatives for resolving Big Rivers' financial difficulties. The Committee has had numerous meetings with creditors, companies interested in exploring possible business relationships, and with Big Rivers' large industrial customers. The Committee has employed financial and legal advisors and has developed the following four-phase resolution process and timetable:

# Phase I ~ 4th Quarter 1994 Organization And Situation Assessment

- \* Establish Special Committee
- \* Select Legal and Financial Consultants
- \* Data Acquisition
- Preliminary Assessment of Economic,
   Financial, Accounting, and Regulatory
   Information

# Phase II ~ 1st Quarter 1995 <u>Process Design And Development of Strategic Alternatives</u>

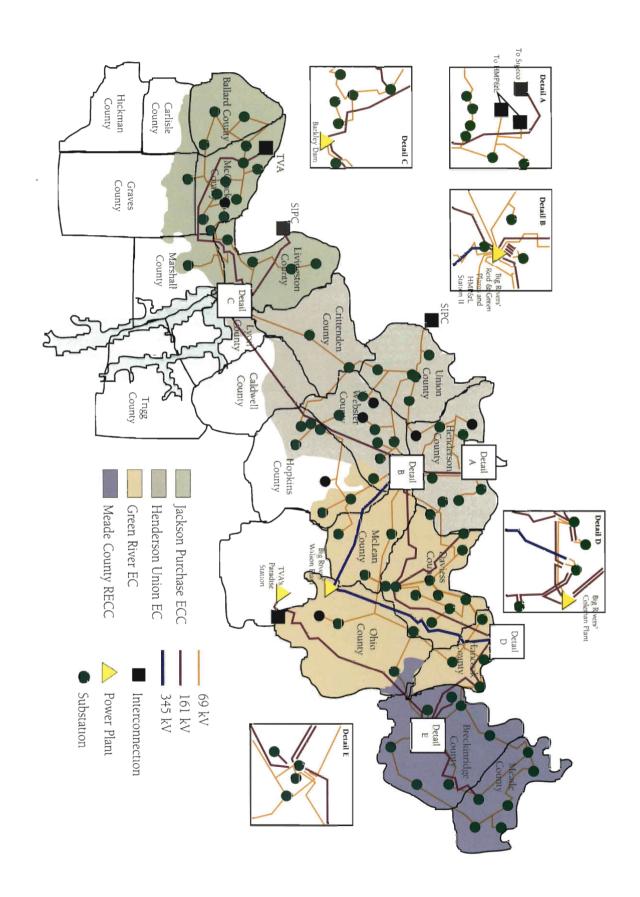
- \* Establish Base Case
- \* Identify and Develop Stand-Alone and Sale/ Merger Alternative and Develop Contingent Bankruptcy Plan
- \* Issue Identification and Analysis
- \* Develop and Implement Communication Plan
- \* Litigation Containment and Settlement Strategy
- \* Industrial and Off-System Sales Development
- \* Adopt Evaluation Criteria
- \* Modeling and Sensitivity Analysis

# Phase III ~ 2nd and 3rd Quarters 1995 Evaluation And Selection

- Rank All Strategic Alternatives by Comparison with Base Case
- \* Discuss Alternatives with Key Participants
- \* Select Preferred Resolution Plan

# Phase IV ~ 4th Quarter 1995 <u>Implementation</u>

- \* Board of Directors Approval
- Presentation to and Negotiation with Key Participants
- \* Obtain Necessary Creditor and Regulatory
  Approvals
- \* Documentation and Closing



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# ARTHUR ANDERSEN LLP Report of Independent Public Accountants

To the Board of Directors of
Big Rivers Electric Corporation:

We have audited the accompanying balance sheet of Big Rivers Electric Corporation ("Big Rivers," a Kentucky corporation) as of December 31, 1994, and the related statements of revenues and expenses, equities (deficit) and cash flows for the year then ended. These financial statements are the responsibility of Big Rivers' management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Big Rivers as of December 31, 1993 and for each of the years ended December 31, 1993 and 1992, were audited by other auditors whose report dated February 25, 1994, expressed an unqualified opinion with an explanatory paragraph related to Big Rivers' ability to continue as a going concern.

We conducted our audit in accordance with generally accepted auditing standards and the standards for financial audits contained in *Government Auditing Standards* (1988 Revision), issued by the Comptroller General of the United States. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation as of December 31, 1994, and the results of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared assuming Big Rivers will continue as a going concern. As discussed in Note 1 to the financial statements, current rates and current sales levels will cause Big Rivers to continue to sustain negative net margins and eventual default of certain provisions under the Debt Restructuring Agreement. Based on forecasted cash flows, management estimates that Big Rivers could be in default of certain provisions under the Debt Restructuring Agreement in 1996. However, management believes Big Rivers will have adequate cash flows in 1995 to avoid default under the Debt Restructuring Agreement. To address this issue, the Board of Directors of Big Rivers has formed a Special Financial Planning Committee, which is evaluating alternatives to avoid default including, among other things, a possible restructuring of debt, additional intersystem sales to non-members, and a sale or partial sale of operating facilities.

Additionally, as discussed in Note 1 to the financial statements, Big Rivers is a defendant in a number of legal actions brought by both private companies and regulatory agencies. Of these legal actions, the most significant suit relates to an action filed subsequent to December 31, 1994, which seeks the dissolution of Big Rivers. Management intends to vigorously defend this claim as well as the other claims discussed in Note 1. The ultimate outcome of these actions is uncertain at this time. Accordingly, no provisions for any liabilities that may result upon adjudication of these matters have been made in the accompanying financial statements.

Little Rock, Arkansas, February 9, 1995.

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# STATEMENTS OF REVENUES AND EXPENSES

For the Years ended December 31 (Dollars in thousands)

	1994	1993	<u>1992</u>
Operating revenues	\$ 315,571	\$ 350,946	\$ 319,907
Operating expenses:			
Operations:			
Fuel for electric generation	115,365	117,400	108,323
Power purchased and interchanged	39,174	45,151	33,731
Production, excluding fuel	28,369	26,161	26,564
Other	26,766	25,205	22,274
Maintenance	28,981	27,783	26,532
Depreciation	45,106	45,257	44,981
Taxes, other than income taxes	4,661	4,505	4,375
Total operating expenses	288,422	291,462	266,780
Electric operating margins	27,149	59,484	53,127
Interest expense and other:			
Interest, net of capitalized interest	93,236	92,707	93,358
Other, net	(1,065)	(1,043)	(1,000)
Total interest expense and other	92,171	91,664	92,358
Operating margin (loss)	(65,022)	(32,180)	(39,231)
Non-operating margins:			
Interest income and other	1,370	1,546	1,276
Net margin (loss)	\$ (63,652)	\$ (30,634)	\$ (37,955)

# BALANCE SHEETS

As of December 31 (Dollars in thousands)

Assets	<u>1994</u>	<u>1993</u>
Utility plant, net Other deposits and investments, at cost Current assets.	\$ 1,040,195 6,207	\$ 1,050,621 5,783
Cash and cash equivalents Accounts receivable Fuel inventory Non-fuel inventory Total current assets	10,103 28,251 20,489 15,123 73,966	10,073 30,933 18,396 14,766 74,168
Deferred charges Coal prepayments	6,766 5,130	7,164 5,653
Equities (Deficit) and Liabilities	<u>\$ 1,132,264</u> <u>1994</u>	\$ 1,143,389 <u>1993</u>
Capitalization: Equities (deficit) Long-term obligations Total capitalization	\$ (249,058) 1,236,558 987,500	\$ (185,406) 1,239,754 1,054,348
Current liabilities: Current maturities of long-term obligations Accounts payable Accrued expenses Total current liabilities	15,144 27,785 17,754 60,683	10,417 21,351 3,919 35,687
Deferred credits:  Balancing account  Unamortized gain on reacquired debt  Other  Total deferred credits	30,878 23,112 30,091 84,081	9,186 24,725 19,443 53,354
Commitments and contingencies (Notes 1, 2, and 11)	\$ 1,132,264	\$ 1,143,389

# STATEMENTS OF EQUITIES (DEFICIT)

For the Years ended December 31 (Dollars in thousands)

				Other equities	
	Total equities (deficit)	Accumulated deficit	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1991 Margins for 1992:	<u>\$(116,817)</u>	\$(249,183)	<u>\$ 127,921</u>	\$ 764	\$ 3,681
Operating	(39,231)	(39,231)	_	_	-
Non-operating Balance at December 31, 1992	1,276 (154,772)	1,276 (287,138)	127,921		3,681
Margins for 1993:  Operating	(32,180)	(32,180)	_	_	_
Non-operating Balance at December 31, 1993	1,546 (185,406)	1,546 (317,772)	127,921	<u> </u>	
Margins for 1994: Operating	(65,022)	(65,022)	_	_	_
Non-operating Balance at December 31, 1994	1,370 \$(249,058)	1,370 \$(381,424)	<del>-</del> \$ 127,921	<del>-</del> \$ 764	<del>-</del> 3,681

# STATEMENTS OF CASH FLOWS For the Years anded December 3.1

For the Years ended December 31 (Dollars in thousands)			
	<u> 1994</u>	<u>1993</u>	<u> 1992</u>
Cash flows from operating activities:	\$ (63,652)	\$ (30,634)	¢ (27.055)
Net margin (loss) Adjustments to reconcile net margin (loss) to cash and	\$ (03,032)	\$ (30,034)	\$ (37,955)
cash equivalents provided by (used in) operating			
activities:			
Depreciation and amortization	46,880	46,979	46,623
Net change in balancing account	21,692	(16,064)	(9,343)
Gain on reacquired debt	(1,613)	(1,612)	(1,612)
Changes in operating assets and liabilities:	(.,,,,,,,	(17012)	(17012)
Accounts receivable	2,682	(7,768)	1,734
Fuel inventory	(2,093)	6,076	3,716
Non-fuel inventory	(357)	(99)	564
Accounts payable	6,434	6,591	(4,030)
Accrued expenses	13,835	(556)	143
Other, net	3,1 <i>7</i> 8	516	(660)
Net cash provided by (used in)			
operating activities	26,986	3,429	(820)
		-	
Cash flows from investing activities:	(00.075)	(1, (, (0, ()	(7.001)
Capital expenditures, net	(29,875)	(16,404)	(7,381)
Sale of pollution control allowances	188	23,150	
Not each provided by (yeard in)			
Net cash provided by (used in) investing activities	(29,687)	6,746	17 3911
investing activities	[27,007]		(7,381)
Cash flows from financing activities:			
Increase (decrease) in RUS Promissory Note	6,003	(5,81 <i>7</i> )	12,544
Principal payments on other long-term debt	(3,272)	(4,364)	(4,364)
rimeipar payments on other long term deor	(0,2,2)	(-1,00-1)	(-1/00-1)
Net cash provided by (used in) financing			
activities	2,731	(10,181)	8,180
			<u> </u>
Net increase (decrease) in cash			
and cash equivalents	30	(6)	(21)
Cash and cash equivalents, beginning of year	10,073	10,079	10,100
Cash and cash equivalents, end of year	\$ 10,103	\$ 10,073	\$ 10,079
Supplemental Cash Flow Information:			
Cash paid relating to interest expense	\$ 86,165	\$ 97,594	\$ 80,233
The accompanying notes to financial statements			,
are an integral part of these statements.			

# FINANCIAL REVIEW OF OPERATIONS

# NOTES TO FINANCIAL STATEMENTS

December 31, 1994 (Dollars in thousands)

> MINIMUM DEBT SERVICE PAYMENTS, LIQUIDITY RISK AND CONTINGENCIES

Management has prepared the accompanying financial statements on the basis that Big Rivers Electric Corporation (Big Rivers) will continue as a going concern, and while management expects to maintain positive cash flows from operations, current rates and current sales levels will cause Big Rivers to continue to sustain negative net margins and eventual default of certain provisions under the Debt Restructuring Agreement (see Note 5). Based on forecasted cash flows, management estimates that Big Rivers could be in default of certain provisions under the Debt Restructuring Agreement in 1996. However, management believes Big Rivers will have adequate cash flows in 1995 to avoid default under the Debt Restructuring Agreement. To address this issue, the Board of Directors has formed a Special Financial Planning Committee (Committee), which is comprised of four board members. The Committee has been given the assignment of proposing a solution to Big Rivers' financial difficulties by the end of 1995. The Committee is evaluating alternatives to avoid default including, among other things, a possible restructuring of debt, additional intersystem sales to non-members, and a sale or partial sale of operating facilities. To assist in this process, the Committee has employed legal advisors, financial advisors, and a turnaround specialist.

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments for cash flows generated in excess of a month-end working capital cash balance of \$10,000, as defined by the Debt Restructuring Agreement. The monthly cash flows of Big Rivers are primarily dependent upon payments received under the Settlement Agreement (see Note 6) between Big Rivers, National Southwire Aluminum Company (NSA) and Alcan Aluminum Corporation (Alcan) (collectively referred to as the Aluminum Smelters). The Settlement Agreement requires the Aluminum Smelters to pay a variable rate from 1.81 cents per kWh to 4.4 cents per kWh based on the market price of aluminum. The market price of aluminum is subject to volatility. Due to the Debt Restructuring Agreement requiring additional debt service payments for cash flows generated in excess of a month-end working capital cash balance of \$10,000, coupled by Big Rivers' reliance on the fluctuating variable rate under the Settlement Agreement, there can be no assurance that Big Rivers will not experience working capital liquidity problems if the market price of aluminum drops significantly below the current level. However, management is of the opinion that Big Rivers will not have working capital liquidity problems in 1995.

On January 20, 1995, NSA filed suit derivatively on behalf of Green River Electric Corporation (Green River) and Big Rivers, and Alcan, filed suit derivatively on behalf of Henderson Union Electric Cooperative (Henderson Union) and Big Rivers, as plaintiffs, versus Big Rivers' Board of Directors, Big Rivers,

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Green River, and Henderson Union in Henderson Circuit Court. This action seeks to dissolve Big Rivers and recover damages in excess of \$83,000 from the individual directors of Big Rivers. Big Rivers has provided indemnification to its directors for the legal expenses in successfully defending this type of claim. Associated with this indemnification, Big Rivers owns a directors' and officers' liability policy which has an aggregate limit of \$2,500. Management of Big Rivers intends to vigorously defend this claim. Management is unable to predict the outcome of this matter.

The U.S. Environmental Protection Agency (EPA) has informed Big Rivers that it may be liable for damages with respect to the Green River Disposal Superfund Site, as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980. A remedial/feasibility study has been completed and approved by the EPA. The EPA issued its Record of Decision in this matter on December 14, 1994, which prescribes the remedies that the EPA has found appropriate for the site. Big Rivers' share of the cost, based on volume waste calculations, will be less than one percent. Management is of the opinion that the ultimate outcome of this matter will not have a material impact on the financial position of Big Rivers.

On March 14, 1994, the Aluminum Smelters sued Big Rivers, Henderson Union, and Green River seeking to set aside the Settlement Agreement (see Note 6), to which all parties to the lawsuit were signatories. Big Rivers has filed a motion to dismiss for lack of jurisdiction, failure to state a claim and improper venue. This motion is pending before the Hancock Circuit Court. Also, Big Rivers, Henderson Union, and Green River have filed suit against the Aluminum Smelters on April 20, 1994, claiming that the Aluminum Smelters have breached their covenants not to challenge the Settlement Agreement. This suit has been stayed pending the Hancock Circuit Court's decision on the pending motions. Management is of the opinion that the ultimate outcome of this matter will not have a material impact on the financial position or results of operations of Big Rivers.

On January 27, 1994, a coal supplier sued Big Rivers seeking damages of approximately \$3,000 In addition to the damages claimed, the coal supplier has asserted that Big Rivers is also responsible for the cost of closing a mine. The coal supplier's latest valuation of its claim, made August 18, 1994, was \$13,283 Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter.

On January 10, 1995, a complaint case was filed with the Kentucky Public Service Commission (KPSC) by the Aluminum Smelters and Commonwealth Aluminum requesting a refund of \$5,993 plus interest for unreasonable fuel costs incurred for the period January 1, 1988 to October 31, 1990. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter.

The Aluminum Smelters and Commonwealth Aluminum are requesting that the KPSC order a refund of \$1,800 to jurisdictional customers contending that Big Rivers' fuel costs were being improperly allocated for the period November 1, 1992 to October 31, 1994. Management intends to vigorously defend this claim. Management is unable to predict the outcome of this matter

Big Rivers has a long-term coal contract with Green River Coal Company (Green River Coal). The contract requires Big Rivers to annually purchase 1,020,000 tons of coal through 2004. Big Rivers believes the Green River Coal contract was unlawfully procured and that Big Rivers is entitled to rescind the contract and recover damages including coal prepayments (see Note 4). When Big Rivers informed Green River Coal of its claim, Green River Coal filed for bankruptcy protection on July 8, 1993. Additionally, Green River Coal has countersued Big Rivers stating the amounts being withheld from payment to Green River Coal (see Note 4) are in violation of its bankruptcy protection. In connection with this contract, a criminal trial for a former general manager of Big Rivers is scheduled for April 1995. As a result, the Bankruptcy Court

has stayed discovery pending the outcome of this trial. Management is unable to predict the outcome of this matter.

Big Rivers is either a defendant or a plaintiff in various other legal actions and claims, which management believes will not have a material impact on Big Rivers' financial position or results of operations.

# 2 ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### General Information.

Big Rivers, an electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives and markets power to non-member utilities and power marketers. The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all of their power and energy requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the KPSC and are subject to approval by the U.S. Department of Agriculture Rural Utilities Service (RUS).

# System of Accounts:

Big Rivers' accrual basis accounting policies follow the Uniform System of Accounts prescribed by the RUS Bulletin 1767B-1, as adopted by the KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters.

## Revenue Recognition.

Revenues are based on month-end meter readings and are recognized as earned.

# Utility Plant and Depreciation.

Utility plant is stated at original cost, which includes the cost of contracted services, materials, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal and salvage value, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of the RUS Promissory Note (see Note 5) to the to-date accumulated expenditures for qualifying projects included in construction in progress. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant in service is provided using the straight-line method over the estimated service lives of depreciable assets. The annual RUS-prescribed rates used to compute depreciation are as follows.

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Depreciation of utility plant in service is provided using the straight-line method over the estimated service lives of depreciable assets. The annual RUS-prescribed rates used to compute depreciation are as follows:

Production plant	3.00 - 3.10%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2.00 - 20.00%

For 1994, 1993, and 1992, the average composite depreciation rates were 3.03, 3.06, and 3.06 percent, respectively.

# Cash and Cash Equivalents:

For purposes of the statement of cash flows, Big Rivers considers all short-term, highly-liquid investments with original maturities of three months or less to be cash equivalents.

#### Inventories

Fuel inventory primarily consists of coal, which is recorded at weighted average cost. Non-fuel inventory primarily consists of materials and supplies related to generating plants and is recorded at weighted average cost. Big Rivers has entered into several long-term coal contracts extending through 2006. Fuel purchased under these contracts in 1994, 1993, and 1992 was \$98,574, \$101,123, and \$107,540, respectively. In 1995, Big Rivers is required to purchase a minimum of 3,658 tons of coal relating to spot and long-term coal contracts.

# Patronage Capital:

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Non-operating margins are used to offset any accumulated non-operating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the non-operating margins against accumulated non-operating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor non-operating losses are allocated to the patrons. In accordance with the Restated Mortgage and Security Agreement (see Note 5), patronage capital cannot be retired if such amounts are less than 40 percent of the total assets.

# New Accounting Standards

During 1994, Big Rivers adopted Statement of Financial Accounting Standards (SFAS) No. 112, "Employers' Accounting for Postemployment Benefits," and SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The impact of adopting these accounting statements did not have a material effect on Big Rivers' financial position or results of operations.

### Reclassifications

Certain prior year amounts have been reclassified for comparability with the 1994 presentation.

3 UTILITY PLANT

The following summarizes utility plant at December 31

	<u>1994</u>	<u>1993</u>
Classified plant in service:		
Production plant	\$ 1,309,388	\$ 1,308,504
Transmission plant	81,571	80,930
Station equipment	100,691	99,447
General plant	17,654	18,015
Other	190	190
Unclassified plant in service	2,115	56
	1,511,609	1,507,142
Less accumulated depreciation	504,460	461,496
• .	1,007,149	1,045,646
Construction in progress	33,046	4,975
	\$ 1,040,195	\$ 1,050,621

Construction in progress is comprised of the City of Henderson Station Two scrubber project (see Note 8), the continuous emission monitors, and several other projects. The average rate used for the capitalization of interest during construction was 8.0 percent in 1994, 1993, and 1992. Interest capitalized was approximately \$1,100, \$400, and \$500 for the years ended December 31, 1994, 1993, and 1992, respectively.

# 4 DEFERRED CHARGES AND COAL PREPAYMENTS

The following summarizes deferred charges and coal prepayments at December 31:

	<u>1994</u>	<u> 1993</u>
Unamortized debt expenses	\$ 6,541	\$ 6,998
Other	225	166
	\$ 6,766	\$ 7,164
Green River Coal Company prepayments	\$ 5,130	\$ 5,653

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In prior years, Big Rivers refinanced portions of its long-term debt at lower interest rates and incurred refinancing expenses. These costs are being amortized over the term of the RUS Promissory Note (see Note 5).

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. On September 24, 1991, a contract for substitution of coal was executed with Green River Coal. In connection therewith, Big Rivers made fuel prepayments of \$7,000, which Big Rivers is withholding from payment to Green River Coal at a rate of one dollar per ton of coal shipped. Interest on the outstanding balance is based on the prime rate established by Chemical Bank of New York plus 2 percent.

# 5 LONG-TERM OBLIGATIONS

A summary of long-term obligations at December 31 is as follows:

Promissory Note - RUS 8.0 percent Unamortized premium	1994 \$ 600,542 482,296 1,082,838	1993 \$ 647,140 429,695 1,076,835
County of Ohio, Kentucky, promissory note,		. %_
with variable interest rate of 5.85 percent and 3.0 percent at 1994 and 1993, respectively County of Ohio, Kentucky, promissory note, with variable interest rate of 5.85 percent and	83,300	83,300
3.0 percent at 1994 and 1993, respectively	58,800	58,800
Obligation under power purchased contract (see Note 8)	22,400	23,600
Bank of New York, bank loan 8.0 percent	1,806	3,160
Chemical Bank, bank loan 8.0 percent	2,558	4,476
Total long-term obligations	1,251,702	1,250,171
Less current maturities	15,144	10,417
	\$1,236,558	\$1,239,754

# Debt Restructuring Agreement:

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated March 30, 1988, which was executed as part of a Debt Restructuring Agreement. The impact of the Debt Restructuring Agreement was accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers accounted for the effects of the restructuring prospectively as a change in the effective interest rate and did not adjust the carrying amount of the debt.

# Promissory Note - RUS

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner to that provided by a conventional loan amortization schedule) at an effective interest rate of 8.0 percent for the RUS Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by the RUS (RUS Debt). For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference between the reverse amortization repayment schedule and the conventional loan amortization schedule is reflected as unamortized premium and will be adjusted throughout the term of the RUS Promissory Note. Any unpaid interest is added to the unamortized premium. In return for Big Rivers making all payments on the RUS Promissory Note, the RUS will make all payments required on all prior debt on a timely basis and will not seek to collect additional funds from Big Rivers.

In connection with the Settlement Agreement (see Note 6), the Debt Restructuring Agreement was amended as of January 1, 1990. The amendment provided that if the variable rates to the Aluminum Smelters specified in the Settlement Agreement and in effect on April 1, 1990, remain continuously in effect and unmodified through August 31, 1997, and if during this period, the RUS Promissory Note never exceeds by more than \$18,000 what the RUS Promissory Note would be if only the scheduled annual amounts were paid, then no event of default shall be deemed to have occurred through December 31, 1997. Using this criteria, the principal balance of the RUS Promissory Note cannot exceed \$460,948 at December 31, 1997.

## Other Long-term Obligations:

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds (Interim Bonds), Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky, issued \$83,300 of Pollution Control Refunding Demand Bonds (Refunding Bonds), Series 1985, the proceeds of which were used to refinance the Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent nor greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Chemical Bank irrevocable standby letter of credit, which is due to expire October 15, 1997, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Chemical Bank to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Amounts borrowed against the letter of credit would bear interest at prime plus two percent and become bank amounts as defined by the Debt Restructuring Agreement. The bank amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or bank amounts by January 31, 2010.

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. These bonds bear a variable rate of interest, determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 1, 1995, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Bank of New York to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Amounts borrowed against the letter of credit would bear interest at prime plus two percent and become bank amounts as defined by the Debt Restructuring Agreement. The bank amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or bank amounts by January 31, 2010.

On February 25, 1988, Big Rivers refinanced \$319,426 of high interest rate debt. As a result of this refinancing, a gain of \$37,734 was realized. Due to regulatory requirements, this gain is reflected as an unamortized gain on reacquired debt in the accompanying balance sheets and is being amortized into income over the term of the RUS Promissory Note.

### Debt Maturities:

At December 31, 1994, Big Rivers had, since September 1987, paid total debt service on the RUS Promissory Note in such a manner that principal payments exceeded the required minimum level of such payments by \$71,883. This amount of excess principal payments represents a decrease of \$30,539 during 1994.

Based on the overpayments to date and the required RUS Promissory Note principal balance on December 31, 1997, Big Rivers has calculated the annual payments necessary to avoid an event of default through December 31, 1997, and minimum scheduled payments thereafter. Actual payments may be more or less than the scheduled amounts below. Under this calculation, the maturities of long-term obligations for each of the five years ending subsequent to December 31, 1994, are estimated to be as follows:

Year	RUS Promissory Note	Unamortized Premium	Other Debt	Financial Statement Change in Principal
1995	\$50,313	\$(42,533)	\$7,364	\$15,144
1996	46,432	(38,004)	3,143	11,571
1997	42,849	(33,716)	3,308	12,441
1998	45,928	(20,158)	3,489	29,259
1999	57,797	11,642	3,679	73,118

#### 6 RATE MATTERS

Big Rivers' rates include a ratchet billing for demand (where current billing units are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers of certain Big Rivers members. A Settlement Agreement effective January 1, 1990, was reached between Big Rivers, the Aluminum Smelters, and Big Rivers' creditors. The Settlement Agreement preserves the variable aluminum smelter rate based on the market price of aluminum within a defined minimum (1.81 cents per kWh) and maximum (4.4 cents per kWh) as the method of calculating the cash payments to be made by the Aluminum Smelters to Big Rivers. The Settlement Agreement, however, fixes the revenue to be recognized by Big Rivers at 2.91285 cents per kWh at an approximate 99 percent load factor over the term of the agreement. The variable rate will be effective through August 1997. Any payments in excess of or under the 2.91285 cents per kWh brought about by the variable aluminum smelter rate are recorded as a component of the balancing account in the accompanying balance sheets. Amounts recorded in the balancing account will be used to increase or decrease operating revenues over the term of the agreement to the level of 2.91285 cents per kWh. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the Aluminum Smelters to pay at or near the maximum rate of 4.4 cents per kWh.

The Clean Air Act Amendments of 1990 (CAAA-90) require significant reductions in the emission of sulfur dioxide and nitrogen oxide by fossil-fueled electric generating units. The CAAA-90 requires that sulfur dioxide emissions be reduced at generating units in two phases over a ten-year period. In order to meet the requirements, the City of Henderson is constructing scrubbers on the two units owned by the city (see Note 8). On August 31, 1994, the KPSC approved Big Rivers' compliance plan and environmental surcharge tariff. Big Rivers does not plan to implement the environmental surcharge until the middle of 1995.

The KPSC has supervised a focused management audit of Big Rivers' fuel procurement policies and procedures. During 1994, the KPSC issued three separate orders directing Big Rivers to refund \$15,460 plus interest for the period November 1, 1990 to April 30, 1994. A decision on a fourth order for the period May 1, 1994 to October 31, 1994, is currently under review by the KPSC. During 1994, Big Rivers recorded an \$18,044 reduction in revenue from jurisdictional customers, which includes the rate refund orders received in 1994, plus an estimate of \$1,200 for the order currently under review, plus accrued interest for these refunds through December 31, 1994. The KPSC also has disallowed from fuel rate recovery approximately \$6,760 annually, related to the Green River Coal contract, over the remaining ten-year life of the contract.

Intersystem power sales to non-members is a component of full cost recovery under Big Rivers' rate design. A long-term contract has been signed with Oglethorpe Power Corporation (Oglethorpe Power) for the sale of 103 MW of firm power for ten years, beginning in August 1992. Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority.

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Two long-term contracts have been signed with Hoosier Energy Rural Electric Cooperative (Hoosier Energy). The first is for the sale of 65 MW of capacity from Big Rivers' combustion turbine during a three-month summer period through year 2000. The second is a peaking power agreement varying from 10 MW in 1993 to 170 MW in 1999. This agreement covers June through September of each calendar year. Hoosier Energy is a RUS cooperative interconnected with Big Rivers. At December 31, 1994, the Hoosier Energy contracts have not received KPSC approval. Big Rivers has contested the KPSC's jurisdiction to approve these contracts and has filed an appeal to the Franklin Circuit Court. Management is of the opinion that the ultimate outcome of this matter will not have a material impact on the financial position or results of operations of Big Rivers.

#### 7 INCOME TAXES

Big Rivers was initially formed as a tax-exempt cooperative organization under section 501 (c) (12) of the Internal Revenue Code. To retain tax-exempt status under this section of the Internal Revenue Code, at least 85 percent of the organization's income must be generated from the sales to the cooperative's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years, it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax-exempt status. Big Rivers is also subject to Kentucky income tax.

At January 1, 1993, Big Rivers adopted the provisions of SFAS No. 109, "Accounting for Income Taxes." SFAS No. 109 requires the recognition of deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes as compared to amounts reported for income tax purposes. Deferred tax assets and liabilities are determined based on these temporary differences using enacted tax rates in effect for the year in which these differences are expected to reverse. The adoption of this accounting statement did not have a significant impact on the financial position or results of operations of Big Rivers.

At December 31, 1994 and 1993, Big Rivers had deferred tax assets of \$396,485 and \$355,346, respectively, which primarily relate to tax credits and net operating losses. The tax credits and net non-member operating losses begin expiring in 1998 through 2000 and 1998 through 2009, respectively. Additionally, at December 31, 1994 and 1993, Big Rivers had deferred tax liabilities of \$220,954 and \$205,913, respectively, which primarily relate to depreciation differences on utility plant. At December 31, 1994 and 1993, Big Rivers did not anticipate utilization of a portion of the deferred tax assets, thus a valuation allowance was established of \$175,531 and \$149,433, respectively.

#### 8 POWER PURCHASED

Big Rivers, under contracts with the City of Henderson, Kentucky (City), operates the City-owned 315-MW generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 83 percent, which is expected to decrease to 81 percent by 1997. The contracts expire in 2003, subject to options for extensions.

In order to comply with the CAAA-90, Big Rivers and the City have agreed to install pollution control equipment on the Station Two facilities. The existing contracts with the City have been amended to include the cost of installing, operating, and maintaining this equipment. The contract amendments are pending approval before the KPSC. The City and Big Rivers have sold emission allowances that were previously awarded by the EPA which will offset approximately 60 percent of the cost to install these scrubbers. Big Rivers' portion of the sale of allowances was approximately \$23,340, which is recorded as a regulatory liability in other deferred credits in the accompanying balance sheets. The allowance proceeds, plus accrued interest, will be refunded prorata to jurisdictional customers in the same year in which the allowances are first available for use, beginning in 1995. The refund will be completed by December 31, 1999. On August 31, 1994, the KPSC approved the compliance plan and environmental surcharge tariff. In addition, Big Rivers would expect to incur additional costs to replace the allowances sold. Big Rivers has the option of extending the contracts through the economic life of the power plant.

Under the terms of the contracts and amendments thereto with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include Big Rivers' respective share of debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded the present value of the portion of the principal payments that it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a corresponding amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. The total operating costs of power purchased under the contract for 1994, 1993, and 1992 were \$31,996, \$33,563, and \$27,250, respectively. Such costs are accounted for as power purchased in the accompanying statements of revenues and expenses.

# PENSION AND DEFERRED COMPENSATION PLANS

Big Rivers has non-contributory defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974. Also, Big Rivers has executed non-contributory defined compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. The deferred compensation plan is fully funded.

A reconciliation of the projected benefit obligation and the funded status of the benefit plans at December 31 is as follows:

Actuarial present value of the benefit obligation:  Accumulated benefit obligation, including vested	1994	<u>1993</u>	
benefits of \$19,189, and \$16,624	\$ (19,246)	\$ (16,673)	
Projected benefit obligation for services rendered	\$ (32,927)	\$ (29,157)	
Plan assets at fair value, primarily listed stocks			
and U.S. Treasury Bonds	19,902	18,768	
Plan assets under projected benefit obligation	(13,025)	(10,389)	
Unrecognized net transition assets	(1,541)	(1,762)	
Unrecognized prior service costs	2,128	2,369	
Unrecognized net loss	9,368	7,559	
Unfunded accrued pension cost	\$ (3,070)	\$_ (2,223)	
Net periodic pension costs, which are calculated based on			
actuarial assumptions at January 1, were as follows for the years ended December 31:	1994	1993	1992
to the years ended December 31.	1774	1773	1772
Service cost ~ benefits earned during the year	\$ 2,233	\$ 1,660	\$ 1,270
Interest cost on projected benefit obligation	2,147	1,726	1,285
Expected return on plan assets	(1,655)	(1,415)	(1,374)
Amortization of transition assets	(220)	(220)	(220)
Amortization of prior service costs	228	230	175
Amortization of net loss (gain)	230	30	(12)
Special termination benefits	0	396	0
Net periodic pension costs	\$ 2,963	\$ 2,407	\$ 1,124

Assumptions used to develop the projected benefit obligation were:

<u> 1994</u>	1993	1992
7.5%	7.5%	8.5%
4.0	4.0	4.0
8.5	8.5	8.5
	7.5% 4.0	7.5% 7.5% 4.0 4.0

Total expense related to the pension and deferred compensation plans was \$3,290, \$3,108, and \$1,396 in 1994, 1993, and 1992, respectively.

# 10 POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. For all employees who retired prior to 1994, Big Rivers pays 80 percent of the cost from age 62-65; and from age 65, for salaried employees, Big Rivers pays 100 percent of Medicare supplement cost. For salaried employees who retire after December 31, 1993, the paid Medicare supplement was eliminated. Effective January 1, 1993, Big Rivers adopted SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions," which requires the expected cost of these benefits to be recognized over the employees' years of service, rather than as medical costs are incurred. The adoption of this accounting statement did not have a material impact on the financial position or results of operations of Big Rivers.

Also, Big Rivers offered a retirement incentive program which provided special termination benefits to certain employees during late 1992 and early 1993. The resulting increase in the other postretirement benefit obligation from SFAS No. 88 was \$61. Postretirement benefit costs for prior years have not been restated.

The discount rate used in computing the obligation for 1994 and 1993 was 8.0 percent. In accordance with SFAS No. 106, Big Rivers chose to amortize the present value of the obligation at the adoption date, the transition obligation, over a twenty-year period. A health care cost trend rate of 13.0 percent in 1994 declining to 6.0 percent in 2012 was utilized. The health care cost trend rate assumption has a significant effect on the amounts reported. A 1.0 percent increase in the health care trend rate each year would increase the aggregate service and interest costs for 1994 by \$90 and the accumulated other postretirement benefit obligation by \$680.

The components of net periodic postretirement benefit costs for the years ended December 31 were as follows:

	<u>1994</u>	<u> 1993</u>
Service cost ~ benefits earned during the year	\$ 246	\$ 199
Interest cost on projected benefit obligation	331	331
Amortization of transition obligation	207	207
Special termination benefits	0	61
Net periodic postretirement benefit costs	\$ 784	\$ 798

PAGE TWENTY-FIGHT

A reconciliation of the postretirement benefit obligation and funded status of the plan at December 31 is as follows:

	1994	1993
Accumulated postretirement benefit obligation ~		
retirees	\$(1,683)	<b>\$(1,57</b> 1)
Other eligible active participants	(558)	(520)
Other active participants	(3,062)	(2,635)
Total benefit obligation	(5,303)	(4,726)
Unrecognized transition obligation	3,721	3,928
Unfunded accrued postretirement cost	\$(1,582)	\$ (798)

In addition to the postretirement plan discussed above, in 1992 Big Rivers began a postretirement benefit which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20 percent of the employee's base hourly rate at time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is \$601 and \$334 at December 31, 1994 and 1993, respectively, and the postretirement expense recorded was \$267, \$150, and \$184, for 1994, 1993, and 1992, respectively.

1 1
RELATED PARTIES AND MAJOR CUSTOMERS

	<u>Operating Revenues</u>				<u>ies</u>
Members:		1994		<u>1993</u>	<u>1992</u>
Green River Electric Corporation	\$	132,400	\$	133,194 \$	133,021
Henderson Union Electric Cooperative		92,167		106,018	105,744
Jackson Purchase Electric Cooperative Corporation		23,960		23,709	22,300
Meade County Rural Electric Cooperative Corporation		12,758		12,463	11,679
KPSC Ordered Fuel Cost Refund (see Note 6)		(18,044)		0	0
Non-members		72,173		75,456	47,068
Other revenue	_	157		106	95
	\$	315,571	\$	350,946 \$	319,907

NSA and Alcan purchase substantial amounts of electric energy under contracts with Big Rivers' members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for NSA and Henderson Union Electric Cooperative for Alcan) were as follows:

		Henderson	
<u>Year</u>	Green River	<u>Union</u>	<u>Combined</u>
1994	\$84,217	\$69,151	\$153,368
1993	86,428	83,432	169,860
1992	87,705	82,841	170,546

In 1994, Alcan closed 80,000 kilowatts of its smelter operation capacity at Sebree, Kentucky. Alcan is required by contract to continue paying the fixed demand cost at the tariff rate of \$10.15 per kW month. All energy associated with this capacity will be sold when possible on the open market by Big Rivers. Alcan will receive a credit for all power sold in excess of Big Rivers' energy cost.

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and requiring payments for power consumed and only such other payments as each member receives from its customers.

At December 31, 1994 and 1993, Big Rivers had accounts receivable from its members of approximately \$24,040, and \$17,387, respectively.

#### 12 DISCLOSURE OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amounts of Big Rivers' cash and cash equivalents approximate the fair value due to the short maturity of these financial instruments. The assumption used in determining the fair value of Big Rivers' long-term variable interest rate debt is that the fair value approximates the carrying value, as the debt reprices weekly. Due to the uncertainties described in Notes 1 and 5, the ability of Big Rivers to obtain new debt or replace its existing debt is indeterminable. Accordingly, it is not practicable for Big Rivers to estimate the fair value of its long-term fixed interest rate debt. The fair value of all other financial instruments is estimated by management to approximate the carrying value.

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#### **OFFICERS**

Morton Henshaw

President

Edward F. Johnson

Vice President

William B. Briscoe

Secretary-Treasurer

J.D. Cooper

Assistant Secretary-Treasurer

#### GENERAL MANAGER

Paul A. Schmitz

#### DIRECTORS

Green River Electric Corporation

Marion Cecil

Edward F. Johnson

Sandra Wood

Henderson Union Electric Cooperative

William Briscoe

Morton Henshaw

C.G. Truitt

Jackson Purchase Electric Cooperative Corporation

Johnny L. Hamm

Ralph Hardin

John B. Myers

Meade County Rural Electric Cooperative

Corporation

John C. Burnett

J.D. Cooper

Joseph A. Hamilton

#### VICE GENERAL MANAGERS

Ed Dolezal ~ Energy Supply

Mike Dotson ~ Fuels

Richard P. Greenwell ~ Production

Ronald W. Johnson ~ Administrative Services and

Human Resources

James H. Jones ~ Public Relations

B. Scott Reed ~ Engineering and Transmission

John J. West ~ Finance

#### SUPERINTENDENTS

Steve Moss ~ Wilson Plant

Bruce Shelton ~ Coleman Plant

Barry Wood ~ Reid/Green Plants

Virgil Mitchell ~ Transmission and Substations

#### CORPORATE

#### ATTORNEY

James Miller

General Counsel

Holbrook, Sullivan, Mountjoy,

and Stainback P.S.C.

Owensboro, Kentucky

#### CORPORATE AUDITORS

Arthur Andersen LLP

Little Rock, Arkansas

#### COMPARATIVE STATISTICAL ANALYSIS

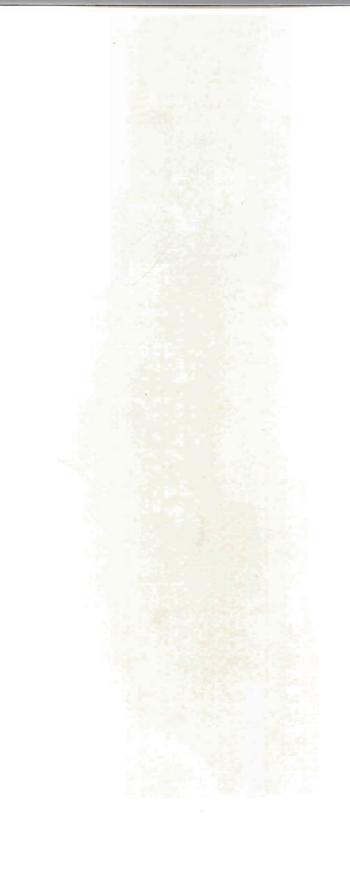
	1994	1993	1992	1991
Operating Revenues Expenses:	\$ 315,570,913	350,945,862	319,907,459	331,334,709
Operation and Maintenance Purchased Power and	199,481,485	196,548,190	183,693,972	193,288,174
Interchanged, Net	39,173,662	45,150,914	33,730,825	39,248,839
Depreciation	45,106,596	45,257,415	44,980,616	44,809,522
Taxes	4,660,584	4,505,465	4,374,765	4,365,522
Interest	93,235,749	92,706,822	93,358,171	95,071,442
Other	(1,065,405)	(1,043,154)	(999,831)	[1,008,592]
Total	380,592,671	383,125,652	359,138,518	375,774,907
Operating Margins (Loss)	(65,021,758)	(32,179,790)	(39,231,059)	(44,440,198)
Non-operating Margins (Loss)	1,369,775	1,545,675	1,275,827	1,505,489
Net Margins (Loss)	\$ [63,651,983]	[30,634,115]	[37,955,232]	[42,934,709]
Utility Plant at Cost	\$ 1,511,609,622	1,507,141,786	1,497,045,501	1,466,355,537
Construction Work in Progress	33,046,229	4,975,491	10,563,767	11,986,253
Total Electric Plant	1,544,655,851	1,512,117,277	1,507,609,268	1,478,341,790
Less Accumulated Depreciation	504,460,557	461,496,317	419,709,707	376,616,976
Utility Plant Net	\$ 1,040,195,294	1,050,620,960	1,087,899,561	1,101,724,814
Total Assets	\$ 1,132,264,001	1,143,388,554	1,180,152,394	1,225,216,359
System Peak Demand - MW	1,190	1,217	1,166	1,168
Net Generating Capacity Owned - MW	1,459	1,459	1,459	1,459
Net HMP&L Capacity Purchased - MW	258	261	262	263
Other Purchased Capacity - MW	178	1 <i>7</i> 8	178	178
Sales to Members - GWh	7,454.42	8,445.13	8,326.34	8,314.32
Sales to Non-Members - GWh	2,587.90	2,802.33	1,463.50	2,055.13
Generated - GWh	8,655.83	9,206.67	8,418.27	8,664.31
Purchased HMP&L Energy - GWh	1,344.70	1,670.12	1,211.98	1,480.77
Other Purchased Energy - GWh	277.69	588.60	305.91	415.91
System Load Factor - %	73.8	81.3	82.7	83.1
Permanent Employees at Year-End	837	847	846	875
Average Cost of Coal Used				
Price Per Ton - \$	29.26	28.27	27.92	28.51
¢/MM BTU	129.4	125.6	125.5	129.2
	the laws of	* P1		

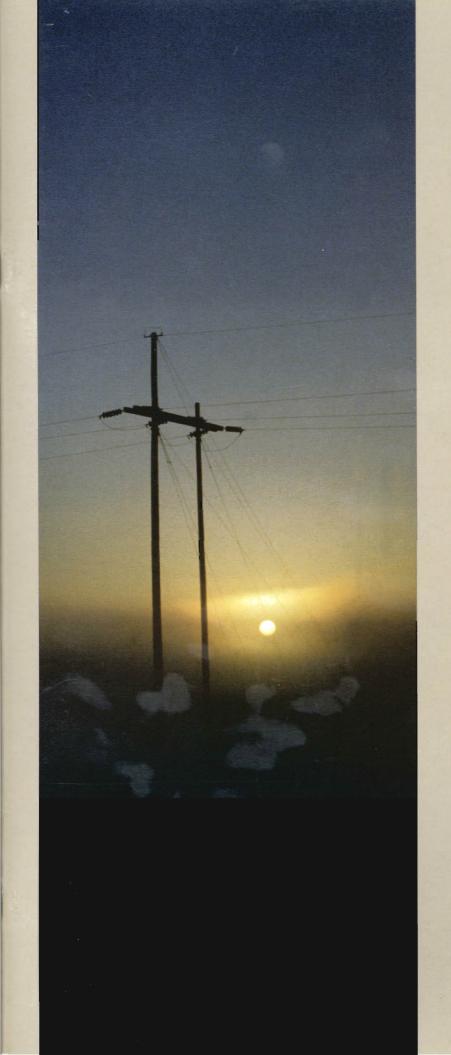
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#### TEN-YEAR SUMMARY

1990	1989	1988	1987	1986	1985
331,736,393	389,976,759	399,277,507	300,084,362	227,664,219	236,023,720
191,389,914	170,941,916	187,344,006	169,931,331	130,991,511	133,779,910
40,263,144 44,564,475 4,201,594	35,434,879 44,333,598 4,011,142	39,158,896 49,310,860 3,906,621	39,146,440 53,555,259 3,817,850	38,214,277 18,798,750 2,515,787	39,792,228 17,788,717 2,353,021
97,222,523 682,563	101,748,177 752,017	103,607,079 612,200	124,351,304 597,187	51,520,808 233,931	39,645,856 185,636
378,324,213	357,221,729	383,939,662	391,399,371	242,275,064	233,545,368
(46,587,820) 2,113,282	32,755,030 2,378,289	15,337,845 3,471,174	(91,315,009) 2,684,163	(14,610,845) (26,614,194)	2,478,352 1,040,972
(44,474,538)	35,133,319	18,809,019	(88,630,846)	(41,225,039)	3,519,324
1,462,170,906 9,204,400	1,454,882,990 4,162,708	1,451,937,802 1,226,596	1,448,581,890 1,448,505	1,452,144,009 2,080,925	539,998,444 833,505,325
1,471,375,306 331,805,315	1,459,045,698 288,884,804	1,453,164,398 245,556,080	1,450,030,395 196,710,029	1,454,224,934	1,373,503,769 124,841,130
1,139,569,991	1,170,160,894	1,207,608,318	1,253,320,366	1,310,745,111	1,248,662,639
1,267,340,928	1,322,367,888	1,386,197,045	1,421,349,400	1,438,564,861	1,409,490,616
				, *-	
1,174	1,177	1,157	990	993	1,042
1,459 264 178	1,459 264 178	1,459 264 178	1,459 270 178	1,448 271 178	1,039 271 178
8,191.46 2,592.86	8,072.76 1,500.96	7,814.61 3,188.51	6,271.32 3,993.08	6,211. <i>7</i> 9 3,303.68	6,908.67 3,290.11
9,010.66 1,668.90 337.14	8,047.11 1,388.66 314.14	9,270.21 1,716.20 262.04	8,321.80 1,932.61 284.69	6,609.70 1,631.87 336.38	6,447.45 1,779.65 291.98
81.9	80.0	77.6	75.5	74.1	78.1
868	857	855	856	863	827
28.73 129.2	27.82 126.5	28.05 125.7	27.48 124.3	27.83 127.6	30.25 137.7

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# 1993 ANNUAL REPORT

BIG RIVERS
ELECTRIC CORPORATION

#### Big Rivers Electric Corporation

Headquartered in Henderson, Kentucky, Big Rivers Electric Corporation is a generation and transmission cooperative owned by the members it serves. Since its origination in 1961, Big Rivers has remained committed to providing reliable wholesale electric service on a not-for-profit basis to its four member cooperatives. In turn, these cooperatives, owned by their 85,749 consumer-members, distribute the electricity at retail, on a not-for-profit basis, in portions of 22 counties located in western Kentucky.

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Financial Highlights Dollars in Thousands	1993	1992	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	350,946	319,907	31,039	9.7
Operating Expenses	291,462	266,780	24,682	9.3
Net Margins	(30,634)	(37,955)	7,321	19.3
Capital Additions	10,817	7,602	3,215	42.3
Cost of Fuel Used	117,400	108,323	9,077	8.4
System Peak Demand (Megawatts)	1,217	1,166	51	4.4
Energy Sold to Members (MWh)	8,445,136	8,326,341	118,795	1.4
Energy Sold to Others (MWh)	2,802,328	1,463,500	1,338,828	91.5
Revenue per kWh Sold (Mills)	31.19	32.67	(1.48)	(4.5)

# President's & General Manager's Report

We are pleased to report that we are continuing to improve our operations through increased sales and improved efficiencies. New sales records were established in 1993. A new system peak demand of 1,217 MW occurred on July 28, compared to the previous record of 1,177 MW set on December 22, 1989. Energy sales of 11,247,464 MWh during the year surpassed the 1988 record of 11,003,122 MWh. Revenues increased from last year by 9.7 percent to \$350.9 million, while operating expenses increased 9.3 percent to \$291.5 million. Although we incurred a net loss of \$30.6 million, this was a betterment of 19.3 percent from 1992 and our third consecutive year of improved results.

The year can best be summarized as a year of audits, reviews, investigations, hearings, and litigation. The year began with the continuation of investigations by the Federal Bureau of Investigation (FBI) and the Internal Revenue Service (IRS) of certain coal suppliers, the company's former general manager, and other individuals not related to the company. Big Rivers is not and has not been a target of these investigations and is fully cooperating with the investigators.

Two of the individuals under investigation have been indicted and have pleaded guilty to numerous counts relating to corruption in the western Kentucky coal industry. Eddie R. Brown, owner of coal companies and a trucking firm which had conducted business with Big Rivers, was indicted and pleaded guilty to numerous counts, wherein it is alleged that he made payments to a third party, Shirley Pritchett, for the benefit of W.H. Thorpe, Big Rivers' former general manager, and payments to Thorpe's daughter, Denise Perkins, all for Thorpe's favorable consideration in the awarding and maintaining of contracts between Big Rivers and Brown. Shirley Pritchett has also been indicted and pleaded guilty to numerous counts, including the payment of approximately \$700,000 to Thorpe.

Big Rivers has filed a lawsuit seeking a declaratory judgement to set aside three coal contracts with Costain Coal, Inc. The contracts were entered into in 1981, 1983, and 1984 with Jim

Smith Contracting Co. Smith sold the coal contracts and other coal properties to Costain in 1987. In 1988, Smith paid Thorpe \$500,000 for advice on the sale of a rail line.

Neither Thorpe nor Perkins has been indicted. Thorpe and Perkins deny any wrongful acts. In a plea agreement in the U.S. District Court for western Kentucky, Pritchett agreed to pay Big Rivers approximately \$1 million. The company has also filed civil lawsuits against the wrongdoers to recover damages.

The Kentucky Public Service Commission (KPSC), in late 1992, ordered a "focused management audit" of Big Rivers' fuel procurement policies, practices, and procedures. The audit was to cover a period beginning November 1, 1990, and extend through April 30, 1992. The final audit report was issued in May. The report stated that the former general manager committed serious violations of the standard of conduct expected of utility executives, but concluded that it was not possible to prove or disprove whether improprieties occurred with the information available from the audit.

The auditor found that, with the exception of fuel costs at the Wilson Plant, the company's fuel costs were below the average of the 22 generating plants within a 100-mile radius of Big Rivers' plants. The auditor expressed an opinion that Big Rivers had \$6 million of unreasonable fuel costs during the period under review. That determination was based upon the auditor's opinion that the company should not have amended a contract with Green River Coal Company (GRCC) in 1988 modifying the productivity index. Had the contract not been amended, the company would have had \$5.2 million lower fuel costs during the period. Also, the auditor concluded that the company should not have entered into a contract with another coal supplier. He therefore determined that the supplier had insufficient financial resources which resulted in an additional \$0.8 million of unreasonable fuel costs.

GRCC took Chapter 11 bankruptcy following the company's notification it would seek to recover any refunds ordered by the Public Service Commission of Kentucky (KPSC) as a result of the above audit. Further, in the indictments and guilty pleas of Brown and Pritchett, it was implied that they also received inside information from Thorpe which allowed GRCC to become a coal supplier for the D.B. Wilson Plant. The Bankruptcy Court stayed discovery procedures until the case could either be heard or disputes settled through the assistance of a court-appointed examiner.

The KPSC held a public hearing from October 26 to November 5, 1993, regarding the focused management audit and Big Rivers' fuel matters for the period under review. The large aluminum industrial customers of the distribution cooperatives intervened in the case along with the Rate Intervention Division of the Kentucky Attorney General's (AG) office. The intervenors claimed overcharges for electrical service of approximately \$45 million for the audit period. Intervenors have published claims for additional refunds. Big Rivers contests all of these claims. No order has been issued by the KPSC.

On February 18, 1994, Big Rivers, the intervenors, and the AG filed a Settlement Stipulation with the KPSC to be effective January 1, 1994, proposing to resolve all issues related to the Fuel Adjustment Clause (FAC) and/or fuel procurement practices by the company prior to the date thereof and the effect of such practices on allowable fuel costs for all past, present, and future periods. The Settlement Stipulation provides that GRCC will be paid \$3.61 over the price it pays for coal received from its substitute coal supplier. and that Big Rivers would not include \$1.80 per ton in the FAC. The ratepayers would receive a reduction in fuel costs, including the \$1.80 not passed through the FAC, of approximately \$9.00 per ton, or approximately \$100 million, during the remaining 11 years of the contract. Subsequent to the filing of the Settlement Stipulation, the aluminum company parties to the agreement notified the KPSC of their attempt to withdraw the agreement. This attempt is contested by Big Rivers and the matter is pending before the KPSC.

The Settlement Stipulation will not become effective until certain conditions occur, including the issuance of an appropriate order by the Bankruptcy Court, and the issuance by the KPSC of orders dismissing the fuel proceeding and approving the tariffs expressing the terms of the Stipulation.

Webster County Coal Corporation, a subsidiary of MAPCO, has filed suit against Big Rivers in the Webster County Circuit Court claiming that its cost-plus contract for the Retiki Mine entitles it to charge Big Rivers mine closing costs. The contract provides specifically for mine opening costs, but not for mine closing costs. Big Rivers has withheld mine closing costs from MAPCO's monthly billings since September. According to MAPCO's counsel, the last estimate of the total amount of these closing costs will be from \$10 million to \$15 million. Big Rivers will vigorously defend this suit.

Scrubbers are being installed by the City of Henderson on its Station Two, a two-unit, 315-MW net coal-fired, generating plant. Big Rivers operates the plant for the City and takes all

capacity and energy, approximately 83 percent, in excess of the City's need. Big Rivers and the City share all costs, except fuel, based on the allocation of capacity. The City Utility Commission and Big Rivers estimate the cost of the scrubber installation to be \$45 million. The installation is being financed by the City and Big Rivers through internally-generated funds, including proceeds ~ approximately \$28 million ~ from the sale of sulfur dioxide emission allow-ances. Amendments to the contract between the City and Big Rivers to include the operation of the scrubber have been filed with the KPSC.

We welcomed Mr. John Myers of Kevil, Kentucky, to our Board of Directors, representing Jackson Purchase Electric Cooperative Corporation. Mr. Myers has been a



Morton Henshaw President



Paul Schmitz General Manager

member of the Jackson Purchase board of directors since 1987, and is presently its vice president.

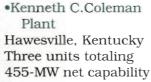
During the year, two members of Big Rivers' management team retired after long and distinguished careers with the company. W. Hayden Timmons, former vice general manager of external relations, marketing, and economic development, retired in March after serving Big Rivers for 14 years. James H. Jones, formerly the manager of economic development, has assumed Mr. Timmons' responsibilities. In November, Joe L. Craig, former vice general manager of fuels, environmental affairs, and information systems, retired, having been with Big Rivers for 21 years. Mike Dotson, former manager of fuels, is the new vice general manager of fuels. Mr. Dotson began his employment with the company in May, bringing with him 13 years of fuels management, purchasing, and related experience.

Through the remainder of this report, we address how the corporation is meeting its Long-Range Corporate Strategic Plan and its established goals.

Big Rivers owns and operates four generating facilities, in addition to operating Henderson Municipal Power and Light's Station Two. Statistics concerning those plants are as follows:



Coleman Plant



- •Robert D. Green Plant Sebree, Kentucky Two units totaling 454-MW net capability
- •Robert D. Reid Plant Sebree, Kentucky One 65-MW net combustion turbine One 65-MW net steam turbine
- D.B. Wilson Plant Centertown, Kentucky One unit with
   420-MW net capability

 Henderson Municipal Power and Light Station Two
 Sebree, Kentucky
 Two units totaling
 315-MW net capability

All of the generating units are coal fired except for a 65-megawatt (MW) combustion turbine used for peaking and emergency purposes.

Big Rivers operates Henderson Municipal Power and Light (HMP&L) Station Two and has contracted to take all the capacity in excess of HMP&L's needs. During 1993, Big Rivers' share was approximately 83 percent.

The Southeastern Power Administration (SEPA) provides 178 MW of hydroelectric peaking capacity to the corporation through a long-term contract.

In 1992, Big Rivers and East Kentucky Power Cooperative entered into a unit back-up power agreement in which each party agreed to furnish (when requested) up to 200 MW upon the loss of the other's largest generating unit (Big Rivers' Wilson unit and East Kentucky's Spurlock No. 2 unit). The agreement covers emergency and planned outages.



Reid/Green Plant HMP&L Station Two

# Increase Sales



Make sufficient member and off-system sales to achieve the debt service requirements as set forth in the Debt Restructuring Agreement.



Wilson Plant

In an effort to increase sales, Big Rivers has formed a three-member sales team. The team focuses on the fact that long-term power sales to other utilities are a vital part of Big Rivers' efforts to meet its obligations under the terms of the Debt Restructuring Agreement. At the close of 1993, sixteen proposals were pending with other utilities, while two other proposals were being prepared for submittal.

In June 1993, a seven-year contract was

negotiated with Hoosier Energy Rural Electric Cooperative (Hoosier) of Bloomington, Indiana, for the sale of peaking capacity during the months of June through September. The amount of capacity sold by year is shown in the following table:

	Capacity Amount
Year	Megawatts
1993	10
1994	30
1995	80
1996	110
1997	130
1998	150
1999	170

The contract has been approved by the Rural Electrification Administration (REA) and has been filed with the KPSC.



Corporate Headquarters

In addition to the Hoosier agreement, Big Rivers is supplying 54 MW of capacity to the Municipal Energy Agency of Mississippi under a contract which expires in September 1995, as well as 103 MW to Oglethorpe Power Corporation, under an agreement extending through July 2002.

Big Rivers has also leased its 65-MW Reid combustion turbine to Hoosier for the period of June 15 through September 15 each year from 1991 through 2000.

Along with the completed sales agreements and pending proposals, Big Rivers is actively attempting to develop markets with prospective new customers, primarily in the southeast and midwest, through its day-to-day telephone contacts and meetings with those prospects.

Economic development efforts have also helped to secure load for the Big Rivers system. In 1990, Scott Paper Company announced a decision to locate its new tissue mill in Daviess County. Phase I of the construction has now been completed. Phase II, which is already underway, is expected to be completed by the close of 1994.

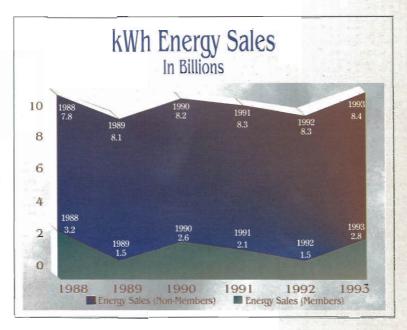
The Scott Paper plant, which is served by Green River Electric Corporation, one of Big Rivers' member cooperatives, expects an electrical load requirement of 30 MW. The total project cost for both phases is anticipated to be \$220 million with employment of approximately 300 people.

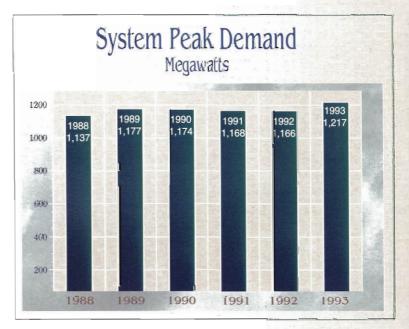
In addition, Big Rivers continues to talk with representatives of various companies who have expressed interest in locating within the Big Rivers system.

As a result of the above, off-system power sales were a marked increase in 1993 over the previous two years. Total energy sales in 1993 amounted to 11,247.5 Gigawatt-hours (GWh) compared to 9,790.0 GWh in 1992. Energy sales to other utilities for 1993, 2,802.3 GWh, increased 91.5 percent over the 1,463.5 GWh delivered during 1992. Rural residential and commercial sales increased by 142 GWh, or approximately 9.9 percent. Industrial energy sales decreased slightly from a year ago by 23.3 GWh.

On July 28, 1993, at 5 p.m., Big Rivers' system load peaked at 1,217 MW. This surpassed the system peak record of 1,177 set in December of 1989 and was 4.4 percent above the 1992 summer peak of 1,166 MW. The system annual load factor for 1993 was 81.3 percent.

Heating and cooling degree days for the year totaled 6,266. The total degree days in 1992 was 5,452.





# Operate Efficiently and Reliably-

#### Goal:

Plan, design, construct, operate, and maintain Big Rivers' electric system to ensure the delivery of safe and reliable energy to its members and wholesale customers at the lowest reasonable cost and in an environmentally sound manner.

A prime example of this dedication to efficient and reliable operation is the installation of the Harris 9000 Energy Management System. The system allows Big Rivers to operate in a more efficient and economical manner. The Harris system provides:

- · real-time dispatch information,
- a method by which the system supervisors are alerted to any problem, enabling corrective action to be taken immediately,
- · data for maximizing load efficiency,
- · similar day forecasting,
- power flow ~ system voltage information,
- · power requirement estimates, and
- · current status on emissions.

Another area which has required extensive planning is the design and construction of electric service facilities for Scott Paper Company's Daviess County plant. The project consists of 16 miles of 161-kV transmission line, the addition of a line bay at the Daviess County Substation, and the development of a new substation at the Scott Paper plant site. A four-mile section of the transmission line was completed and energized at 69 kV providing five to seven MW of power to Scott Paper's first phase of plant operation. The remaining 12 miles of line and the associated substation work continued during 1993 and is scheduled for completion by mid-1994. Until completion, Big Rivers' mobile substation is being used as a means of transformation.

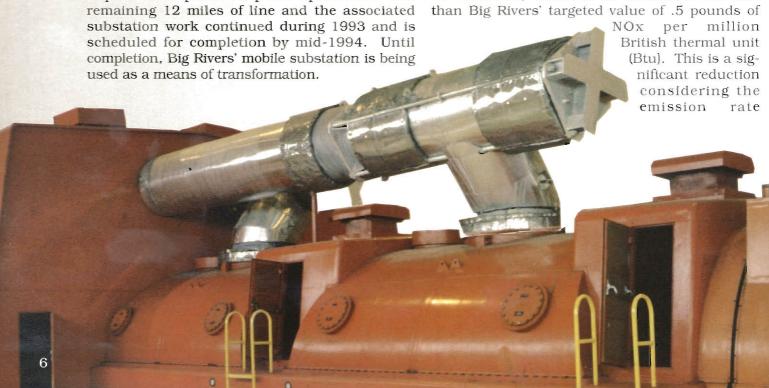
In addition, a 3 1/2-mile 69-kV transmission line was designed and constructed to serve Costain Coal Company's East Portal Mine in Webster County.

In October, the Sextet Mining Company began receiving electric service at its Dorea Mine in Webster County. This service required a 69-kV tap line and a 69-kV metering installation; both were completed in 1993.

Compliance with various environmental regulations was also a focus of attention during 1993. Applications for Phase I Acid Rain Permits, to comply with regulatory aspects of the Clean Air Act Amendments of 1990 (CAAA-90), were filed for all of Big Rivers' affected units, as well as for HMP&L Station Two.

In addition, Big Rivers continued its evaluations of the various available options for system compliance with the SO2 emission requirements under the CAAA-90. These evaluations indicated that the most economical approach is the installation of scrubbers at HMP&L Station Two. This creates system-wide benefits for all affected units.

Furthermore, in order to reduce nitrogen oxide (NOx) emissions, Coleman Units One and Two were retrofitted with low NOx burners. Results from testing on Unit Two (the first unit to be retrofitted) indicated an emissions rate less than Big Rivers' targeted value of .5 pounds of



was at, or above, 1.1 pounds of NOx per million Btu before the conversion.

As mandated by the 1990 Amendment to the Clean Air Act, new continuous emission monitoring systems were installed on each Phase I affected unit. The system monitors SO2, NOx, and CO2 particulate emissions opacity and volumetric flow of generating plant stack gases. The data is automatically collected at a central location by means of microwave link-up of the various site monitoring computers. A great amount of time was spent ensuring that these systems were properly installed and certified in accordance with regulations.

Preliminary design work for relocating the Wilson Plant scrubber controls to the main control room has been completed and a construction contract has been awarded. Relocation will result in a more cost-effective scrubber operation.

Other environmental concerns began when zebra mussels were discovered in the Coleman Plant intake structure. These mollusks have been found at various facilities along the Ohio River. Close sampling of Coleman's systems will continue to assure no impacts on the Plant's operation or reliability. Sampling efforts are continuing at the D.B. Wilson and Reid/Green facilities on the Green River. Thus far, no mollusks have been discovered.

As previously stated, employees are continually investigating other avenues to help reduce operating costs and increase efficiency. As a result of these efforts, additional titanium in the scrubber outlet duct at Wilson Plant has been installed to help reduce maintenance repair costs by protecting the carbon steel ductwork and eliminating annual replacement costs of the original Gunite duct lining. Also, landfilling of the Wilson Plant scrubber sludge/bottom ash mixture was moved back to the on-site landfill area. An outside contractor is hauling the waste and managing the landfill operation for significantly less cost per ton than the previous arrangement of off-site disposal. Performance engineers are conducting additional testing on all units to provide more comprehensive heat rate curves for year-round operation of each unit. Also, the coal feeders on one Green and one Henderson unit have been converted from a mechanical weigh system to an electronic weigh system using load cells to increase the accuracy of coal measurement. Moreover, production employees completed work on performance monitoring systems and enhancements to the computerized maintenance management system, which were responses to the last two open recommendations from the 1990 management audit. As a result, PSC approval has been received to close all of the recommendations relevant to the Production Department.

Total capital expenditures for construction in 1993 were \$16.4 million, up \$9.0 million from 1992.

Continuing to provide members and wholesale customers reliable energy at the lowest reasonable cost remains in the forefront of Big Rivers' rate matters. As discussed in previous annual reports, in 1987 the PSC ordered a variable tariff rate for energy sold by Big Rivers to Henderson Union Electric Cooperative and Green River Electric Corporation to be delivered to the aluminum smelters. The variable rate requires Big Rivers to collect from a high of 4.4 cents per kWh to a low of 1.8 cents, as primary aluminum prices fluctuate between 80 and 45 cents a pound. During 1993, the market price for aluminum reached a historically low level, averaging 53.85 cents a pound, as compared to an average of 58.02 cents a pound the previous year. Consequently, Big Rivers' 1993 cash collections for energy delivered to the smelters averaged 2.6 cents per kWh, as opposed to 2.9 cents in 1992. This low amount had a substantial impact on Big Rivers' cash flow and the availability of funds for debt service payments to the Rural Electrification Administration (REA). However, the low cash flow did not affect the recognition of revenues from the smelters for 1993. The settlement with the smelters, more fully discussed in footnote 5 to the financial statements, assures that Big Rivers will receive an average of 2.91285 cents per kWh through August 1997, to the extent the smelters operate at a 99 percent load factor.

The variable rate, as set by the PSC, was designed to assure that the aluminum smelters could continue to operate at full capacity in spite of a low sales price for their product.



# Provide a Quality Work Environment-

#### Goal:

Maintain an organization structure and employee programs and practices which foster an atmosphere that motivates, attracts, develops, and retains qualified and capable personnel.

Teamwork and employee involvement continued to be the buzz words around Big Rivers for 1993 as the company-sponsored "Powerful Ideas" employee-suggestion program reached a crescendo with \$3,183,567 worth of ideas approved for implementation. In addition to the 1,214 "costsaving and revenue-generating" ideas, there were 794 "quality" ideas submitted by the 797 employees who chose to participate in this new venture. Big Rivers employees achieved a remarkable record with an average of over 19 ideas submitted per team during the 13-week program! Once again, Big Rivers' employees have proven the theory that, "No one knows the job better than those who do it every day." Big Rivers commends all employees for this outstanding accomplishment.

Fifty-one employees had a quest for higher education and benefited from the company's Educational Assistance Program. A total of \$35,581 was spent on behalf of employees in this program in 1993. Big Rivers considers this money an investment in

the future of the company.

All headquarters and transmission employees completed the "FrontLine Leadership"

and "Working" training programs.

In an effort to provide employees with information concerning their health, Big Rivers offered the "Sack Lunch Series." Topics such as stress awareness and healthful eating habits were presented during luncheon meetings. This program originated as an employee-suggested "Powerful Idea."

> Another program offered to employees as a result of the suggestion program was "Grammar Brush-Up," conducted by Marianne Walker, instructor at Henderson Community College. Participants learned more effective ways to communicate through better grammar when speaking and writing.

> > An audit of the company's Affirmative Action

Program in 1993 by the U.S. Department of Labor's office of Federal Contract Compliance found Big Rivers' equal employment opportunity policies and practices to be in full compliance with federal regulations. This was the second such audit of the company's Affirmative

> Action Program since 1987. In both, Big Rivers was found to be in compliance. Big Rivers is proud of this accomplishment and is committed to continuing with our affirmative action employment efforts.

> > Safety precautions and employee dedication to creating a safe working environment paid off in 1993. Corporate-wide, there were 216 lost-time days, which was a 46 percent decrease from 1992's 472 lost-time days.

> > > There were 12 lost-time injuries in 1993 ~ down from 13 in 1992. However, there were 61 reported injuries, which is up 12 percent from 1992's 42 injuries.

Throughout the year, training seminars were conducted to ensure that employees were up-to-date on the latest

safety procedures. Some of the topics covered during the sessions were:

Les can Day Rivers

- Standard first aid and cardiopulmonary resuscitation ~ offered to headquarters and plant personnel;
- · Fire procedure and extinguisher training ~ offered to plant and headquarters employees:
- Basic self-contained breathing apparatus training ~ offered at all plants;
- Emergency response team training ~ a three-day seminar for plant supervisors.

In addition to in-house training endeavors, Orr Safety conducted small-scale, short-duration, and 24-hour EPA bulk asbestos training.

Plant employees were also introduced to fireresistant smocks for use when racking in and out electrical breakers.



Big Rivers also offered training seminars to co-op employees.

- Approximately 175 employees were either certified or recertified in cardiopulmonary resuscitation.
- Twelve employees were certified in standard first aid.
- All member system employees were trained on basic substation operations, on Big Rivers' switching procedures, and on how to communicate with dispatch.

In addition, co-op employees participated in merchant lineman courses, forklift, hazard communication, weather spotting, and numerous other training seminars.

The above mentioned efforts helped to keep the annual employee turnover rate below the national average for similar-sized companies. Total employment at the end of the year was 847, up from 846 in 1992. Annual employee turnover rate was 1.6 percent.

# Provide Quality Support Services and Maintain Sound Customer, Public, and Regulatory Relations—

#### Goal:

Provide quality support services in an efficient and cost-effective manner while creating a better understanding of the mission of Big Rivers by representing the best interests of the corporation, our member cooperatives, and their consumers, through public relations and marketing activities, and input in governmental actions at the federal, state, and local levels.

Big Rivers Electric and the member distribution systems continued to work together, applying the principles of cooperation to successfully market high-efficiency end-use products to our consumers. The value of electricity was promoted through regional advertising and strong individual selling at the distribution level.

#### **Program Results**

Over 280 homeowners installed heat pumps during the year, amounting to 936 tons of capacity. Additionally, 310 tons of commercial heat pump capacity was installed in 1993. Approximately 310 consumers installed

electric water heaters in new homes, while 80 consumers converted from gas to electric.

A new home construction program entitled "All-Seasons Comfort Home" (ASCH) was initiated in 1993, with 23 new homes meeting the ASCH standards, while approximately 20 additional homes were under construction at year-end.

#### **Advertising and Promotion**

Advertising and promotion of residential marketing programs via television, radio, newspapers, and consumer publications such as "Current Trends" and "Power Partners," were well received and very effective in



"Power Partners," and radio advertising won national and state awards of merit and excellence in their respective categories.

Bill inserts promoting the marketing programs were produced and inserted into consumer bills throughout the year, providing a cost effective way to reach the customer.

#### Demand-Side Management and **End-Use Research**



A new customer satisfaction and end-use survey was completed in April 1993. The study revealed no significant changes in satisfaction among our

> customers ~ satisfaction still

remains high! The study also indicated that market share for electric water heating remains strong, and electric space heat-

ing has gained market share in the past two years.

A detailed Demand-Side Management study was initiated in late 1993 with results due during the first quarter of

1994. This study should establish the direction for marketing programs, load control, wholesale pricing signals, and other related areas for the Big Rivers system.

#### Trade Ally and Consumer Education

An ongoing effort was made during the year to provide quality training and information to trade allies (those involved in the installation of electrical products and the construction and planning of facilities where electricity will be used) and consumers. Several trade allies attended training at the Electric Training and Research Laboratory in Lexington, Kentucky, and also attended other seminars throughout the region.

Home-energy consumer workshops were held at the distribution system facilities during 1993. Members were offered free information on how to save energy in the home.

#### Community Relations and Customer Service

D.B. Wilson Plant tours, along with the distribution systems' participation in trade shows, fairs, and school programs, were a significant part of system-wide public relation activities. Community and civic activities were supported by Big Rivers through employee participation in March of Dimes, Chamber of Commerce, United Way, Big Brothers/Big Sisters of America, and other community organizations.

# Enhance Financial Stability -

#### Goal:

Enhance financial stability and provide financial resources required to achieve corporate goals.

During 1993, Big Rivers continued improving its operating margins. The loss of \$30.6 million for 1993 was a \$7.3 million improvement compared to 1992. This represents the best annual improvement of the past three years. At yearend, the corporation's equity position reflected a \$185.4 million deficit. Big Rivers' current projections show continued improvements in margins, with positive margins anticipated for 1998.

The cost of fuel consumed in generating electricity is Big Rivers' single largest expenditure. About three-fourths of Big Rivers' coal requirements are supplied from Kentucky mines in the service areas of the corporation's member cooper-

The units burned 4.9 million tons of coal in generating electricity ~ an average of 13,470 tons per day. This compares with 4.4 million tons ~ 12,127 tons per day ~ burned in 1992. Fuel costs for the year (including Big Rivers' share of HMP&L Station Two, reported as purchased power) were \$139.8 million ~ an increase of \$15.1 million.

The average cost of coal was \$28.27 per ton, equivalent to 125.6 cents per million Btu. This compares with \$27.92 per ton, 125.5 cents per million Btu last year.

In 1988. Big Rivers entered into a Debt Restructuring Agreement effective August 31. 1987 (defined in note 4 to the financial statements), which provides for annual minimum debt service payments. The Agreement also provides for payment to REA of cash in excess of a \$10 million balance at the end of each month after "Power Partners," and radio advertising won national and state awards of merit and excellence in their respective categories.

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On June 29 and September 8, SO2 emission allowances, available from Henderson Municipal Power and Light's Station Two scrubber project, were sold and netted Big Rivers \$22.9 million. The proceeds from these two transactions increased cash flow available for debt service. As a result, Big Rivers paid \$92.7 million to the REA during 1993.

On October 4, 1993, Big Rivers submitted an application to the REA to refinance \$354.9 million of outstanding high-cost Federal Financing Bank (FFB) debt. This refinancing, if approved, will decrease our government debt. Through 1993, cumulative principal payments have reduced the principal balance to \$84.4 million less than the scheduled principal balance under the Debt Restructuring Agreement, as amended. The scheduled REA debt service payment for 1994 is \$134.0 million.

As ordered by the KPSC, a focused management audit of fuels procurement was performed by Overland Consulting Group. The audit began in January and the final report was issued in May. Although the report was favorable in many areas, it was recommended that many improvements to the fuels procurement function be made and it was determined that Big Rivers had unreasonable fuel costs of \$6.0 million for the period under review (November 1990 through December 1992). The alleged unreasonable costs resulted from entering into a particular coal contract in 1991 and amending another coal contract in 1988.

The Kentucky Industrial Utilities Customers (a group representing Big Rivers' largest industrial customers) and the Kentucky Attorney General, together, intervened in the case and engaged five consultants to develop testimony against Big Rivers. These consultants developed hundreds of pages of pre-filed testimony and

claimed that \$45.4 million should be refunded for the period under review (November 1990 through April 1993). Big Rivers denied the validity of the claims for refund, and engaged four consultants to develop supporting prefiled testimony, along with prefiled testimony of Big Rivers' management. A public hearing was held before the KPSC October 27-30 and November 3-5 involving approximately 72 hours of verbal testimony. The Commission's decision is awaited at year-end.

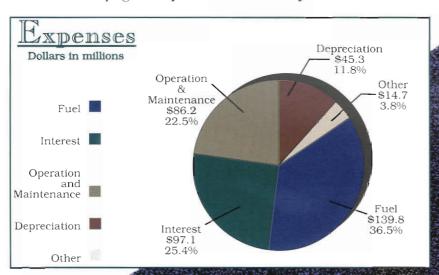
In March, the U.S. District Court of Southern Indiana rendered a decision in favor of Big Rivers in a lawsuit involving Delta Mining Corporation. This former coal supplier alleged that Big Rivers owed \$15.7 million in damages for not accepting the total quantity of coal required under a 10-year contract made in 1977. In April, Delta Mining appealed the decision in the U.S. Court of Appeals for the Seventh Circuit. Oral arguments on the appeal were held in October. At year-end, no decision had been rendered.

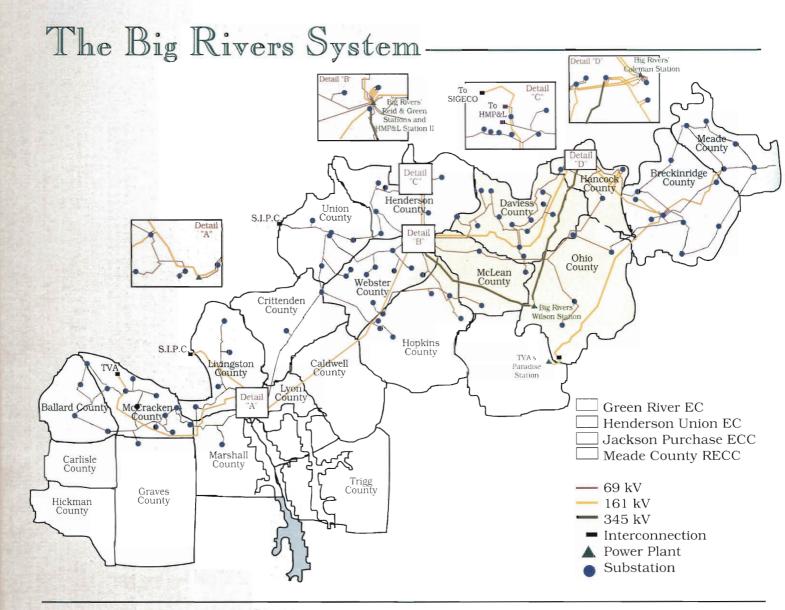
In June, Big Rivers notified Green River Coal Co., Inc., the supplier of 1.020 million tons of coal annually to the Wilson Plant under a 20-year contract made in 1982, that the coal supply contract should be terminated. Furthermore, all payments resulting from the 1988 amendment to the contract should be refunded. These actions were a result of recent information indicating that the contract and amendment were made with illegal activity involved.

Green River Coal denied that any wrongdoing took place in the making of the contract or amendment and, in July, filed for Chapter 11 protection in the U.S. Bankruptcy Court for the Western District of Kentucky, requesting the Court to declare the contract and amendment valid. Big Rivers filed opposition to this

action. At year-end, no outcome

had been determined.





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# Independent Auditor's Report-

The Board of Directors
Big Rivers Electric Corporation:

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1993 and 1992, and the related statements of revenues and expenses, equities (deficit) and cash flows for each of the years in the three-year period ended December 31, 1993. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation at December 31, 1993 and 1992, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1993, in conformity with generally accepted accounting principles.

As discussed in notes 4 and 5 to the financial statements, Big Rivers Electric Corporation and its creditors entered into a Debt Restructuring Agreement whereby government related debt was restructured into a Total Government Debt Note (REA Promissory Note). The principal repayment of the REA Promissory Note is contingent upon the available cash flow, as defined by the Debt Restructuring Agreement. Big Rivers Electric Corporation's ability to recover its costs and repay its debt is dependent upon among other things, its generating adequate revenues by selling excess capacity to nonmembers.

As discussed in note 7 to the financial statements, Big Rivers Electric Corporation may have exposure to cancellation charges and additional costs if a project of the City of Henderson is terminated.

As discussed in note 12 to the financial statements, Big Rivers Electric Corporation is a defendant in a number of legal actions brought by both private and regulatory agencies.

The ultimate outcome of the matters discussed in the three preceding paragraphs cannot be presently determined. Accordingly, no provisions for any liability that might result from the outcome of these uncertainties have been recognized in the accompanying financial statements. These matters also raise substantial doubt about Big Rivers Electric Corporations' ability to continue as a going concern. The financial statements do not include any adjustments relating to the recoverability and classification of reported asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties.

February 25, 1994

KPMG Peat Manuel

KPMG Peat Marwick, Certified Public Accountants

#### Statement of Revenues and Expenses Years ended December 31, 1993, 1992, 1991 (Dollars in thousands)

	1993	1992	1991
Operating revenues (notes 5 and 10)	\$350,946	319,907	331,335
Operating expenses			
Operations:			
Fuel for electric generation	117,400	108,323	115,202
Power purchased and interchanged, net	45,151	33,731	39,249
Other	51,366	48,838	48,467
Maintenance	27,783	26,532	29,618
Depreciation and amortization	45,257	44,981	44,810
Taxes	4,505	4,375	4,366
Total operating expenses	291,462	266,780	281,712
Electric operating margins	59,484	53,127	49,623
Interest and other deductions:			
Interest (note 4)	93,149	93,890	95,530
Allowance for borrowed funds used			
during construction (note 2)	(442)	(532)	(458)
Other deductions	(1,043)	(1,000)	(1.009)
Total interest and other deductions	91,664	92,358	94,063
Operating loss	(32,180)	(39,231)	(44,440)
Nonoperating margins:			
Interest earned	1,542	1,274	1,502
Other	4	2	3
Total nonoperating margins	1,546	1,276	1,505
Net loss	\$ (30,634)	(37,955)	(42,935)

## Statement of Equities (Deficit)

Years ended December 31, 1993, 1992, 1991 (Dollars in thousands)

(Donars in thousands)	Total equities	Accumulated deficit- operating	Accumulated deficit- nonoperating	Patronage capital	Other Donated capital and memberships	equities Consumers' contributions to debt service
Balance at December 31, 1990	\$ (73,882)	(190,280)	(15,968)	127,921	764	3.681
Margins for 1991:						
Operating	(44,440)	(44,440)				
Nonoperating	1,505		1,505			
Balance at December 31, 1991	(116,817)	(234,720)	(14,463)	127,921	764	3,681
Margins for 1992:						
Operating	(39, 231)	(39, 231)				
Nonoperating	1,276		1,276			17.5
Balance at December 31, 1992	(154,772)	(273,951)	(13, 187)	127,921	764	3,681
Margins for 1993:						
Operating	(32, 180)	(32, 180)				-+-
Nonoperating	1,546		1,546			
Balance at December 31, 1993	\$(185,406)	(306,131)	(11,641)	127,921	764	3,681

#### Balance Sheets At December 31, 1993, 1992 (Dollars in thousands)

<u>Assets</u>	1993	1992
Utility plant, net (notes 2, 4, and 7) Other deposits and investments, at cost Current assets:	\$ 1,050,621 5,783	1,087,900 5,483
Cash and temporary cash investments Receivables (note 10) Fuel for electric generation Non-fuel inventory	10,073 30,933 18,396 14,766	10,079 23,164 24,471 14,668
Total current assets	74,168	72,382
Deferred charges (note 3)	12,817	14,387
	\$ 1,143,389	1,180,152
Equities and Liabilities	<u>1993</u>	1992
Capitalization: Equities (deficit) Long-term liabilities (notes 4, 5, and 7)	\$ (185,406)	(154,772)
REA debt Other long-term debt	1,076,835 173,336	1,082,652 178,600
Total long-term liabilities Less current maturities	1,250,171 19,532	1,261,252 18,337
Total long-term liabilities net of current maturities	1,230,639	1,242,915
Total capitalization	1,045,233	1,088,143
Current liabilities: Current maturities of long-term		
liabilities (notes 4, 5, and 7) Accounts payable Accrued expenses	19,532 21,351 3,919	18,337 14,760 4,475
Total current liabilities	44,802	37,572
Deferred revenue (note 5) Deferred credits (note 7)	9,186 44,168	25,250 29,187
Commitments and contingencies (notes 7, 8, 9, and 12)	\$ 1,143,389	1,180,152

## Statement of Cash Flows

Year ended December 31, 1993, 1992, 1991 (Dollars in thousands)

	1993	1992	<u>1991</u>
Cash flows from operating activities:	W 1990 N COUNTY N		
Net loss	\$ (30,634)	(37,955)	(42,935)
Adjustments to reconcile net loss			
to cash provided by operating activities:	45 000	45 500	45 510
Depreciation and amortization	45,983	45.706	45.518
Amortization of deferred charges	996	917	2,356
Net change in deferred revenue	(16,064)	(9.343)	6.107
Change in assets and liabilities:	(5.500)	1 701	E 0.51
Receivables	(7,768)	1,734	5,371
Fuel for electric generation	6,076	3.716	(3,604)
Non-fuel inventory	(99)	564	(421)
Accounts payable	6,591	(4,030)	185
Accrued expenses	(556)	143	(4,676)
Other, net	(1,096)	(2,272)	324_
Net cash provided by (used in)		(0.00)	
operating activities	3,429	(820)	8,225_
Cash flows from investing activities:			
Construction expenditures	(16,404)	(7.381)	(7,672)
Prepayment on coal contract	(10,101)	(1,001)	(3,500)
Sale of pollution control allowances	23,150		(0,000)
Sale of political control anowalices	20,100		
Net cash provided by (used in)			
investing activities	6,746	(7,381)	(11, 172)
an obtains dourned		(1,001)	(11,112)
Cash flows from financing activities:			
Principal payments on long-term debt	(4,364)	(4,364)	(4,364)
Unpaid accrued interest	(5,816)	12,544	7,158
onpaid accrace interest	(0,010)	12,011	7,100
Net cash provided by (used in) financing			
activities	(10, 180)	8,180	2,794
activities	(10,100)		2,751
Net increase (decrease) in cash			
and temporary cash investments	\$ (5)	(21)	(153)
and temporary each investments	ψ (0)	(21)	(100)
Supplemental Cash Flow Information			
	1993	1992	1991
	1000	1002	1001
Cash paid relating to interest expense	\$ 97,594	80,233	84,642
Paragraph of the control of the cont	Ψ 01,001		

See accompanying notes to financial statements.

#### Notes to Financial Statements

December 31, 1993, 1992, 1991 (Dollars in thousands)

#### 1. Summary of Significant Accounting Policies

#### General Information: -

Big Rivers Electric Corporation (Big Rivers), a non-profit electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives and markets power to non-member utilities. The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from

Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

#### System of Accounts: -

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies

retain authority and periodically issue orders on various accounting and rate-making matters.

#### Revenue Recognition:-

Revenues are based on month-end meter readings.

#### Utility Plant and Depreciation:-

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal and salvage value, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate of the REA Promissory Note to the to-date accumulated expenditures for qualifying projects included in construction

in progress. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. The annual REA-prescribed rates used to compute depreciation are as follows:

Production plant	3.00-3.10%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2.00-20.00%

For 1993 and 1992, the average depreciation rate was 3.06 percent.

#### Temporary Cash Investments: -

Temporary cash investments consist primarily of temporary investments in U.S. government and federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market. For purposes of statement of cash flows, Big Rivers considers all short-term, highly-liquid investments of three months or less to be cash equivalents.

#### Notes (continued)

#### Inventories:

Inventories, consisting of non-fuel and fuel for electric generation, are valued at weighted average cost.

#### Patronage Capital:-

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal

year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons. Patronage capital cannot be retired if patronage capital is less than 40 percent of the total assets.

#### Pension and Deferred Compensation Plans:

All employees, after one year of service, are covered under trusteed non-contributory retirement plans. Also, Big Rivers has executed non-contributory compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. The pension plans are funded in accordance with the OBRA mini-

mum funding requirements, while the deferred compensation plan is fully funded. Pension expense includes current service cost, interest cost, actual return on plan assets amortizations of prior service cost and gains and losses. Amortizations are over periods up to 21 years.

#### New Accounting Standards:

In November 1992, the FASB issued Statement of Financial Accounting Standard (SFAS) No. 112, "Employers' Accounting for Postemployment Benefits." This standard requires that employers accrue the estimated postemployment cost of benefits during the years that employees render service. The Company plans to adopt SFAS No. 112 on January 1, 1994.

In May 1993, the FASB issued SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities" which the Company plans to adopt on January 1, 1994. This statement addresses the accounting and reporting for investments in equity securities that have readily determinable fair values and for all investment in debt securities.

During 1993, Big Rivers adopted SFAS No. 109, "Accounting for Income Taxes." and SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions."

The impact of the new statements will not have a material impact on the financial position or results of operations.

#### Reclassification: -

Certain prior year amounts have been reclassified for comparability with the 1993 presentation.

#### 2. Utility Plant

The following summarizes utility plant:

	1993	1992
Classified plant in service:		
Production plant	\$1,308,504	1,306,209
Transmission plant	80,930	80,158
Station equipment	99,447	92,359
General plant	18,015	17,670
Intangible	190	190
Unclassified plant in service	56	460
	1,507,142	1,497,046
Less accumulated depreciation and amortization	461,496	419,710
	1,045,646	1,077,336
Construction in progress	4,975	10,564
	\$1,050,621	1,087,900

Construction in progress is comprised of the Scott Paper 161-kV transmission line, the continuous emission monitors, and several small projects. The

average rates used for the capitalization of interest during construction in 1993, 1992, and 1991 were 8.0, 8.0, and 7.8 percent, respectively.

#### 3. Deferred Charges

The following summarizes deferred charges:

	1993	1992
Unamortized debt expenses	\$ 6,998	7,454
Green River Coal prepayment	5,653	6,192
Other	166	741
	\$12,817	14,387

Big Rivers refinanced a portion of its long-term debt at lower interest rates and incurred refinancing expenses. In November 1982, Big Rivers elected to refinance \$90,053 of FFB short-term mortgage notes with long-term notes at lower interest rates. As a result of this election, a refinancing cost of \$4.616 was incurred. On September 29, 1987, and February 25, 1988, Big Rivers refinanced \$319,426 and \$250,805, respectively, at lower interest rates. The refinancing costs were \$2,937 and \$3,318, respectively. These costs are being amortized over the term of the REA promissory note (see note 4).

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. A contract for substitution of coal was executed on September 24, 1991, with

Green River Coal. Big Rivers has made total fuel prepayments of \$7,000. Interest on the outstanding balance is based on the prime rate established by Chemical Bank of New York plus 2 percent. Green River Coal is repaying Big Rivers at the rate of \$1 per ton of coal shipped.

On July 8, 1993, Green River Coal filed for bankruptcy protection from its creditors. Big Rivers and Green River Coal are currently in negotiations, under the supervision of the Bankruptcy Court, and it is the opinion of management that the outcome of these negotiations will not adversely affect Big Rivers (see note 12).

#### 4. Long-term Liabilities

A summary of long-term liabilities follows:	1993	1992
Promissory note - REA 8.36%	\$ 647,140	705,029
Unamortized premium	429,695	377,623
	1,076,835	1,082,652
County of Ohio, Kentucky, promissory note, with variable	e	
interest rate of 3.00% as of 12/31/93	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable	e	
interest rate of 3.00% as of 12/31/93	58,800	58,800
Obligation under purchased power contract (see note 7)	23,600	24,500
Bank of New York, bank loan 8.0%	3,160	4,965
Chemical Bank, bank loan 8.0%	4,476	7,035
Total long-term liabilities	1,250,171	1,261,252
Less current maturities	19.532	18 337

#### Debt Restructuring Agreement:

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated as of March 30, 1988, which was executed as part of a Debt Restructuring Agreement.

The impact of the Debt Restructuring Agreement was accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers accounted for the effects of the restructuring prospectively and did not change the carrying amount of the debt.

1.242.915

\$1.230,639

#### Promissory Note - REA:

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner to that provided by a conventional loan amortization schedule) at an interest rate of 8.36 percent for the REA Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by REA (REA Debt). For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. Any unpaid interest is added to the unamortized premium. The effective interest rate for 1993, 1992, and 1991 on the REA Promissory Note was 8.0, 8.1, and 7.9 percent, respectively. In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on all prior debt on a timely basis and will not seek to collect from Big Rivers, with respect to any REA Debt, any amounts in excess of the obligation on the REA Promissory Note.

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments 20

depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a monthend cash balance of \$10,000.

In connection with the Settlement Agreement described in note 5, the Debt Restructuring Agreement was amended as of January 1, 1990. The amendment provided that if the variable rates to the aluminum smelters specified in the Settlement Agreement (described in note 5) and in effect on April 1, 1990, remain continuously in effect and unmodified through August 31, 1997, and if during this period, the REA Debt never exceeds by more than \$18 million what the REA Debt would be if only the scheduled annual amounts were paid, then no Event of Default shall be deemed to have occurred through December 31, 1997. If the REA Debt exceeds \$442,948 on January 1, 1998, then the schedule shall be amended beginning with 2004 and continuing to each immediately successive year such that the amount of the cash payments for any year shall not exceed \$150,000 and such that the scheduled annual payment amounts in and after 1998, if paid in equal monthly installments for each year, will when discounted in accordance with the agreement, yield a figure that equals in aggregate the REA Debt as of January 1, 1998.

#### Other Long-term Debt:

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. These bonds bear a variable rate of interest, determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 1, 1994, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Bank of New York to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the

County of Ohio, Kentucky, issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent nor greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Chemical Bank irrevocable standby letter of credit, which is due to expire October 15, 1997, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit. In absence of notification by Chemical Bank to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Draws against the letter of credit would bear interest at prime plus 2 percent and become Bank Amounts as defined by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

#### Debt Maturities:-

At December 31, 1993, Big Rivers had, since September 1987, paid total debt service on the REA Promissory Note in such a manner that there existed an excess debt service payment against default in the amount of \$102,422. This represents a decrease of \$21,331 during 1993. This excess debt service payment can be used to offset future payments under the schedule.

Based on the overpayments to date and the required REA Promissory Note principal balance on

December 31, 1997, Big Rivers has calculated the annual payments on a straight-line basis to avoid an event of default through December 31, 1997, and minimum scheduled payments thereafter. Actual payments may be more or less than those on a straight-line basis. Under this calculation, the maturities of long-term debt for each of the five years subsequent to December 31, 1993, are estimated to be as follows:

Year	REA Promissory Note	Unamortized Premium	Other Debt	Financial Statement Change in Principal
1994	\$57,350	(43,966)	6,148	19,532
1995	52,926	(38,421)	7,364	21,869
1996	48,842	(33, 127)	3,143	18,858
1997	45,074	(28,044)	3,308	20,338
1998	62,629	8,112	3,489	74,230

#### 5. Rate Matters

Big Rivers' rates include a ratchet billing for demand (where current billing units are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers of Big Rivers' members, National Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) (see note 10). The variable rate will be effective through August 1997. The variable rate for the aluminum smelters will fluctuate based on the price of aluminum within a defined minimum (18.1 mills per kWh) and maximum (44 mills per kWh).

A Settlement Agreement effective January 1, 1990, was reached between Big Rivers, the aluminum smelters, and Big Rivers' creditors. The Settlement Agreement preserves the variable aluminum smelter rate as the method of calculating the cash payments to be made by the smelters to Big Rivers. The Settlement Agreement, however, fixes the revenue to be recognized by Big Rivers at 29.1285 mills per kWh at an approximate 99 percent load factor through August 1997. Accordingly, any payments in excess of or under the 29.1285 mills per kWh brought about by the variable aluminum smelter rate will be recorded as either deferred revenue or a receivable by Big Rivers. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the smelters to pay at or near the maximum rate of 44 mills per kWh.

While Big Rivers expects to maintain positive cash flow, the agreed upon rate of 29.1285 mills per kWh will cause Big Rivers to sustain negative net margins in the next few years if additional intersystem sales to non-members are not achieved. In addition, the settlement modified certain default provisions under the

Debt Restructuring Agreement to afford greater flexibility to Big Rivers from default in its debt payments.

The Clean Air Act Amendments of 1990 (CAAA-90) require significant reductions in the emission of sulfur dioxide and nitrogen oxide by fossil-fueled electric generating units. The CAAA-90 require that sulfur dioxide emissions be reduced at generating units in two phases over a ten-year period. In order to meet the requirements, the City of Henderson is constructing scrubbers on the two units owned by the City. Big Rivers has filed with the KPSC a plan to comply with the Clean Air Act and to impose an Environmental Surcharge. Big Rivers does not plan to implement the Environmental Surcharge until the middle of 1995. A ruling from the KPSC should be received by the summer of 1994.

Intersystem power sales to non-members is a component of full cost recovery under Big Rivers' rate design. A long-term contract has been signed with Oglethorpe Power Corporation (Oglethorpe Power) for the sale of 103 MW of firm power for ten years, beginning in August 1992. Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority (TVA).

Two long-term contracts have been signed with Hoosier Energy Rural Electric Cooperative (Hoosier Energy). The first was for the sale of 65 MW of capacity from Big Rivers' Combustion Turbine during a three-month summer period through year 2000. The second was a Peaking Power agreement varying in MW from 10 in 1993 to 170 in 1999; this Agreement covers June through September of each calendar year. Hoosier Energy is a REA Cooperative interconnected with Big Rivers (see note 12).

#### 6. Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under section 501 (c) (12) of the Internal Revenue Code. To retain tax exempt status under this section of the Internal Revenue Code, at least 85 percent of the organization's income must be generated from the sales to the cooperative's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax exempt status.

Big Rivers has generated losses for both accounting and income tax purposes. As a result, there is no provision for current or deferred income tax expense.

As discussed in note 1, Big Rivers adopted Statement 109 as of January 1, 1993. The cumulative

effect of this change in accounting for income taxes was not material to the financial statements as a whole and is included in income from continuing operations for the year ended December 31, 1993. Big Rivers' only significant temporary difference results from excess tax depreciation and basis differences related to the utility plant. No deferred tax liability has been recorded as of December 31, 1993, as management has indicated that any future income in excess of the net operating loss carryforwards will be offset with qualified patronage allocations and distributions to patrons of the cooperative.

At December 31, 1993, Big Rivers has net operating loss carryforwards for federal income tax purposes of \$872,762 which are available to offset any future federal taxable income through 2007. Big Rivers has investment tax credit carryforwards of approximately \$57,735 which are available to partially offset portions of any future income taxes through 2000.

#### 7. Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky (City), operates the City-owned 315-MW generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 83 percent which is expected to decrease to 81 percent by 1997. The contracts expire in 2003, subject to options for extensions.

In order to comply with the Clean Air Act, Big Rivers and the City of Henderson have agreed the City should install pollution control equipment on the City's Station Two facilities. The existing contracts with the City have been amended to include the cost of installing, operating, and maintaining this equipment. The City of Henderson and Big Rivers have sold allowances that were awarded to them by the Environmental Protection Agency which will offset approximately 60 percent of the cost to install these scrubbers. Big Rivers' portion of the sale of allowances was approximately \$23,000. Of this amount, \$16,272 has been recorded as a deferred credit and \$6,800 as an offset to cost of utility plant. This project is pending approval before the KPSC and Big Rivers may have exposure to approximately \$14 million of estimated cancellation charges if the project were to be terminated. In addition, Big Rivers

would expect to incur additional cost to replace the allowances sold. Big Rivers has the option of extending the contracts through the economic life of the power plant.

Under the terms of the contracts and amendments thereto with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1993, 1992, and 1991 was \$33,563, \$27,250, and \$30,998, respectively. Such costs are accounted for as purchased power.

#### 8. Pension, Deferred Compensation Plans

Big Rivers has non-contributory defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and the 5 highest consecutive years' compensation during the last 10 years of employment. Also, Big Rivers has executed non-contributory defined compensation agreements with certain key

employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

Big Rivers has adopted the provisions of SFAS No. 87, Employers' Accounting for Pensions. The amortizations are over periods up to 21 years.

The funded status of the plan at December 31 is as follows:

Actuarial present value of benefit obligation:  Accumulated benefit obligation, including vested benefits of	1993	1992	1991
\$16,624, \$12,916, and \$10,718.	<u>\$ 16,673</u>	12,942	10,773
Projected benefit obligation for services rendered to-date	\$ 29.157	17,507	14,459
Plan assets at fair value, primarily listed stocks and U.S. Treasury Bonds	18,768	16,861	15,657
Plan assets over (under) projected benefit obligation	(10,389)	(646)	1,198
Unrecognized net transition assets	(1,762)	(1,982)	(2,202)
Unrecognized prior service cost	2,369	1,516	1,343
Unrecognized net loss (gain)	7,559	270	(1,916)
Unfunded accrued pension cost	\$ (2,223)	(842)	(1,577)
			23

Net pension costs included the following components for the years ended December 31:	1993	<u>1992</u>	<u>1991</u>
Service cost-benefits earned during the year Interest cost on projected benefit obligation Actual return on plan assets Amortization of transition assets Amortization of prior service cost Amortization of deferral of net loss (gain) Special termination benefits Net periodic pension costs	\$ 1,660	1.270	1,219
	1,726	1.285	1,046
	(2,138)	(1.537)	(2,787)
	(220)	(220)	(220)
	230	175	143
	753	151	1,722
	396	0	0
	\$ 2,407	1,124	1,123
Assumptions used to develop the projected benefit obligation were:  Discount rates Rates of increase in compensation levels Expected long-term rate of return on assets	7.5%	8.5%	8.5%
	4.0	4.0	4.0
	8.5	8.5	8.5

Total expense related to the pension and deferred compensation plans was \$3,108, \$1,396, and \$1,420 in 1993, 1992, and 1991, respectively.

#### 9. Postretirement Benefits Other Than Pensions

The Company provides certain postretirement medical benefits for retired employees and their spouses. For all employees who retired prior to 1994, the Company pays 80 percent of the cost from age 62-65; and from age 65, for salaried employees, the Company pays 100 percent of Medicare supplement cost. For salaried employees who retire after December 31, 1993, the Company-paid Medicare supplement was eliminated. Effective January 1, 1993, Big Rivers adopted SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" which requires the expected cost of these benefits to be recognized over the employees' years of service, rather than a pay-as-you-go basis. Also, the Company offered a retirement incentive program which provided special termination benefits to certain employees during late 1992 and early 1993. The resulting increase in the other postretirement benefit obligation from SFAS 88 was \$61. As depicted in the following tables, the total 1993 postretirement benefit expense other than pensions was \$798. Postretirement benefits costs for prior years have not been restated.

The discount rate used in computing the obligation was 8 percent. In accordance with SFAS 106, the Company chose to amortize the present value of the obligation at the adoption date, the transition obligation, over a 20-year period. A health care cost trend

rate of 13 percent in 1993 declining to 6 percent in 2012 was utilized. The health care cost trend rate assumption has a significant effect on the amounts reported. A 1 percent increase in the health care trend rate each year would increase the aggregate service and interest costs for 1993 by \$90 and the accumulated other postretirement benefit obligation by \$680. The Company plans to fund such benefits beginning mid-1994.

The components of net periodic postretirement cost for the year ended December 31, 1993 follows:	
Service cost ~ benefits earned during the period Interest cost on projected benefit obligation	\$ 199 331
Amortization of transition obligation Special termination benefits  Net other periodic postretirement benefit cost	 207 61

Reconciliation of the accumulated postretirement benefit obligation to the accrued liability for postretirement benefits as of January 1, 1993, and December 31, 1993, is as follows:

Accumulated postretirement benefit obligation ~	<u>January 1</u>	December 31
retirees	\$ 1,459	1,571
Other eligible active participants	482	520
Other active participants	2,255	2,635
Total accumulated benefit obligation	4,196	4,726
Unrecognized transition obligation	4,135	3,928
Unrecognized special termination benefits	61	0
Unfunded accrued postretirement benefit liability	<u>\$ 0</u>	<u>798</u>

#### 10. Related Parties and Major Customers

#### **Operating Revenues**

Members:	1993	1992	1991
Green River Electric Corporation	\$133,194	133,021	135,805
Henderson Union Electric Cooperative	106,018	105,744	106,368
Jackson Purchase Electric Cooperative Corporation	23,709	22,300	22,390
Meade County Rural Electric Cooperative Corporation	12,463	11,679	11,932
Non-members	75,456	47,068	54,751
Other Revenue	106	95	89
	\$350,946	319,907	331,335

National Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National Southwire Company and Henderson Union Electric Cooperative for Alcan Aluminum Corporation) were as follows:

		Henderson	
Year	Green River	Union	Combined
1993	\$ 86,428	83,432	169,860
1992	87,705	82,841	170,546
1991	88,892	83,117	172,009

Alcan Aluminum Corporation has closed one third of its operation capacity at the Sebree, Kentucky,

smelter and NSA has reduced its operation capacity at the Hawesville, Kentucky, smelter by 10 percent. The smelters are required by contract to continue paying the fixed demand cost. All energy associated with this capacity will be sold when possible on the open market by Big Rivers. Each smelter will receive a credit for all power sold in excess of Big Rivers' energy cost.

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and accepting only such payment therefore as each member receives from its customers.

Receivables from members at December 31, 1993, 1992, and 1991 were \$17,838, \$18,478, and \$20,602, respectively.

#### 11. Disclosure of the Fair Value of Financial Instruments

The carrying amounts of Big Rivers' cash and cash equivalents, accounts receivable, short-term investments, and accounts payable approximate the fair value because of the short maturity of these financial instruments. The assumption used in determining the fair value of Big Rivers' long-term variable interest rate debt is that the fair value approximates the

carrying value, as the debt reprices weekly. Due to the uncertainties described in note 12, the ability of Big Rivers to obtain new debt or replace its existing debt is indeterminable. Accordingly, it is not practicable to estimate the fair value of the long-term fixed interest rate debt. The carrying value of this debt is \$1,108,071.

#### 12. Commitments and Contingencies

The United States Environmental Protection Agency (EPA) has informed Big Rivers that it may be liable for damages with respect to the Green River Disposal Superfund Site, as defined in the comprehensive Environmental Response, Compensation and Liability Act of 1980. A remedial/feasibility study has been completed and submitted to the EPA. Big Rivers' share of the cost of the study is 0.3 percent plus 0.3 percent of the final cost of implementing a remedy at the site which management believes should not significantly impact the financial statements.

During 1993, a suit by a former coal supplier in the amount of \$15.7 million was decided in Big Rivers' favor. The coal supplier appealed this decision to the United States Court of Appeals, and at December 31, 1993, a decision on this appeal was pending and is still pending. Management believes that the outcome of this legal action will not have a material effect on Big Rivers' financial position or results of operations.

Big Rivers has entered into several long-term coal contracts extending through 2006. Fuel purchased under these contracts in 1993, 1992, and 1991 was \$101,123, \$107,540, and \$127,247, respectively.

The KPSC has supervised a focused management audit of Big Rivers' fuel procurement policies and procedures. As a result of this action, the Kentucky Utility Industrial Customers (KIUC) asserted claims that Big Rivers should be required to refund to rate payers \$45,447 for alleged excess coal cost including interest for the review period. KIUC further claimed that Big Rivers should reduce its fuel recovery rate in future years under the Green River Coal Company contract by at least \$11,373 annually over the remaining 11-year life of the contract. These claims were consolidated in a hearing before the KPSC. The decision of the KPSC on these items is pending. On February 17, 1994, Big Rivers and the KIUC entered into a Settlement Stipulation agreement. The effect of this agreement would be to settle all claims by the KIUC against Big Rivers and to reduce the price of coal Big Rivers pays under the Green River Coal contract by approximately \$9.00 per ton for the remaining 11-year life of the contract. The Settlement Stipulation agreement is contingent upon approval by the KPSC, the Bankruptcy Court for Green River Coal Company, the Big Rivers creditors, and an agreement by the parties as to the review of fuel procurement policies and practices and related matters at Big Rivers. Subsequent to the filing of the Settlement Stipulation, the aluminum company parties to the agreement notified the KPSC of their attempt to withdraw the agreement. This attempt is contested by Big Rivers and the matter is pending before the KPSC.

On January 27, 1994, a coal supplier sued Big Rivers seeking damages of approximately \$3,000. In addition to the damages claimed, the coal supplier has asserted that Big Rivers is also responsible for the estimated cost of closing a mine. The estimate of these costs is between \$10,000 and \$15,000. Management of Big Rivers intends to vigorously defend this claim.

Big Rivers is currently undergoing a study suggested by its creditors. The purpose of this study is to determine Big Rivers' economic opportunities.

Big Rivers is either a defendant or a plaintiff in various other legal actions and claims, which management believes will not have a material effect on Big Rivers' financial position or results of operations.

## Corporate Directory-

#### Officers

Morton Henshaw President

Edward F. Johnson Vice President

William B. Briscoe Secretary-Treasurer

J.D. Cooper Assistant Secretary-Treasurer

#### General Manager

Paul A. Schmitz

#### Directors

Green River Electric Corporation Marion Cecil Edward F. Johnson Sandra Wood

Henderson Union Electric Cooperative William Briscoe Morton Henshaw C.G. Truitt

Jackson Purchase Electric Cooperative Corporation Johnny L. Hamm Ralph Hardin John B. Myers

Meade County Rural Electric Cooperative Corporation John C. Burnett J.D. Cooper Joseph A. Hamilton

#### Vice General Managers

J.E. Dolezal Energy Supply

Mike Dotson Fuels

Richard P. Greenwell Production

Ronald W. Johnson Administrative Services and Human Resources

James H. Jones Public Relations

B. Scott Reed Engineering and Transmission

John J. West Finance

#### Superintendents

Steve Moss Wilson Plant

Bruce Shelton Coleman Plant

Barry Wood Reid/Green Plants

Virgil Mitchell Transmission and Substations

#### Corporate Attorney

Morton Holbrook General Counsel Holbrook, Wible, Sullivan & Mountjoy P.S.C. Owensboro, Kentucky

#### Corporate Auditors

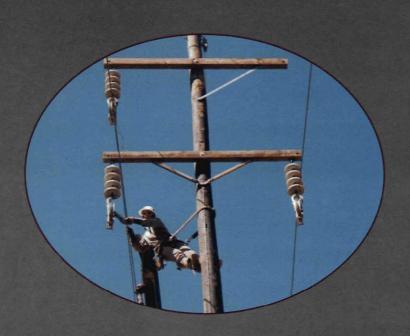
KPMG Peat Marwick Louisville, Kentucky

## Comparative Statistical Analysis . . . Ten-Year Summary

	1993	1992	1991	1990
Operating Revenues	\$ 350,945,862	319,907.459	331,334,709	331,736,393
Expenses: Operation and Maintenance Purchased Power and	196,548,190	183,693,972	193,288,174	191,389,914
Interchanged, Net	45,150,914	33,730,825	39,248,839	40,263,144
Depreciation and Amortization	45,257,415	44,980,616	44,809,522	44,564,475
Taxes	4,505,465	4,374,765	4,365,522	4,201,594
Interest	92,706,822	93,358,171	95,071,442	97,222,523
Other	(1,043,154)	(999,831)	(1,008,592)	682,563
Total	383,125,652	359,138,518	375,774,907	378.324,213
Operating Margins (Loss)	(32, 179, 790)	(39,231,059)	(44,440,198)	(46,587,820)
Nonoperating Margins (Loss)	1,545,675	1,275,827	1,505,489	2,113,282
Net Margins (Loss)	\$ (30,634,115)	(37,955,232)	(42,934,709)	(44,474,538)
Hility Plant at Coat	\$1,507,141,786	1,497,045,501	1,466,355,537	1,462,170,906
Utility Plant at Cost Construction Work in Progress	4,975,491	10,563,767	11,986,253	9,204,400
Construction work in Frogress	1,070,101	10,000,707	11,000,200	3,204,400
Total Electric Plant	1,512,117,277	1,507,609,268	1,478,341,790	1,471,375,306
Less Accumulated Depreciation	461,496,317	419,709,707	376,616,976	331,805,315
Utility Plant Net	\$1,050,620,960	1,087,899,561	1,101,724,814	1,139,569,991
Total Assets	\$1,143,388,554	1,180,152,394	1,225,216,359	1,267,340,928
System Peak Demand - MW	1,217	1,166	1,168	1,174
Net Generating Capacity Owned - M		1,459	1,459	1.459
Net HMP&L Capacity Purchased - N		262	263	264
Other Purchased Capacity - MW	178	178	178	178
Sales to Members - GWh	8,445.13	8,326.34	8,314.32	8,191.46
Sales to Non-Members - GWh	2,802.33	1.463.50	2,055.13	2,592.86
Generated - GWh	9,206.67	8,418.27	8,664.31	9,010.66
Purchased HMP&L Energy - GWh	1,670.12	1,211.98	1,480.77	1.668.90
Other Purchased Energy - GWh	588.60	305.91	415.91	337.14
System Load Factor - %	81.3	82.7	83.1	81.9
Permanent Employees at Year-End	847	846	875	868
Average Cost of Coal Used				
Price Per Ton - \$	28.27	27.92	28.51	28.73
¢/MM BTU	125.6	125.5	129.2	129.2

1989	1988	1987	1986	1985	1984
389,976,759	399,277,507	300,084,362	227,664,219	236,023,720	258,019,579
170,941,916	187,344,006	169,931,331	130,991,511	133,779,910	143,358,327
35,434,879 44,333,598 4,011,142 101,748,177 752,017	39,158,896 49,310,860 3,906,621 103,607,079 612,200	39,146,440 53,555,259 3,817,850 124,351,304 597,187	38,214,277 18,798,750 2,515,787 51,520,808 233,931	39,792,228 17,788,717 2,353,021 39,645,856 185,636	47,494,014 18,533,362 2,269,307 39,747,343 128,581
357,221,729	383,939,662	391,399,371	242,275,064	233,545,368	251.530,934
32,755,030 2,378,289	15,337,845 3,471,174	(91,315,009) 2,684,163	(14,610,845) (26,614,194)	2,478,352 1,040,972	6,488,645 (1,749,130)
35,133,319	18,809,019	(88,630,846)	(41,225,039)	3,519,324	4,739,515
1,454,882,990 4,162,708	1,451,937,802 1,226,596	1.448,581,890 1,448,505	1,452,144,009 2,080,925	539,998,444 833,505,325	533,597,067 745,589,266
1,459,045,698 288,884,804	1,453,164,398 245,556,080	1,450,030,395 196,710,029	1,454,224,934 143,479,823	1,373,503,769 124,841,130	1,279,186,333 106,923,761
1,170,160,894	1,207,608,318	1,253,320,366	1,310,745,111	1,248,662,639	1,172,262,572
1.322,367,888	1,386,197,045	1,421,349,400	1,438,564,861	1,409,490,616	1,332,830,420
1,177	1,157	990	993	1,042	1,027
1,459 264 178	1,459 264 178	1,459 270 178	1,448 271 178	1,039 271 178	1,039 268 178
8,072.76 1,500.96	7,814.61 3,188.51	6,271.32 3,993.08	6,211.79 3,303.68	6,908.67 3,290.11	7,390.75 2,075.96
8.047.11 1.388.66 314.14	9.270.21 1.716.20 262.04	8,321.80 1,932.61 284.69	6,609.70 1,631.87 336.38	6,447.45 1,779.65 291.98	6.876.37 1.882.22 666.72
80.0	77.6	75.5	74.1	78.1	84.1
857	855	856	863	827	835
27.82 126.5	28.05 125.7	27.48 124.3	27.83 127.6	30.25 137.7	29.91 135.6

ANNUAL REPORT



BIG PIVERS
ELECTRIC CORPORATION

ig Rivers Electric Corporation, located in Henderson, Kentucky, is a generation and transmission cooperative owned by the members it serves. It provides reliable wholesale electric service on a not-for-profit basis to its four member distribution cooperatives. These cooperatives, owned by their 82,918 consumer-members, distribute electricity at retail within 22 counties of western Kentucky on a not-for-profit basis.



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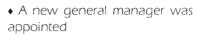
Comparative Statistical Analysis-Ten-Year Summary 22-23

Corporate Directory 25

Financial Highlights	1992	1991	Increase (Decrease)	% Increase (Decrease)
Operating Revenues Operating Expenses Net Margins Capital Additions Cost of Fuel Used System Peak Demand (Megawatts) Energy Sold to Members (Mwh) Revenue per kWh Sold (Mills)	319,907 266,780 (37,955) 7,602 108,323 1,166 8,326,341 32.67	331,335 281,712 (42,935) 7,843 115,202 1,168 8,314,320 31.94	(11,428) (14,932) 4,980 (241) (6,879) (2) 12,021	(3.4) (5.3) 11.6 (3.1) (6.0) (.2) .1 2.3

# resident's & General Manager's Report

In 1992, many changes took place throughout Big Rivers Electric Corporation. It no longer is "business as usual," but a generation and transmission cooperative corporation being structured to continue to meet the objectives of the distribution cooperatives and their member consumers, yet meeting the competition within the power supply industry. Some of the more significant changes were:



- A cost-containment program was implemented, expecting to reduce cash requirements by \$50 million through December 1996.
- An employee suggestion program called "Powerful Ideas" was implemented, creating extensive employee involvement during the 13-week ideagenerating program.
- An early retirement program for employees 59 years of age and older was offered. This down-sizing program resulted in 15 of 33 eligible employees taking advantage of the program, yielding the corporation an additional positive cash flow of approximately \$300,000 annually.
- Under a 10-year firm power sales contract, power began to

be delivered to Oglethorpe Power Corporation (Oglethorpe) of Tucker, Georgia.

- A back-up agreement with East Kentucky Power Corporation, Winchester, Kentucky, was implemented, providing greater system reliability.
- Three additional interchange agreements were executed with out-of-state utilities, creating potential avenues for the sale and availability of power during times of need
- The Henderson City Utility Commission initiated innovative bidding procedures for financing scrubbers to be installed on Henderson Municipal Power

and Light (HMP&L) Station Two, which will be more cost effective than switching fuels to comply with the 1990 Clean Air Act Amendments (CAAA).

- Scott Paper Company began construction of its new tissue plant and Big Rivers is proceeding with construction of facilities to provide its electrical service requirements Scott Paper is a welcome addition to Green River Electric Corporation's service area
- An employee safety record of 20 years has been shattered for the least number of reported injuries Employees continue to be very dedicated and involved in improved safety procedures.

By creating opportunities and capitalizing on them, Big Rivers faces the future with enthusiasm.

Morton Henshaw. Paul A. Schmitz.

President of the Board

Paul A. Schmitz, General Manager

# Capacity Resources

All of the corporation's generating units are coal fired except for a 65megawatt (MW) combustion turbine used for peaking and emergency purposes The Kenneth C. Coleman Plant near Hawesville, has three units totaling 455-MW net capability. The net capability of the two-unit Robert D. Green Plant near Sebree, is 454 MW. The Robert D. Reid Plant near Sebree, is a 65-MW net capability unit. The D. B. Wilson Plant, located near Centertown, has a net capability of 420 MW

Big Rivers also operates the 315-MW net capability HMP&L Station Two located near Sebree. Big Rivers has contracted with HMP&L to take all the capacity in excess of their needs During 1992, Big Rivers' share was approximately 83 percent.

The Southeastern Power Administration (SEPA) provides 178 MW of hydroelectric peaking capacity to the corporation through a long-term contract.

In February, Big Rivers and East Kentucky Power Corporation entered into a unit back-up power agreement in which each party has agreed to furnish (when requested) up to 200 MW upon the loss of the other's largest generating unit (Big Rivers' Wilson unit -East Kentucky's Spurlock No 2 unit) The agreement covers emergency and planned outages.



Big Rivers' Headquarters located in Henderson, Kentucky



Big Rivers' Wilson Plant located near Centertown, Kentucky 420-MW net capability



Big Divers' Coleman Plant located near Hawesville, Kentucky 455-MW net capability



Big Rivers' Reid, Green & HMP&L Station Two Plants located near Sebree, Kentucky 834-MW net capability

# Fuels

The cost of fuel consumed in generating electricity is Big Rivers' single largest expenditure.

During 1992, the units burned 4 4 million tons of coal in generating electricity, an average of 12,127 tons per day. This compares with 4.7 million tons, 12,932 tons per day, burned in 1991 Fuel costs for the year (including Big Rivers' share of Henderson Station Two, reported as purchased power) were \$124.7 million, a decrease of i cooperatives. \$10.7 million.

The average cost was \$27.92 per ton, equivalent to 125.5 cents per million British thermal units (Btu) This compares with \$28.51 per ton, 129.2 cents per million Btu last year.

About three-fourths of Big Rivers' coal requirements are supplied from Kentucky mines located within the service areas of the corporation's member

In January, a new contract was entered into with Green Coal Company of Owensboro, Kentucky, to supply the Coleman Plant with 24,000 tons of coal per month through June 1994.

In July, Big Rivers terminated the contract made in November 1991, with E & M Coal, Inc (E&M) This contract was also to supply the lower-sulfur compliance coal for the Coleman Plant during Phase I (1995-1999) of the Clean Air Act of 1990. The specified coal producer sold its coal reserves and mining equipment to another party, in violation of the contract. E & M proposed to find another supplier for the coal and contested Big Rivers' right to terminate. Big Rivers filed for arbitration as provided in the contract, seeking confirmation of its right to terminate. The hearing was held on November 2 and 3 The decision of the arbitrators was issued on January 7, 1993, upholding Big Rivers' right to terminate

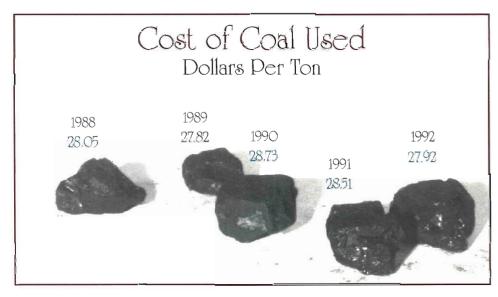
The U.S. District Court of Southern Indiana still has not rendered a decision in the Delta Mining Corporation lawsuit. This former coal supplier alleges that Big Rivers owes \$15.7 million in damages for not accepting the total quantity of coal required under a 10-year contract made in 1977. A decision has been pending since March 1991.

In November, the Kentucky Public Service Commission (KPSC) ordered a "focused management audit" of Big Rivers' fuel procurement policies, practices, and procedures. The audit is being conducted by a consultant hired by the PSC, and the report is expected to be completed in the spring of 1993.

The Coleman, Reid, and Henderson Station Two plants, which are not equipped with sulfur dioxide (SO<sub>2</sub>) scrubbers, burn lower-sulfur coal from western Kentucky and southern Indiana. These plants will be affected in 1995 by the Phase I (SO<sub>2</sub>) requirements under the acid deposition con-

trol provisions of the Clean Air Act Amendments of 1990, requiring that the emissions be cut in half

The Wilson and Green plants, approximately 50 percent of the generating resources, are equipped with flue gas desulfurization scrubbers, using limestone and thiosorbic lime respectively. These plants burn high-sulfur coal which is abundantly available in the distribution members' service areas.



# Planning

The uncertainties of the future make it imperative that the corporation be prepared for change as circumstances and conditions dictate

The corporation has developed a Long-Range Corporate Strategic Plan setting forth Big Rivers' position with regard to several key issues facing the electric utility industry, including: (1) deregulation/increased competition; (2) environmental concerns, (3) global warming; (4) electromagnetic fields; (5) diversification, (6) planning under uncertainty; (7) debt restructuring

agreement; (8) regulatory climate; and (9) demand side management.

Further, the corporation has developed long-range goals to: increase sales; operate efficiently and reliably, provide a quality work environment; provide quality support services; maintain sound customer, public and regulatory relations, and enhance financial stability.

The PSC staff formally responded to Big Rivers' Integrated Resource Plan (IRP) in September. The corporation immediately began a review of the recommendations, comments, and suggestions, intending to implement as much as possible prior to filing an updated IRP in September 1993

# Energy & Capacity Sales

Big Rivers continues to develop long-term capacity and energy markets At year-end. 19 offers were outstanding to other utilities. As a result of these efforts. Big Rivers believes that it will greatly improve its energy sales in 1993 by marketing all its excess capacity.

A ten-year, 100-MW firm power sale to Oglethorpe began on August 1

Moderate weather patterns throughout most of the year contributed to a soft market for energy sales. Normal heating and cooling degree day totals for the service area were 6,262. During the year, a total of 5,452 degree days were recorded, or nearly 13 percent below normal.

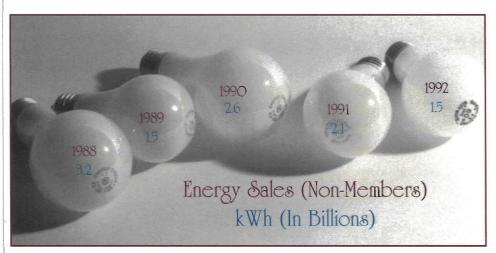
Total energy sales in 1992 amounted to 9 8 billion kWh, compared to 10 4 billion in 1991. Rural residential and farm sales decreased by 50 3 million kWh, or 3 4 percent under 1991. The distribution cooperatives' industrial members accounted for 6 9 billion kWh, 09 percent under last year Energy sales to other utilities were 1 5 billion kWh, down 28.8 percent (593 0 million) from 1991.

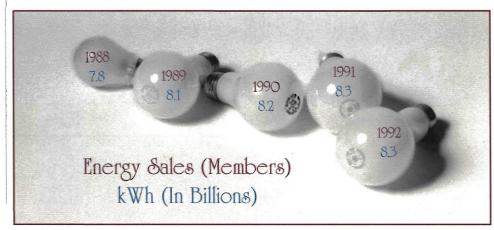
On July 13, Big Rivers' system peaked at 1.166 MW, 2 MW below the 1991 system annual peak demand of 1.168. The record peak of 1.177 MW set in December of 1989 still stands.

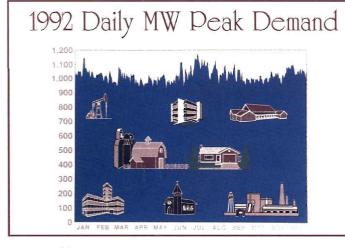
During 1992 the annual system load factor was 82 7 percent

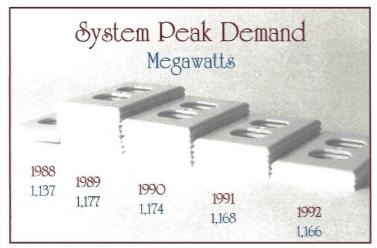
Big Rivers' 1992 power requirements study shows, for years 1992 through 2006, an expected average

annual growth rate of 1 30 percent for peak demand, and 0.80 percent for total required energy for system load









# Marketing

In support of the distribution cooperatives, the corporation expanded and intensified its residential and commercial marketing program this year Marketing of geothermal and air-source heat pumps offers a large potential for winter load-building.

During this first year of providing financial incentives for consumer installation of heat pumps, more than 200 systems were placed in homes. Nearly 359 tons of heating and cooling geothermal units will add 441 kW of load to Big Rivers' system Another 369 kW

of load was added by high-efficiency air-source heat pumps.

Clean, safe, efficient electric water heaters were promoted heavily during 1992. Nearly 300 consumers took advantage of the incentive for new construction with 25 percent of those being captured from non-electric fuel sources. During the year, over 100 consumers converted from fossil-fuel water heaters to new high-efficiency electric units.

Advertising and promotion of the residential marketing program through

radio and newspapers were expanded and intensified. Advertising-tracking research conducted every four to six weeks helped focus these efforts, as well as provided good information on the effectiveness of the messages on product promotion and safety.

"Current Trends," a consumer publication, was distributed quarterly to all consumers during the year, focusing on health, energy efficiency, new technology, the environment, and safety. "Power Partners," the contractor/trade ally equivalent to "Current Trends," was also distributed quarterly to inform trade allies of new technology, legislation affecting their businesses, and environmental news.



Installation of Ceothermal Loop "Slinky"



Construction of an All Seasons Comfort Home

# Management Changes

William H. Thorpe, who served as General Manager, for fourteen years, resigned on June 3, 1992, and Assistant General Manager and Vice General manager of Finance, Paul A. Schmitz was appointed General Manager. Mr Schmitz has served in a managerial position with Southern Indiana Gas and Electric Company for

15 years, and with Big Rivers for 16 years

William D Johnson, Sr, vice general manager of external relations, marketing, and economic development, died suddenly on May 7. Big Rivers' employees and directors were saddened by this loss.

W Hayden Timmons, former vice general manager of external relations, marketing and economic development had retired on January 31, 1992, but graciously returned to work to fill the position vacated by Mr. Johnson.

# Engineering & Transmission

Modifications were completed at the National Aluminum substation, near Hawesville, Kentucky, to provide electric service to the new Worldsource plant The completed modifications convert the substation to a multicustomer delivery point.

The Scott Paper Company began development of its Daviess County tissue mill. To meet the schedule, the corporation has completed the design of 16 miles of 161 kilovolt (kV) transmission line. A four-mile section of this line is scheduled to be built by mid-1993 and will provide five to seven megawatts of power for the first year. The remainder of the line is to be completed by mid-1994 and will provide service up to 40 MW

Willamette Industries' paper mill near Hawesville continues to grow,

and system improvements were completed to accommodate the mill's increasing power usage.

Reliability of electric service is a growing concern among electric consumers. To meet the higher service expectations of Big Rivers' member cooperatives, the corporation has developed a Service Reliability Program. The program calls for an investigation of all electric service disruptions to determine the cause, the timeliness of service restoration, and the actions needed to prevent recurrence. These investigations have resulted in new maintenance practices, altered operating procedures, and several system improvements.



# Construction

Total capital expenditures for the year were \$7.6 million, down \$ .2 million from 1991. Big Rivers has sufficient generating capacity and has no plans to construct additional generating units. Projects under construction include:

♦ A new energy management system, equipped with "state of the art" programs providing for the dispatch of

the most economical power generation and the most efficient and reliable operation of the transmission system, scheduled for start-up in early 1993

- ♦ A 161-kV transmission line to serve the new Scott Paper plant, scheduled for completion in December 1994.
- ♦ Continuous emission monitors and low NO<sub>X</sub> burners, required for compliance with the Clean Air Act,

scheduled to be in service by December 1993

• A generator rotor blade modification and replacement at the Green Plant, to be completed during the first half of 1993.

# Environmental

Big Rivers continues to regard environmental matters as one of its highest priorities. Much emphasis is placed on testing, monitoring, and controlling environmental conditions. As a corporate policy we are consciously concerned about the environment.

It was previously announced switching to lower sulfur coal would be

the least-cost plan to comply with the acid rain regulations. However, the Henderson City Utility Commission, owners of Henderson Power and Light Station Two, initiated bidding procedures allowing scrubber manufacturers to take SO<sub>2</sub> allowances granted to Station Two under the 1990 Clean Air Act as partial payment for scrubber

installation costs

The results are under evaluation, but preliminary indications are that scrubbers should be installed on HMP&L Station Two and lower sulfur coal should be burned at Coleman to yield the least- cost compliance alternative.

# Human Resources

The corporation's efforts during the entire year stressed a strong "employee" focus. The results of an earlier employee attitude survey provided information about areas of employee concern. These are being addressed, and are generating wider involvement of employees in day-to-day decision-making and operation of the corporation.

More than 700 employees volunteered to become deeply involved in cost containment and reduction programs, as well as provide suggestions



to generate additional revenues Interest in these programs was high, with more than 95 percent of eligible employees participating

Approximately 1,200 "Powerful Ideas" were submitted by these employees A total of 272 ideas were

approved, totaling \$2 2 million in savings or improved cash flow. At year-end more than 115 ideas were pending further study, testing, and evaluation

Total employment in the corporation at the close of the year was 846, down from 875 in 1991. Part of this reduction was due to early retirement of 15 longtime employees. Annual personnel turnover rate

was 5 4 percent, well below the national average for similar-sized companies.

Continued intensive efforts toward a safer workplace resulted in a corporate injury incident rate of 5.6 for 1992, compared to 5.9 for 1991. Working with the Kentucky Occupational Safety and Health Administration (KOSHA) and the PSC, safety procedures and programs in many areas were developed and refined.

Big Rivers continues to provide support for employees to continue their education, ranging from obtaining a G.E.D through skills training to college-



level courses Also, more than 600 employees have completed in-house programs to improve their communication skills at all levels.



# Rates for Aluminum Smelters

As discussed in previous annual reports, in 1987 the PSC ordered a variable tariff rate for energy sold by Big Rivers to Henderson-Union Rural Electric Cooperative Corporation and Green River Electric Corporation to be delivered to the aluminum smelters. The variable rate requires Big Rivers to charge from a high of 4.4 cents per kilowatt hour (kWh) to a low of 1.8 cents, as primary aluminum prices fluctuate between 80 and 45 cents a pound. During 1992, the market price

for aluminum was at a low level, averaging 58.02 cents a pound, as compared to an average of 59.97 cents a pound the previous year Consequently, Big Rivers' 1992 sales price for energy to the smelters averaged 2.9 cents as opposed to 3.2 cents per kWh in 1991. This low price substantially reduced Big Rivers' cash flow and the availability of funds for debt service payments to the Rural Electrification Administration (REA). However, the lower cash flow did not

affect the recognition of revenues from the smelters for 1992. The settlement agreement with the smelters, more fully discussed in Footnote 5 to the financial statements, assures that Big Rivers will receive an average of 2.91285 cents per kWh through August 1997.

The variable rate, as set by the PSC, was designed to assure that the aluminum smelters could continue to operate at full capacity in spite of a low sales price for their product.

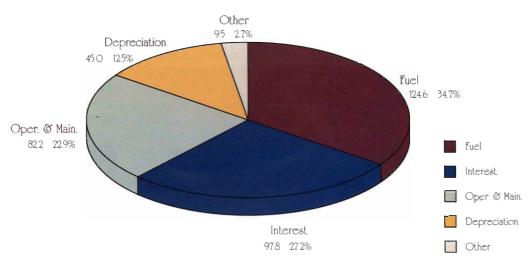


# Margins

As expected in the development of the workout plan, margins for the year were negative. The loss incurred was \$38.0 million. At year-end our total

deficit equity was \$154.8 million Big Rivers anticipates that it will continue to incur negative margins for the next 5 years with the potential that deficit equity will reach \$250.0 million before margins turn toward the positive.

#### EXPENSES Dollars in Millions

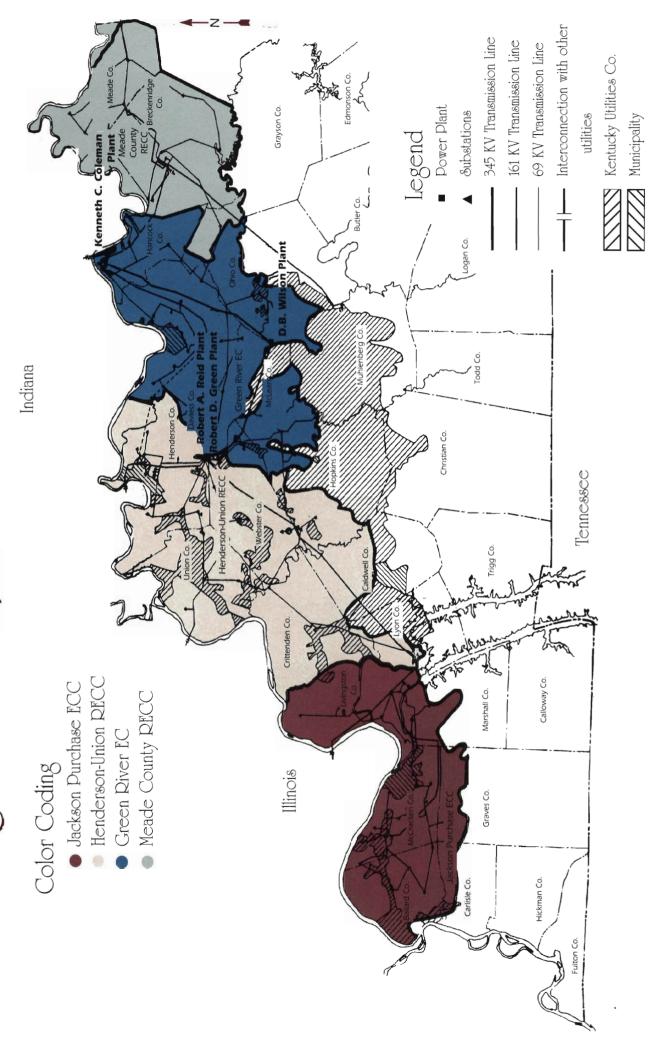


# Debt Service

In 1988, Big Rivers entered into a debt restructuring agreement effective August 31, 1987, (defined in Note 4 to the financial statements) which provides for annual minimum debt service payments. The agreement also provides for the payment of cash in excess of a \$10 million balance at the end of Rivers to pay only \$74.3 million.

each month after paying operating costs and capital expenditures. The scheduled minimum debt service for 1992 was \$122.0 million The decline in aluminum prices, mild weather, and the resulting decrease in cash flow available for debt service, enabled Big Through 1992, cumulative principal payments have reduced the principal balance to \$123.8 million less than the scheduled principal balance under the debt restructuring agreement as amended The minimum for 1993 is \$127 0 million.

# The Big Divers System



# Financial Report 1992



Auditor's Report

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Statement of Equities (Deficit)
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# Independent Auditors Report

The Board of Directors
Big Rivers Electric Corporation:

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1992 and 1991, and the related statements of revenues and expenses, equities (deficit) and cash flows for each of the years in the three-year period ended December 31, 1992. These financial statements are the reponsibility of the Corporation's management. Our reponsibility is to express an opinion of these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation at December 31, 1992 and 1991, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31,1992, in conformity with generally accepted accounting principles.

As discussed in notes 4 and 5 to the financial statements, Big Rivers Electric Corporation and its creditors entered into a Debt Restructuring Agreement whereby government related debt was restructured into a Total Government Debt Note (REA Promissory Note). The principal repayments of the REA Promissory Note are contingent upon the available cash flow, as defined by the Debt Restructuring Agreement. Big Rivers Electric Corporation's ability to recover its costs and repay its debt is dependent upon its generating adequate revenues by selling approximately fifteen percent of capacity to nonmembers.

As discussed in note 10 to the financial statements, Big Rivers Electric Corporation is a defendant in a law suit filed by a former coal supplier. Also, as discussed in note 10, Big Rivers Electric Corporation is currently undergoing a focused management audit of its fuel procurement policies and procedures.

The ultimate outcome of the foregoing matters cannot be presently determined. Accordingly, no adjustments relating to the recoverability and classification of reported asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties have been recognized in the accompanying financial statements.

KPM 6 Peat Marwick

February 19, 1993

KPMG Peat Marwick , Certified Public Accountants

#### Statement of Revenues and Expenses

Years ended December 31, 1992, 1991, 1990 (Dollars in thousands)

	<u>1992</u>	<u>1991</u>	<u>1990</u>
Operating revenues (notes 5 and 9)	\$319,907	331,335	331,736
Operating expenses			1.
Operations:			1 2
Fuel for electric generation	108,323	115,202	118,096
Power purchased and interchanged, net	33,731	39,249	40,263
Other	48,838	48,467	46,263
Maintenance	26,532	29,618	27,030
Depreciation and amortization	44,981	44,810	44,565
Taxes	4,375	4,366	4,202
Total operating expenses	266,780	281,712	280,419
Electric operating margins	53,127	49,623	51,317
Interest and other deductions:		7. 1	1
Interest (note 4)	93,890	95,530	97,462
Allowance for borrowed funds used			į
during construction (note 2)	(532)	(458)	(240)
Other deductions	(1,000)	(1,009)	683
Total interest and other deductions	92,358	94,063	97,905
Operating margins (loss)	(39,231)	(44,440)	(46,588)
Nonoperating margins (loss):		140	20
Interest earned	1,274	1,502	2,108
Other	2		5
Total nonoperating margins	1,276	1,505	2,113
Net margins (loss)	\$(37,955)	(42,935)	(44,475)
		-	

#### Statement of Equities (Deficit)

Years ended December 31, 1992, 1991, 1990 (Dollars in thousands)

	17				Other e	quities
17 -	14				Donated	Consumers'
11 3 3 3	The last	Accumulated	Accumulated		capital	contributions
11 1 22	Total	deficit-	deficit-	Patronage	and	to
14	equities	operating	nonoperating	capital	memberships	debt service
Balance at December 31, 1989	\$(29,407)	(143,692)	(18,081)	127,921	764	3,681
Margins for 1990:	THE STATE OF	<u> </u>				1
Operating	(46,588)	(46,588)			_	<u> </u>
Nonoperating	2,113		2,113	_	- 50	— s
Balance at December 31, 1990	(73,882)	(190,280)	(15,968)	127,921	764	3,681
Margins for 1991:	11					1 1 1 1 1
Operating	(44,440)	(44,440)	_	_	- 11	-1. <del>-</del> 73 :
Nonoperating	1,505		1,505		4	arelet 🚅
Balance at December 31, 1991	(116,817)	(234,720)	(14,463)	127,921	764	3,681
Margins for 1992:	1.1/1	hands.	400		480	1
Operating	(39,231)	(39,231)	1 de -	_	- 38	and the sales
Nonoperating	1,276		1,276	ito		$\frac{-1}{2}$
Balance at December 31, 1992	\$(154,772)	(273,951)	(13,187)	127,921	764	3,681

#### Balance Sheets

At December 31, 1992, 1991 (Dollars in thousands)

Assets	1992	1991
Utility plant, net (notes 2 and 4) Productive capacity under purchased power contract (note 7) Other deposits and investments, at cost Current assets:	\$1,063,400 24,500 5,483	1,101,725 25,200 4,921
Cash and temporary cash investments Receivables (note 9) Fuel for electric generation Non-fuel inventory	10,079 23,164 24,471 14,668	10,100 24,898 28,187 15,232
Total Current Assets	72,382	78,417
Deferred charges (note 3)	14,387	14,953
	\$1,180,152	1,225,216
Equities and Liabilities	<u>1992</u>	<u>1991</u>
Capitalization: Equities (deficit)	\$ (154,772)	(116,817)
Long-term liabilities (notes 4, 5, and 7) REA debt Other long-term debt	1,082,652 178,600	1,070,108 183,663
Total long-term liabilities Less current maturities	1,261,252 18,337	1,253,771 6,946
Total long-term liabilities net of current maturities	1,242,915	1,246,825
Total capitalization	1,088,143	1,130,008
Current liabilities:		
Current maturities of long-term liabilities (notes 4, 5, and 7) Accounts payable Accrued expenses	18,337 14,760 <u>4,475</u>	6,946 18,790 4,332
Total current liabilities	37,572	30,068
Deferred revenue (note 5) Deferred credits	25,250 29,187	34,593 30,547
Commitments and contingencies (note 11)		
	\$1,180,152	1,225,216

2K7/K****			. 1
Statement of Cash F <u>lows</u>		Land	and the same
Year ended December 31, 1992, 1991, 1990 (Dollars in thousands)		The state of the s	11
	1992	1991	1990
Cash flows from operating activities:	1772	1001	1330
Net margins (loss)	\$(37,955)	(42,935)	(44,475)
Adjustments to reconcile net margins (loss)			
to cash provided by operating activities:			N. le
Depreciation and amortization	45,706	45,518	45,196
Amortization of deferred charges	917	2,356	2,078
Net change in deferred revenue	(9,343)	6,107	28,486
Change in assets and liabilities:	page 1577	mental second	dans resident
Receivables	1,734	5,371	5,758
Fuel for electric generation	3,716	(3,604)	774
Non-fuel inventory	564	(421)	163
Accounts payable	(4,030)	185	968
Accrued expenses	143	(4,676)	(9,302)
Other, net	(2,272)	324	(1,094)
	A. Maria		
Net cash provided by (used in)	April 19 and April		0.00
operating activities	(820)	8,225	28,552
	77. 12. 12.		1
1 10 10 10 10 10 10 10 10 10 10 10 10 10			200
		100	
Cash flows from investing activities:		and the same of th	
Construction expenditures	(7,381)	(7,672)	(14,605)
Prepayment on coal contract		(3,500)	(1,000)
		The state of the s	1 110
Net cash provided by (used in)			
investing activities	(7,381)	(11,172)	(15,605)
		1.4	1
Cash flows from financing activities:	(4.7(4)	(4.7(4)	(54.020)
Principal payments on long-term debt	(4,364)	(4,364)	(54,920)
Unpaid accrued interest	12,544	7,158	24.000
Proceeds from bank loan		_	24,000
Not each provided by (used in) financing			1
Net cash provided by (used in) financing	0.100	2 704	(20,020)
activities	8,180	2,794	(30,920)
Not increase (degrees) in each			A. S.
Net increase (decrease) in cash	\$ (21)	/1531	(17.072)
and temporary cash investments	\$ (21)	(153)	(17,973)
			1
			1.7
			11/
			(Marine Land
Supplemental Cash Flow Information			1.18
	1992	1991	1990
		AT AN THE PUR	11

\$ 80,233

105,401

84,642

See accompanying notes to financial statements.

Cash paid relating to interest expense

#### Notes to Financial Statements

December 31, 1992, 1991, 1990 (Dollars in Thousands)

#### 1. Summary of Significant Accounting Policies

#### General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, resi-

dential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such require-

ments. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

#### System of Accounts

The accrual basis accounting policies follow the Uniform System of

Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### Revenue Recognition

Revenues are based on month-end

meter readings.

#### Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal and salvage value, are charged to accumulated depreciation. Routine maintenance, repairs,

and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of such allowance. The interest capitalized is determined by applying the effective rate on the REA Promissory Note to the to-date accumulated expenditures for qualifying projects included in construction in progress. Capitalization of interest is discontinued when the project is completed

and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Annual rates used to compute depreciation are as follows:

Production plant 3%-3.10%
Transmission plant 2.75%
Station equipment 2.75%
General plant 2%-20%

#### Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in

U.S. government and federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market. For pur-

poses of statement of cash flows, Big Rivers considers all short-term, highlyliquid investments of three months or less to be cash equivalent.

#### Inventories

Inventories, consisting of non-fuel

and fuel for electric generation, are

valued at weighted average cost.

#### Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital

account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses, during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a bal-

ance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons. Patronage capital cannot be retired if patronage capital is less than 40 percent of the total assets.

#### Pension and Deferred Compensation Plans

All employees, after one year of service, are covered under trusteed noncontributory retirement plans. Also, Big Rivers has executed noncontributory compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in the event of death. The pension plans are funded in accordance with the OBRA minimum funding requirements, while the deferred compensation plan is fully funded. Pension expense includes current service cost, interest cost, actual return on plan assets amortizations of prior service cost and gains and losses. Amortizations are over periods up to fifteen years.

Reclassification

Certain prior year amounts have

been reclassified for comparability with 1992 presentation.

#### 2. Utility Plant

The following summarizes utility plant:

	1992	1991	
Classified plant in service:		7	
Production plant	\$1,281,709	1,276,781	
Transmission plant	80,158	79,742	
Station equipment -	92,359	91,534	
General plant	17,670	17,627	
Intangible	190	190	
Unclassified plant in service	460	482	
	1,472,546	1,466,356	
Less accumulated depreciation and amortization	419,710	376,617	
La tra Material A	1,052,836	1,089,739	g.
Construction in progress	10,564	11,986	
	\$1,063,400	1,101,725	

Construction in progress is comprised of the EMS Computer System and several small projects. The aver-

age rates used for the capitalization of interest during construction in 1992,

1991, and 1990 were 8.0, 7.8, and 7.7 percent respectively.

#### 3. Deferred Charges

The follo	owing summarizes deferred charges:	1992	<u>1991</u>
	Unamortized debt expenses	\$ 7,454	7,910
	Green River Coal prepayment	6,192	6,653
	Other	 741	390
		\$ 14,387	14,953

Big Rivers refinanced a portion of its long-term debt at lower interest rates and incurred refinancing expenses. In November 1982, Big Rivers elected to refinance \$90,053 of FFB short-term mortgage notes with long-term notes at lower interest rates. As a result of this election, a refinancing cost of \$4,616 was incurred. On September 29, 1987 and February 25, 1988, Big Rivers refinanced \$319,426 and

\$250,805, respectively, at lower interest rates. The refinancing costs were \$2,937 and \$3,318, respectively. These costs are being amortized over the term of the REA promissory note (see note 4).

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. A contract for substitution of coal was executed

on September 24, 1991, with Green River Coal. Big Rivers has made total fuel prepayments of \$7,000. Interest on the outstanding balance is based on the prime rate established by Chemical Bank of New York plus two percent. Green River Coal is repaying Big Rivers at the rate of \$1 per ton of coal shipped.

#### 4. Long-term Liabilities

A summary of long-term liabilities follows:

	1992	<u>1991</u>
Promissory note - REA 8.36% Unamortized premium	\$ 705,029 377,623 1,082,652	755,135 314,973 1,070,108
County of Ohio, Kentucky, promissory note, with variable interest rate of 3.94% as of 12/31/92	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable interest rate of 3.94% as of 12/31/92	58,800	58,800
Obligation under purchased power contract (see note 7)	24,500	25,200
Bank of New York, bank loan 8.0% Chemical Banking Corporation, bank loan 8.0%	4,965 7,035	6,771 9,592
Total long-term liabilities	1,261,252	1,253,771
Less current maturities	18,337	6,946
3	\$1,242,915	1,246,825

#### Debt Restructuring Agreement:

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated as of

March 30, 1988, which was executed as part of a Debt Restructuring Agreement.

The impact of the Debt Restructuring Agreement was accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers accounted for the effects of the restructuring prospectively and did not change the carrying amount of the debt.

#### Promissory Note - REA:

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner to that provided by a conventional loan amortization schedule) at an interest rate of 8.36 percent for the REA Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by REA (REA Debt). For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. Any unpaid interest is added to the unamortized premium. The effective interest rate for 1992, 1991, and 1990 on the REA Promissory Note was 8.1, 7.9, and

7.7 percent, respectively. In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on all prior debt on a timely basis and will not seek to collect from Big Rivers, with respect to any REA Debt, any amounts in excess of the obligation on the REA Promissory Note.

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a month-end cash balance of \$10,000.

In connection with the Settlement Agreement described in note 5, the Debt Restructuring Agreement was amended as of January 1, 1990. The amendment provided that if the variable rates to the aluminum smelters specified in the Settlement Agreement (described in note 5) and in effect on April 1, 1990, remain continuously in effect and unmodified through August 31, 1997, and if during this period, the REA Debt never exceeds by more than \$18 million what the REA Debt would be if only the scheduled annual amounts were paid, then no Event of Default shall be deemed to have occurred through December 31, 1997. If the REA Debt exceeds \$442,948 on January 1, 1998, then the schedule shall be amended beginning with 2004 and continuing to each immediately successive year such that the amount for any year shall not exceed \$150,000 and such that the scheduled annual amounts in and after 1998, if paid in equal monthly installments for each year, will when discounted in accordance with the agreement, yield a figure that equals the REA Debt as of January 1, 1998.

#### Other Long-term Debt:

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. These bonds will bear a variable rate of interest, determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 1, 1993, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. In absence of notification by Bank of New York to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts

as defined by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky, issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent nor greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Chemical Securities, Inc. irrevocable standby letter of credit, which is due to expire October 15, 1997, and is subject to renewal. The bonds are subject to mandatory purchase upon expiration of the supporting letter of credit and any renewal thereof. In absence of notification by Chemical Securities, Inc. to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to purchase the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

#### Debt Maturities

At December 31, 1992, Big Rivers had, since September 1987, paid total debt service on the REA Promissory Note in such a manner that there existed an excess debt service payment against default in the amount of \$123,753. This represents a decrease

of \$23,373 during 1992. This excess debt service payment can be used to offset future payments under the schedule.

Based on the overpayments to date and the required REA Promissory Note principal balance on December 31, 1997, Big Rivers has calculated the annual payments on a straightline basis to avoid an event of default through December 31, 1997. Actual payments may be more or less than those on a straight-line basis. Under this calculation, the maturities of longterm debt for each of the five years subsequent to December 31, 1992 are estimated to be as follows:

Year	Promissory Note	Unamortized Premium	Other Debt	Total
1993	\$61,152	(49,906)	7,091	18,337
1994	56,434	(44,248)	6,143	18,329
1995	52,080	(38,873)	7,379	20,586
1996	48,062	(33,753)	3,180	17,489
1997	44,354	(28,848)	3,341	18,847

#### 5. Rate Matters

Big Rivers' rates include a ratchet billing for demand (where current billing units are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers of Big Rivers' members, National Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) (see note 9). The variable rate will be effective through August 1997. The variable rate for the aluminum smelters will fluctuate based on the price of aluminum within a defined minimum (18.1 mills per kWh) and maximum (44 mills per kWh).

A Settlement Agreement effective January 1, 1990 was reached between Big Rivers, the aluminum smelters, and Big Rivers' creditors. The Settlement Agreement preserves the variable aluminum smelter rate as the method of calculating the cash payments to be made by the smelters

to Big Rivers. The Settlement Agreement however, fixes the revenue to be recognized by Big Rivers at 29.1285 mills per kWh through August 1997. Accordingly, any payments in excess or under the 29.1285 mills per kWh brought about by the variable aluminum smelter rate will be recorded as either deferred revenue or a receivable by Big Rivers. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the smelters to pay at or near the maximum rate of 44 mills per kWh.

While Big Rivers expects to maintain positive cash flow, the agreed upon rate of 29.1285 mills per kWh will cause Big Rivers to sustain negative net margins in the next few years if additional intersystem sales to nonmembers are not achieved. In addition, the settlement modified certain default provisions under the Debt Restructuring Agreement to afford

greater flexibility to Big Rivers from default in its debt payments.

Effective January 1, 1991, Big Rivers was granted a rate increase by the KPSC of \$1.35 per kW, which increased the demand rate to \$10.15 per kW.

Intersystem power sales to nonmembers is a component of full cost recovery under Big Rivers' rate design. A long-term contract has been signed with Oglethorpe Power Corporation (Oglethorpe Power) for the sale of 103 MW of firm power for ten years, beginning in August 1992. Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority (TVA).

#### 6. Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under Section 501 (c)(12) of the Internal Revenue Code. To retain taxexempt status under this code provision, at least 85 percent of the organization's income must be generated from sales to the cooperative's members. In 1983, sales to nonmembers resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for taxexempt status.

Big Rivers has generated losses for both accounting and income tax purposes. Thus, there is no provision for to offset taxable income for the peri-

current or deferred income tax expense. The following analysis summarizes the net operating loss carryforwards:

Year of Origination	Accounting Purposes	Federal Income Tax Purposes
1984	\$ 9,340	87,500
1985	9,640	160,180
1986	123,650	154,790
1987	88,680	94,600
1988	14,190	14,440
1989	20,000	54,760
1990	44,475	79,470
1991	42,935	78,330
1992	37,955	73,000

These carryforwards may be utilized

od of fifteen years from the year of origination. The difference between accounting and tax losses is primarily due to accelerated depreciation methods being utilized for income tax purposes.

Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes, is to be implemented for fiscal years beginning after December 15, 1992. This requires a change from the deferred method to the asset and liability method of accounting for income taxes. The initial adoption of SFAS No. 109 may be on either a prospective or retroactive basis. The impact of adopting this statement has not been determined.

#### 7. Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City-owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 83 percent which is expected to decrease to 81 percent by 1997. The contracts expire in 2003.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has record-

ed as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1992, 1991, and 1990 was \$27,250, \$30,998, and \$33,043 respectively. Such costs are accounted for as power purchased.

#### 8. Pension, Deferred Compensation Plans, and Other Benefits

Big Rivers has defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974. Big Rivers has adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 87, Employers' Accounting for Pensions.

Actuarial present value of benefit obligation:  Accumulated benefit obligation, including vested benefits of	<u>1992</u>	1991	<u>1990</u>
\$12,916, \$10,718, and \$8,481	\$12,942	10,773	8,513
		1/A)	
Projected benefit obligation for services rendered to-date	\$17,507	14,459	11,614
Plan assets at fair value, primarily listed stocks and U.S. Treasury			Springerin
Bonds	16,861	15,657	12,422
Plan assets over (under) projected benefit obligation	(646)	1,198	808
Unrecognized net transition assets	(1,982)	(2,202)	(2,422)
Unrecognized prior service cost	1,516	1,343	959
Unrecognized net loss (gain)	270	(1,916)	(517)
Unfunded accrued pension cost	\$ (842)	(1,577)	(1,172)
Net pension costs included the following (income) / expense components:			House
Service cost-benefits earned during the year	\$ 1,270	1,219	1,047
Interest cost on projected benefit obligation	1,285	1,046	835
Actual return on plan assets	(1,537)	(2,787)	(1,265)
Amortization of transition assets	(220)	(220)	(220)
Amortization of prior service cost	175	143	96
Amortization of deferral of net loss (gain)	151	1,722	321
Net periodic pension costs	\$ 1,124	1,123	814

Assumptions used to develop the projected benefit obligation were:	1992	<u> 1991</u>	<u> 1990</u>
Discount rates	8.5%	8.5%	8.5%
Rates of increase in compensation levels	4.0	4.0	4.0
Expected long-term rate of return on assets	8.5	8.5	8.5

Total expense related to the pension and deferred compensation plans was \$1,396, \$1,420, and \$973 in 1992, 1991, and 1990, respectively.

Statement of Financial Accounting

Standard No. 106, Post Retirement Benefits Other Than Pensions, is to be implemented for fiscal years beginning after December 15, 1992. The company currently provides for certain retirement medical benefits. Current year expenses were insignificant and management is pursuing efforts to mitigate the impact of SFAS 106.

#### 9. Related Parties and Major Customers

A related party relationship exists between Big Rivers and its member

distribution cooperatives. Operating revenues from members and nonmembers were as follows:

Members:	1992	<u> 1991</u>	<u> 1990</u>
Green River Electric Corporation	\$133,021	135,805	131,411
Henderson-Union Rural Electric Cooperative Corporation	105,744	106,368	104,908
Jackson Purchase Electric Cooperative Corporation	22,300	22,390	20,488
Meade County Rural Electric Cooperative Corporation	11,679	11,932	10,778
Nonmembers	47,068	54,751	64,083
Other Revenue	95	89	68
	\$319,907	331,335	331,736

National Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to mem-

bers for these two customers (Green River Electric Corporation for National Southwire Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

Nonmember sales to Oglethorpe accounted for 8.3 and 10.9 percent of operating revenues in 1992 and 1991, respectively.

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and accepting only such payment therefore as each member receives from its customers.

Receivables from members at December 31, 1992, 1991, and 1990 were \$18,478, \$20,602, and \$23,839, respectively.

		Henderson-	
Year	Green River	Union	Combined
1992	\$87,705	82,841	170,546
1991	88,892	83,117	172,009
1990	88,624	83,980	172,604

#### 10. Disclosure of the Fair Value of Financial Instruments

The carrying amounts of Big Rivers cash and cash equivalents, accounts receivable, short-term investments, and accounts payable approximate the fair value because of the short maturity

of these financial instruments. The assumption used in determining the fair value of Big Rivers long-term variable interest rate debt is that the fair value approximates the carrying value,

as the debt reprices weekly. Fair value of the long-term fixed interest rate debt is approximately the carrying value, \$1,119,152.

#### 11. Commitments and Contingencies

As of December 31, 1992, a suit filed by a former coal supplier in the amount of \$15.7 million was pending, as were a number of other legal actions and claims involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims

will not have a material effect on Big Rivers' financial position or results of operations.

Big Rivers has entered into several long-term coal contracts expiring through 2006. Fuel purchased under these contracts in 1992, 1991, and 1990 was \$107,540, \$127,247, and

\$126,626, respectively.

The KPSC is conducting a focused management audit of Big Rivers' fuel procurement policies and procedures. A report is expected in the spring of

Comparative Statisti	cal Analysis	Ten-Ye	ar Summary	J	
	1992	1991	1990	1989	
Operating Revenues	\$ 319,907,459	331,334,709	331,736,393	389,976,759	
Expenses:	N. S.			The state of	
Operation and Maintenance Purchased Power and	183,693,972	193,288,174	191,389,914	170,941,916	
Interchanged, Net	22 720 025	20 240 020	40,263,144	25 424 970	
Depreciation and Amortization	33,730,825	39,248,839	40,263,144 44,564,475	35,434,879 44,333,598	
Taxes	44,980,616 4,374,765	44,809,522 4,365,522	4,201,594	4,011,142	
Interest	93,358,171	95,071,442	97,222,523	101,748,177	
Other	(999,831)	(1,008,592)	682,563	752,017	2
Total	<u>359,138,5</u> 18	375,774,907	378,324,213	357,221,729	B
Operating Margins (Loss)	(39,231,059)	(44,440,198)	(46,587,820)	32,755,030	
Nonoperating Margins (Loss)	1,275,827	1,505,489	2,113,282	2,378,289	
Net Margins (Loss)	\$ (37,955,232)	(42,934,709)	(44,474,538)	35,133,319	A CARLO
Utility Plant at Cost	\$1,472,545,501	1,466,355,537	1,462,170,906	1,454,882,990	
Construction Work in Progress	10,563,767	11,986,253	9,204,400	4,162,708	1
Total Electric Plant	han marketinar Mark	170 244 700		1 450 045 400	
Less Accumulated Depreciation	1,483,109,268 419,709,707	1,478,341,790 376,616,976	1,471,375,306 331,805,315_	1,459,045,698 288,884,804	
		370,010,770		200,001,001	
Utility Plant Net	<u>\$1,063,399,561</u>	1,101,724,814	1,139,569,991	1,170,160,894	100
Total Assets	\$1,180,152,394	1,225,216,359	1,267,340,928	1,322,367,888	
A STATE OF THE PARTY OF THE PAR			The same of the sa	1-23/	
			The same of the sa	The same	
			-5.	100	
The state of the s				45.15	
System Peak Demand - MW	1,166	1,168	1,174	1,177	
Net Generating Capacity Owned - MW	1,459	1,459	1,459	1,459	
Net HMP&L Capacity Purchased - MW	262	263	264	264	
Other Purchased Capacity - MW	178	178	178	178	
Sales to Members -GWh	8,326.34	8,314.32	8,191.46	8,072.76	
Sales to Non-Members - GWh	1,463.50	2,055.13	2,592.86	1,500.96	
Generated - GWh	8,418.27	8,664.31	9,010.66	8,047.11	
Purchased HMP&L Energy - GWh	1,211.98	1,480.77	1,668.90	1,388.66	
Other Purchased Energy - GWh	305.91	415.91	337.14	314.14	
System Load Factor - %	82.7	83.1	81.9	80.08	
Permanent Employees at Year-End	846	875	868	857	
Average Cost of Coal Hand	///	M. M.			100
Average Cost of Coal Used Price Per Ton	27.9.2	28.51	28.73	37.03	
¢/MM BTU	125.50	28.51 129.2¢	129.2¢	27.82 126.5¢	
CAMINI DI O	23.50	127.25	127.25	120.5¢	

Applica	100					
	1988	1987	1986	1985	1984	1983
	399,277,507	300,084,362	227,664,219	236,023,720	258,019,579	258,276,967
	187,344,006	169,931,331	130,991,511	133,779,910	143,358,327	136,539,322
	39,158,896	39,146,440	38,214,277	39,792,228	47,494,014	55,494,464
	49,310,860	53,555,259	18,798,750	17,788,717	18,533,362	17,782,446
	3,906,621	3,817,850	2,515,787	2,353,021	2,269,307	2,202,576
	103,607,079	124,351,304	51,520,808	39,645,856	39,747,343	38,198,269
1	612,200	597,187	233,931	185,636	128,581	91,698
1	383,939,662	391,399,371	242,275,064	233,545,368	251,530,934	250,308,775
	15,337,845	(91,315,009)	(14,610,845)	2,478,352	6,488,645	7,968,192
_	3,471,174	2,684,163	(26,614,194)	1,040,972	(1,749,130)	949,868
=	18,809,019	(88,630,846)	(41,225,039)	3,519,324	4,739,515	8,918,060
	1,451,937,802	1,448,581,890	1,452,144,009	539,998,444	533,597,067	531,772,691
_	1,226,596	1,448,505	2,080,925	833,505,325	745,589,266	653,519,304
	1,453,164,398	1,450,030,395	1,454,224,934	1,373,503,769	1,279,186,333	1,185,291,995
-	245,556,080	196,710,029_	143,479,823	124,841,130_	106,923,761	<u>91,374,775</u>
=	1,207,608,318	1,253,320,366	1,310,745,111	1,248,662,639	1,172,262,572	1,093,917,220
_	1,386,197,045	1,421,349,400	1,438,564,861	1,409,490,616	1,332,830,420	1,225,799,340
	1,157	990	993	1,042	1,027	952
	1,459	1,459	1,448	1,039	1,039	1,039
	264	270	271	271	268	270
	178	178	178	178	190	140
	7,814.61	6,271.32	6,211.79	6,908.67	7,390.75	6,719.42
	3,188.51	3,993.08	3,303.68	3,290.11	2,075.96	2,098.82
	9,270.21	8,321.80	6,609.70	6,447.45	6,876.37	6,474.14
	1,716.20	1,932.61	1,631.87	1,779.65	1,882.22	1,724.84
	262.04	284.69	336.38	291.98	666.72	790.65
j	77.6	75.5	74.1	78.1	84.1	78.4
	855	856	863	827	835	794
1	28.05	27.48	27.83	30.25	29.91	30.38
A.	125.7¢	124.3¢	127.6¢	137.7¢	135.6¢	138.4¢
11.8		The second second		A CONTRACTOR OF THE PARTY OF TH		



#### Officers

Morton Henshaw President

Edward F Johnson Vice President

William B Briscoe Secretary-Treasurer

J.D Cooper Assistant Secretary-Treasurer

#### General Manager

Paul A. Schmitz

#### Directors

Green River Electric Corporation Marion Cecil Edward F. Johnson Sandra Wood

Henderson-Union Rural Electric Cooperative Corporation William Briscoe Morton Henshaw C.G. Truitt

Jackson Purchase Electric Cooperative Corporation Johnny L. Hamm Ralph Hardin Delbert Powers

Meade County Rural Electric Cooperative Corporation John C. Burnett J.D. Cooper Joseph A. Hamilton

#### Vice General Managers

Joe L. Craig
Fuels, Environmental Affairs, and Information Systems

J.E. Dolezal Energy Supply

Richard P Greenwell Production

Ronald W. Johnson

Administrative Services and Human Resources

B. Scott Reed Engineering and Transmission

W. Hayden Timmons
External Relations, Marketing, and Economic Development

John J. West Finance

#### Superintendents

Steve Moss Wilson Plant

Bruce Shelton Coleman Plant

Barry Wood Reid/Green Plants

Virgil Mitchell
Transmission and Subtations

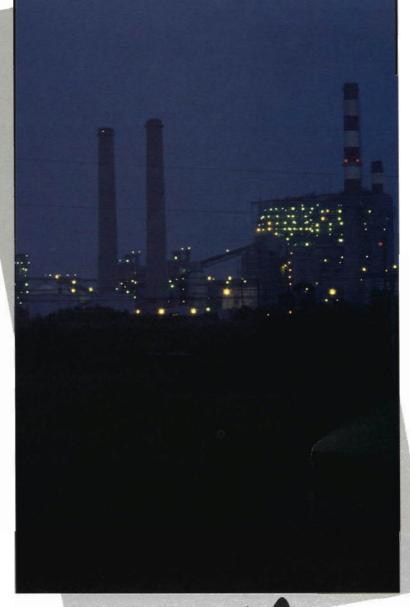
#### Corporate Attorney

Morton Holbrook General Counsel Holbrook, Wible, Sullivan & Mountjoy P.S.C Owensboro, Kentucky

#### Corporate Auditors

KPMG Peat Marwick Louisville, Kentucky





# Annum

BIG RIVERS ELECTRIC CORPORATION

### Financial Highlights

(Dollars in thousands)

	1991	1990	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	331,335	331,736	(401)	(.1)
Operating Expenses	281,712	280,419	1,293	.5
Net Margins	(42,935)	(44,475)	1,540	3.5
Capital Additions	7,843	14,365	(6,522)	(45.4)
Cost of Fuel Used	115,202	118,096	(2,894)	(2.5)
System Peak Demand (Megawatts)	1,168	1,174	(6)	(.5)
Energy Sold to Members (Mwh)	8,314,320	8,191,465	122,855	1.5
Revenue per kWh Sold (Mills)	31.94	30.75	1.19	3.9

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#### About Big Rivers

Big Rivers Electric Corporation, located in Henderson, Kentucky, is a generation and transmission cooperative owned by the members it serves. It provides reliable wholesale electric service on a not-for-profit basis to its four member distribution cooperatives. These cooperatives, owned by their 82,918 consumer-members, distribute electricity at retail within 22 counties of western Kentucky on a not-for-profit basis.

### President's and General Manager's Report



1991 was a very "normal" year at Big Rivers Electric Corporation. It was routine for the production of electric energy, with system and intersystem sales near forecast levels, no extended forced outages on any units, and normal planned outages.

Implementation of management audit recommendations continued as planned. Of the 67 recommendations originally made by the Scott Consulting Group (SCG), 38 have been completed. SCG estimates that implementation of the recommendations will ultimately save approximately \$2.6 million annually, for a one-time cost of \$1.4 million.

Details of the Integrated Resource Plan/Acid Rain Study, completed this year, are contained elsewhere in this report. Basically the study concluded that Big Rivers will not need additional peaking capacity until the year 2008. The consultants recommended that acid rain compliance for Phase I be accomplished by fuel switching at the Kenneth C. Coleman Plant, and scrubbing Henderson Municipal Power and Light Station Two in 1997. Phase II requirements can be met by over-scrubbing all units equipped with scrubbers. Alternatives were still being studied at year-end.

Residential marketing efforts, in cooperation with the member distribution cooperatives, were expanded and intensified in 1991. During the year plans were made for much larger marketing, promotion, advertising, and education and information programs in 1992. The objective is to encourage consumer-members to fully utilize more efficient electric appliances and heating and cooling systems. These efforts should improve the Big Rivers' system winter load factor and off-peak consumption, which will ultimately result in lower overall cost of electric service to our members and their consumers.

We remain committed and accept the challenge to aggressively pursue our purpose of providing members with an adequate and reliable source of electric service at a reasonable cost. Our professional and skilled employees, together with the dedication and leadership provided by our board of directors, make this endeavor possible.

We remain
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to aggressively
pursue
our
purpose

Motor Henshau

Morton Henshaw President, Board of Directors

W. H. Thorpe

William H. Thorpe General Manager

## Sates

Revenue from the sale of electric energy during the year was \$331.2 million, down \$0.4 million, primarily due to a reduction in intersystem sales. Sales to our members were \$276.5 million, an increase of \$8.9 million, or 3 percent. Intersystem sales for the year were \$54.8 million, down \$9.3 million, or 15 percent.

Moderate weather conditions affected both member and nonmember energy sales. Heating and cooling degree days for the year were 5,478, compared to 5,236 last year, and a norm of 6,262.

The system peak demand of 1,168 megawatts (MW), reached on July 22, fell 6 MW short of the 1990 peak of 1,174 MW, and 9 MW short of the record system peak demand of 1,177 MW established in December 1989.

The annual system load factor was 83.10 percent compared to 81.91 percent last year. Big Rivers' load factor is high relative to other utilities, primarily due to the aluminum smelters operating continuously above a 95 percent level.

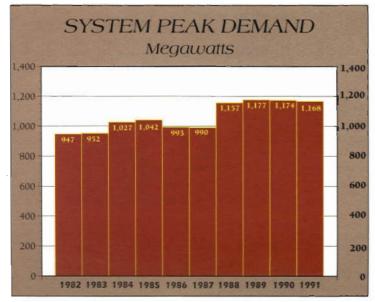
As discussed in previous annual reports, in 1987 the Kentucky Public Service Commission (PSC) ordered a variable tariff rate for energy sold by Big Rivers to Henderson-Union Rural Electric Cooperative Corporation and Green River Electric Corporation to be delivered to the two aluminum smelters. The variable rate requires Big Rivers to charge from a high of 4.4 cents per kilowatt hour (kWh) to a low of 1.8 cents, as primary aluminum prices fluctuate between 80 cents a pound and 45 cents. During 1991, the market price

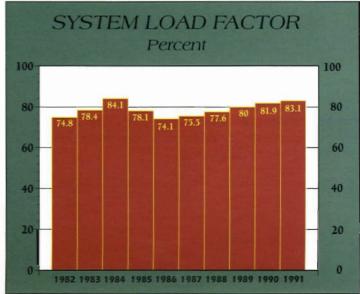
for aluminum was at a low level, averaging 59.46 cents a pound, as compared to an average of 74.04 cents a pound the previous year. Consequently, Big Rivers' 1991 sales price for energy to the smelters averaged 3.1 cents as opposed to 3.5 cents per kWh in 1990. This low price substantially reduced Big Rivers' cash



flow and the availability of funds for debt service payments to the Rural Electrification Administration (REA). However, the lower cash flow did not affect the recognition of revenues from the smelters for 1991. The settlement agreement with the smelters, more fully discussed in footnote 5 to the financial statements, assures that Big Rivers will receive an average of 2.91285 cents per kWh through August 1997.

The variable rate, as set by the PSC, was designed to assure that the aluminum smelters could continue to operate at full capacity in spite of a low sales price for their product.





## Fuels

Our plants burned 4.7 million tons of coal in generating electricity, an average of 13,011 tons per day. This compares with 4.9 million tons, 13,398 tons per day, burned in 1990. Fuel costs for the year were \$115.2 million, a decrease of \$2.9 million. Fuel cost of \$20.2 million associated with HMP&L Station Two was included in the cost of purchased power.

The average cost was \$28.34 per ton, equivalent to 128.5 cents per million Btu. This compares with \$28.73 per ton, 129.2 cents per million Btu last year.

About three-fourths of Big Rivers' coal requirements are supplied from Kentucky mines in the service areas of the corporation's member cooperatives.

Agreement was reached with Green River Coal Co., Inc., the contract supplier of approximately 80 percent of the coal for the Wilson Plant, for substitution



of coal produced by Andalex Resources, Inc. The coal supplied by Green River Coal contained unacceptable high levels of chlorine, which caused corrosion of the sidewall boiler tubes near the low nitrous oxide (NOx) burners. The substitute coal is substantially lower in chlorine, and of much better quality for the Wilson Plant. With the improvement in quality, a savings of approximately \$27 million will be realized over the 13 years remaining on the contract.

The Coleman, Reid, and HMP&L Station Two Plants, which are not equipped with scrubbers, burn lower-sulfur coal from western Kentucky and southern Indiana. These plants will be affected in 1995 by Phase I sulfur dioxide (SO2) requirements under the acid deposition control provisions of the Clean Air Act Amendments of 1990, requiring that the emissions be cut in half.

Upon completion of the Integrated Resource Plan/Acid Rain study, Big Rivers entered into an eight-year contract with E & M Coal, Inc. to supply coal to the Coleman plant, including a much lower-sulfur compliance fuel during years 1995-1999 (the Phase I period).

During March a trial was held in the U.S. District Court of southern Indiana regarding a lawsuit filed by a former coal supplier, Delta Mining Corporation, seeking \$15.7 million in damages. The suit alleges that Big Rivers did not accept the total quantity of coal required under a ten-year supply contract made in 1977. At year-end the court had not rendered a decision.

## Margins

As projected in the 1987 workout plan with creditors, Big Rivers continues to operate at a loss. The loss incurred in 1991 was \$42.9 million, compared to a loss of \$44.5 million during 1990. At year end the

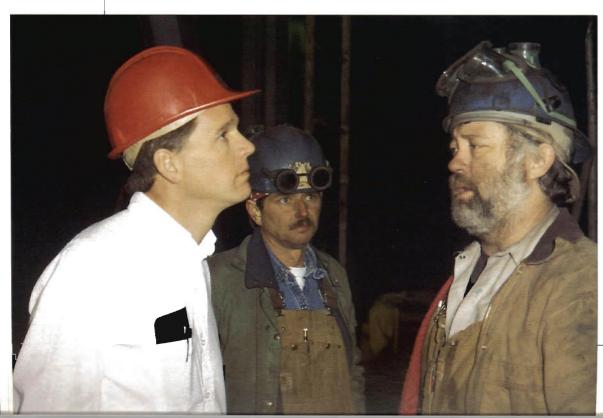
corporation's total deficit equity was \$116.8 million. It is anticipated that Big Rivers will continue to incur negative margins for the next three to four years.

## Rate Matters

On December 21, 1990, the PSC approved the third-step rate increase as provided in the workout plan. The increased rates became effective on January 1, 1991, producing additional annual revenues of \$6.9

million, increasing the wholesale cost of power for rural residential consumers by 6.4 percent, an average of \$2.81 per 1,000 kWh.





### Production

The system's generating units are all coal-fired except for a 65 MW combustion turbine used for peaking and emergency purposes.

The Green and Wilson Plants are equipped with flue-gas desulfurization scrubbers, and these plants burn western Kentucky high-sulfur coal.

The system-wide heat rate was 10,343 British Thermal Units (Btu) per net kWh generated. The loss of intersystem power sales during off-peak hours (10 p.m. to 6 a.m.) in 1991, caused a break in the preceding six consecutive year's record of heat rate improvement.

The installation of real-time performance

monitoring equipment was completed on the Coleman Plant. All of Big Rivers' generating units are now equipped with data acquisition and performance monitoring computers. This equipment provides the unit operators and performance engineers with boiler and turbine data on a real-time basis, which greatly improves our ability to increase unit operating efficiency.

The table below presents 1991 data regarding each generating unit.

Generating Unit	Year Placed in Service	Net Capability kW	Operating Hours	Forced Outage Rate %	Output Factor %	Equivalent Availablity Factor %	Gross Generation MWh	Net Heat Rate BTU/ kWh
Robert A. Reid Plant near Sebree, Kentucky								
Reid Unit 1	1965	65,000	Rei	d Unit 1 wa	as on stand	-by status th	roughout 19	91
Kenneth C. Coleman Plant								
near Hawesville, Kentucky								
Coleman Unit 1	1969	150,000	8,001	2.54	83.8	87.6	1,072,559	10,266
Coleman Unit 2	1970	150,000	7,653	1.29	86.7	85.5	1,061,824	10,334
Coleman Unit 3	1972	155,000	7,573	1.96	82.7	89.2	1,033,435	10,498
		455,000	23,227	1.94	84.4	87.5	3,167,817	10,364
Robert D. Green Plant								
near Sebree, Kentucky	- 30 0 20 6 30	Office of the second			To the state of			
Green Unit 1	1979	231,000	7,209	2.49	83.2	81.7	1,449,467	10,539
Green Unit 2	1981	223,000	8,001	1.22	86.6	90.6	1,676,822	10,644
HMP&L Station Two		454,000	15,210	1.82	85.0	86.0	3,176,289	10,594
near Sebree, Kentucky	1070			4.00				40 400
Henderson Unit 1	1973	154,000	7,359	1.02	78.6	84.4	954,042	10,180
Henderson Unit 2	1974	<u>161,000</u>	7,641	1.51	77.0	83.5	1,011,919	10,247
D.B. Wilson Plant		315,000	15,000	1.27	77.8	83.9	1,965,961	10,215
near Island, Kentucky								
Wilson Unit 1	4000	100.000		0.50	05.5	00.0	0.000.000	10.100
WIISON ONIL I	1986	420,000	7,819	2.58	85.5	88.6	3,020,682	10,138

## Safety

A low-accident incident rate (accidents per 200,000 man-hours worked) of 4.9 was set in 1991. Last year the rate was a record low of 4.6. Wilson Plant employees made a major contribution to the corporation's safety record by completing two full years without a lost-time injury on October 31.

We regret the death of long-time employee Melvin Hagan, and serious injury to James Boarman following an acid tank explosion at the Coleman Plant on August 12.

## Acid Rain Study

A study was completed by consultants to determine the most favorable plan for compliance with the new Clean Air Act Amendments. No final decision has been made, but based on the assumptions used, the conclusion was that the most favorable plan for meeting Phase I SO2 emission limits is to: (1) add fluegas desulfurization systems (scrubbers) to both units at the HMP&L Station Two Plant, with a 1997 in-service date, (2) temporarily switch to a lower-sulfur coal in 1995 at HMP&L Station Two until the scrubber system is operational, and (3) switch all three units at the Coleman Plant to low-sulfur coal in 1995.

Big Rivers will continue to evaluate its alternatives, whether to burn lower-sulfur coal or construct the scrubbers, to meet Phase I limits. A final decision is expected by mid-year 1992.

Nitrous oxide requirements will be met by installing low-NOx burners where necessary.

The recommended plan for meeting Phase II limits is to increase the removal efficiency of the scrubbers at Wilson, Green, and HMP&L Station Two beginning in 2000.

This compliance plan offers considerable flexibility. Big Rivers plans to annually review its position with regard to Phase II compliance options, with the objective of taking the best advantage of developing technologies, allowance market conditions, fuel market conditions, and other factors that would influence the final decision, before the year 2000.

## Marketing

The corporation has embarked on a new residential and commercial marketing program designed to increase off-peak load and enhance consumer satisfaction. Incentives were offered to consumers to install new high-efficiency electric water heaters. In addition, the distribution systems offered incentives on geothermal heat pumps.

1991 was the first full year of residential and commercial marketing for Big Rivers and the program was productive. Over 3,000 efficient water heaters



and more than 110 geothermal heat pumps were installed across the system. Information on energy efficiency and safety was made available to consumers at annual meetings, home shows, and county fairs. Energy audits were provided to consumers by member service personnel from the distribution systems.

An end-use/consumer opinion survey was completed in September 1991. This survey, coupled with data from previous surveys, provides Big Rivers "benchmarks" from which a data base can be built to track the effectiveness of incentive programs, advertising, consumer satisfaction, and off-peak load building.

Heating and air-conditioning contractor training was enhanced by Big Rivers' participation in the Kentucky Committee for Marketing Electricity (KCME). The KCME is a joint utility effort promoting efficiency, better building methods, and an overall understanding of more efficient use of electricity. The KCME coordinated the construction of the Electric HVAC Training and Research Center at the University of Kentucky in Lexington to provide contractors with hands-on training. An increased effort to communicate to the public was initiated in 1991 by Big Rivers and the distribution cooperatives through brochures, personal contacts, and local media.

## Planning

As required by a PSC regulation implementing statewide planning, Big Rivers filed its Integrated Resource Plan in September. The regulation requires utilities to develop a 15-year plan for supplying electric energy at the lowest cost consistent with meeting acceptable standards for quality and reliability of service. The conclusion of this plan is that Big Rivers' current generating resources are adequate to meet its needs for several years into the future. Present indications are that 69 MW of new peaking generation capacity will be needed in 2008.

Because of Big Rivers' very high system load factor and the high concentration of heavy industrial load, the potential for significant impacts from traditional demand side management and peak-shaving strategies is reduced. The benefit of such load reduction is also diminished since the need for new resources is relatively far in the future. Big Rivers also is currently supplying approximately 70 MW of industrial load on an interruptible basis to the aluminum smelters. This relatively large block of interruptible load gives Big Rivers and its member distribution systems another means of responding to emergency conditions without additional resources.

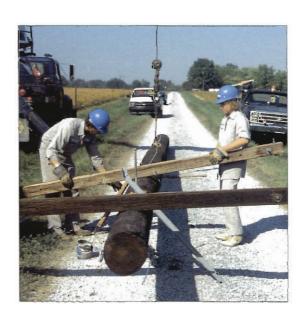
An update to the Power Requirements Study was completed with a forecast of Big Rivers' energy and peak demand requirements for 1991 through 2010. It shows an expected average annual growth rate of 1.29 percent for peak demand, and 1.02 percent for total required energy for Big Rivers' system load.

## Construction

No major construction was in progress at year-end. Total capital expenditures for the year were \$7.8 million, down \$6.5 million from 1990.

The corporation has sufficient generating capacity and has no plans for the construction of additional units.

A new energy management system scheduled for installation in mid-1992 has been delayed approximately three months due to the addition of an SO2 allowance dispatch program. This new system will be equipped with "state of the art" programs providing for the dispatch of the most economical power generation, and will permit the most efficient and reliable operation of the transmission system.



## Debt Service

In 1988 Big Rivers entered into a debt restructuring agreement effective August 31, 1987, as defined in Note 4 to the financial statements, providing for annual minimum debt service payments. The agreement also provides for the payment of cash in excess of a \$10 million balance at the end of each month, after paying operating costs and capital expenditures. The minimum

debt service for 1991 was \$116.0 million. With the decline in aluminum prices and the resulting decrease in cash flow available for debt service, as previously discussed in the SALES section of this report, Big Rivers was able to pay only \$83.1 million. However, through 1991, \$147.2 million has been paid on principal in excess of the minimum debt service schedule.

## Economic Development

Scott Paper Company announced in 1990 that it would locate a \$500 million tissue mill near Newman, Ky., in Daviess County. The company has exercised its option to purchase site properties. Transfer of title will be completed by mid-January 1992, and site work is expected to begin by mid-year 1992. The permitting is in place with the exception of the permits that have to be acquired during the construction process.

The plant will be located in Green River Electric Corporation's service area, one of Big Rivers' member cooperatives. This is expected to be a 60-MW load, with approximately 500 people employed.

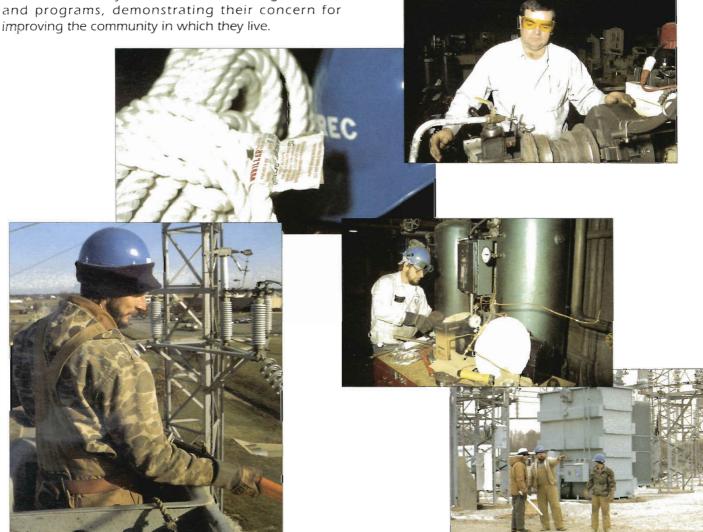
A small manufacturing facility has been opened locally by Scott, and employees are being trained on equipment that will be moved into the new plant when completed.

## Employees

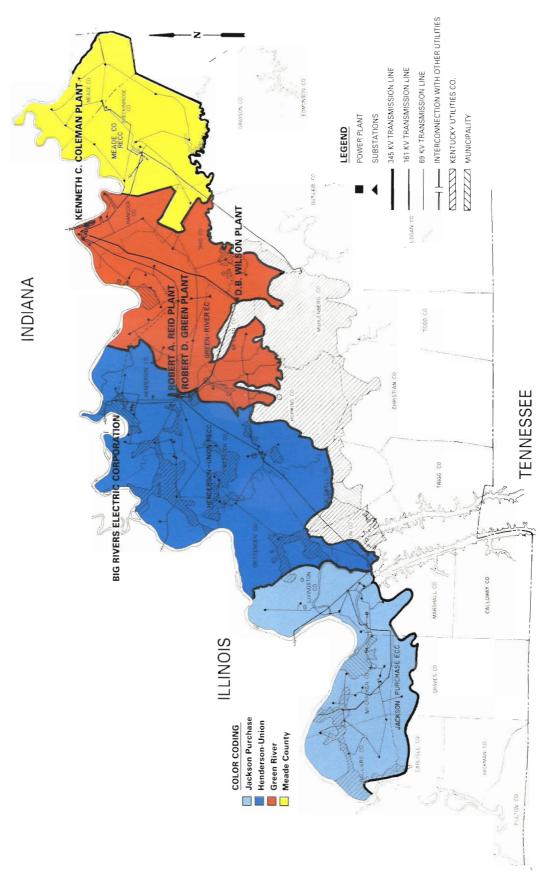
Employment at year-end was 875. The turnover rate for the year was 1.4 percent, which is considerably lower than the national average for similar size corporations.

Employees throughout Big Rivers are active in various community, civic, and business organizations and programs, demonstrating their concern for improving the community in which they live.

Sixty-five employees continued their quest for higher education with help from the educational assistance program. Big Rivers is proud that each year many employees find the time, and make the commitment to advance their career potential and value to the corporation.



## System Map



# Financial Report

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# Independent Auditors' Report



The Fifth Avenue Building 444 South Fifth Street Louisville, KY 40202

#### Independent Auditors' Report

The Board of Directors
Big Rivers Electric Corporation.

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1991 and 1990, and the related statements of revenues and expenses, equities (deficit) and cash flows for each of the years in the three-year period ended December 31, 1991. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation at December 31, 1991 and 1990, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1991, in conformity with generally accepted accounting principles.

As discussed in notes 4 and 5 to the financial statements, Big Rivers Electric Corporation and its creditors entered into a Debt Restructuring Agreement whereby government related debt was restructured into a Total Government Debt Note (REA Promissory Note). The principal repayments of the REA Promissory Note are contingent upon the available cash flow, as defined by the Debt Restructuring Agreement. Big Rivers Electric Corporation's ability to recover its costs and repay its debt is dependent upon its generating adequate revenues by selling approximately fifteen percent of capacity to nonmembers. In addition, as discussed in note 10 to the financial statements, Big Rivers Electric Corporation is a defendant in a law suit filed by a former coal supplier. The ultimate outcome of the litigation cannot be presently determined. Accordingly, no adjustments relating to the recoverability and classification of reported asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties have been recognized in the accompanying financial statements.

KPM 6 Peat Maurick

February 5, 1992

## Statement of Revenues and Expenses Years ended December 31, 1991, 1990, 1989

(Dollars in thousands)

	1991	1990	1989
Operating revenues (notes 5 and 9)	\$331,335	331,736	389,977
Operating expenses:	·		
Operations:			
Fuel for electric generation	115,202	118,096	104,830
Power purchased and interchanged, net	39,249	40,263	35,435
Other	48,467	46,263	41,987
Maintenance	29,618	27,030	24,125
Depreciation and amortization	44,810	44,565	44,334
Taxes	4,366	4,202	4,011
Total operating expenses	281,712	280,419	254,722
Electric operating margins	49,623	51,317	135,255
Interest and other deductions:			
Interest (note 4)	95,530	97,462	101,890
Allowance for borrowed funds used			
during construction (note 2)	(458)	(240)	(142)
Other deductions	(1,009)	683	752
Total interest and other deductions	94,063	97,905	102,500
Operating margins (loss)	(44,440)	(46,588)	32,755
Nonoperating margins (loss):			
Interest earned	1,502	2,108	2,376
Other	3	5	2
Total nonoperating margins	1,505	2,113	2,378
Net margins (loss)	\$[42,935]	(44,475)	35,133

## Statement of Equities (Deficit) Years ended December 31, 1991, 1990, 1989

(Dollars in thousands)

					Other equities	
	Total equities	Accumulated deficit- operating	Accumulated deficit- nonoperating	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1988 Margins for 1989:	\$[64,540]	(123,899)	(20,459)	75,373	764	3,681
Operating	32,755	32,755	_	_		_
Nonoperating	2,378	_	2,378	_	_	_
Patronage allocation	-	(52,548)		52,548		_
Balance at December 31, 1989 Margins for 1990:	[29,407]	(143,692)	[18,081]	127,921	764	3,681
Operating	(46,588)	(46,588)	_		_	_
Nonoperating	2,113	_	2,113			
Balance at December 31, 1990 Margins for 1991:	(73,882)	(190,280)	(15,968)	127,921	764	3,681
Operating	(44,440)	(44,440)	_	_	_	
Nonoperating	1,505	-	1,505	_		
Balance at December 31, 1991	\$(116,817)	(234,720)	[14,463]	127,921	764	3,681

See accompanying notes to financial statements.

### Balance Sheets

At December 31, 1991 and 1990 (Dollars in thousands)

Assets	1991	1990
Utility plant, net (notes 2, and 4) Productive capacity under purchased power contract (note 7) Other deposits and investments, at cost Current assets: Cash and temporary cash investments Receivables (note 9) Fuel for electric generation Non-fuel inventory	\$1,101,725 25,200 4,921 10,100 24,898 28,187 	1,139,570 27,400 5,574 10,253 30,269 24,584 14,811
Total current assets		79,917
Deferred charges (note 3)	14,953	14,880
	<u>\$1,225,216</u>	1,267,341
Equities and Liabilities Capitalization:     Equities (deficit)     Long-term liabilities (notes 4, 5 and 7):     REA debt     Other long-term debt	\$ (116,817) 1,055,407 	(73,882) 1,062,950 190,227
Total long-term liabilities Less current maturities	1,239,070 6,946	1,253,177 10,593
Total long-term liabilities, net of current maturities	_1,232,124	1,242,584
Total capitalization	<u>1,115,307</u>	1,168,702
Current liabilities:     Current maturities of long-term     liabilities (notes 4, 5 and 7)     Accounts payable     Accrued expenses  Total current liabilities  Deferred revenue (note 5)	6,946 18,790 19,033 44,769	10,593 18,605 9,009 38,207
Deferred credits	34,543	31,946
Commitments and contingencies (note 10)		
	\$ 1,225,216	1,267,341

See accompanying notes to financial statements.

## $S_{tatement\ of\ Cash\ Flows}$

Year ended December 31, 1991, 1990, 1989 (Dollars in thousands)

Cash flows from operating activities:	1991	1990	1989
Net margins (loss)	\$(42,935)	(44,475)	35,133
Adjustments to reconcile net margins (loss) to cash provided by operating activities:			
Depreciation and amortization	45,518	45,196	44,886
Amortization of deferred charges	2,356	2,078	2,158
Net change in deferred revenue	6,107	28,486	
Change in assets and liabilities:			
Receivables	5,371	5,758	1,209
Fuel for electric generation	(3,604)	774	(2,001)
Material and supplies	(421)	163	666
Accounts payable	185	968	(874)
Accrued expenses	10,025	(9,302)	(3,170)
Other, net	324	[1,094]	3,024
	22,926	28,552_	81,031
Cash flows from investing activities:			
Construction expenditures	(7,672)	(14,605)	(7,734)
Refund from vendor relating to			205
construction expenditures Prepayment on coal contract	(3,500)	(1,000)_	295
Prepayment on coan comsact	[3,300]		<u>(2,500)</u>
Net cash provided by (used in)			
investing activities	(11,172)	(15,605)	(9,939)
Cash flows from financing activities:			
Principal payments on long-term debt	(11 007)	/E/L 0201	(00.141)
Proceeds from bank loan	(11,907)	(54,920)	(99,161)
Freedy north bassic today		24,000	
Net cash used in financing			
activities	(11,907)	(30,920)	<u>[99,161]</u>
Net increase (decrease) in cash	A (150)	447.072	(30.040)
and temporary cash investments	\$ (153)	(17,973)	[28,069]
Supplemental Cash Flow Information			
Supplemental Cash Flow Information			
	1991	1990	1989
Cook and relating to interest account	A 0.4.453	105 404	407.777
Cash paid relating to interest espense	\$ 84,642	<u>105,401</u>	102,997

See accompanying notes to financial statements.

#### Notes to Financial Statements

December 31, 1991, 1990, 1989

(Dollars in thousands)

#### 1. Summary of Significant Accounting Policies

#### General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all

their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

#### System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### Revenue Recognition

Revenues are based on month-end meter readings.

#### Utility Plant and Depreciation

Utility plant is stated at original cost which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of the allowance. The interest capitalized is determined by applying the effective rate on the REA Promissory Note to qualifying assets included in construction in progress.

Capitalization of interest is discontinued when the project is completed and the asset is ready for service. Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Annual rates used to compute depreciation are as follows:

Production plant	3%-3.10%
Transmission plant	2.75%
Station equipment	2.75%
General plant	<b>2</b> % - <b>20</b> %
Unclassified plant in service	2.75%

#### Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in U. S. government and federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

For purpose of statement of cash flows, Big Rivers considers all short-term highly liquid investments of three months or less to be cash equivalent.

#### Inventories

Inventories, consisting of non-fuel and fuel for electric generation, are valued at weighted average cost.

#### Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses, during the current or any prior fiscal year. If, after

offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons. Patronage capital cannot be retired if patronage capital is less than 40 percent of the total assets.

### Notes (Continued)

#### Pension and Deferred Compensation Plans

All employees after one year of service are covered under trusteed noncontributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### Reclassification

Certain prior year amounts have been reclassified for comparability with 1991 presentation.

#### 2. Utility Plant

The following summarizes utility plant:

Classified plant in service:	1991	1990
Production plant	\$1,276,781	1,275,582
Transmission plant	79,742	78,979
Station equipment	91,534	8 <b>7</b> ,849
General plant	17,627	16,360
Intangible	190	190
Unclassified plant in service	482	3,211
·	1,466,356	1,462,171
Less accumulated depreciation and amortization	376,617	331,805
•	1,089,739	1,130,366
Construction in progress	11,986	9,204
, 5	\$1,101,725	1,139,570

Construction in progress is comprised of several small projects. The average rates used for the capitalization of interest during

construction in 1991, 1990, and 1989 were 7.8, 7.7 and 7.7 percent respectively.

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#### 3. Deferred Charges

The following summarizes deferred charges:

	1991	1990
Unamortized debt expenses	\$ 7,910	8,367
Cravat coal contract amendment		1,553
Insurance claim		1,215
Green River Coal prepayment	6,653	3,500
Other	390	245
	\$ 14,953	14,880

Big Rivers refinanced a portion of its long-term debt at lower interest rates and incurred refinancing expenses. These expenses are being amortized over the term of the REA promissory note (see note 4).

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12,500 was paid to Cravat, which was amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

In 1990, Big Rivers filed a claim with its insurer to recover certain costs of repairs to a substation. Costs incurred, in excess of the

policy deductible, to repair the substation were deferred until settlement of the claim. This claim was settled in 1991.

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. A contract for substitution of coal was executed on September 24,1991, with Green River Coal. Big Rivers has made total prepayment of \$7,000. Interest on the outstanding balance is based on the prime rate established by Chemical Bank of New York plus two percent. Green River Coal is repaying Big Rivers at the rate of \$1 per ton of coal shipped.

#### 4. Long-term Liabilities

A summary of long-term liabilities follows:

	1991	1990
Promissory note - REA 8.36%	\$ 755,135	816,448
Unamortized premium	300,272	246,502
·	1,055,407	1,062,950
County of Ohio, Kentucky, promissory note, with variable	•	
interest rate of 4.41% as of 12/31/91	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable	•	
interest rate of 4.41% as of 13/31/91	58,800	58,800
Obligation under purchased power contract (see note 7)	25,200	27,400
Bank of New York, Bank Loan 8.0%	6,771	8,577
Chemical Banking Corporation, Bank Loan 8.0%	9,592	12,150
Total long-term liabilities	1,239,070	1,253,177
Less current maturities	6,946	10,593
	\$1,232,124	1,242,584
	_	

#### Debt Restructuring Agreement:

On March 30, 1988, a Debt Restructuring Agreement, dated as of August 31, 1987, was signed. The Debt Restructuring Agreement provided for amendments to the debt payments for all REA debt and County of Ohio, Kentucky, promissory notes. In addition, the Debt Restructuring Agreement provided for the funding of the 8 percent Bank of New York and Chemical Banking Corporation bank loans upon Big Rivers meeting certain conditions. These loans were funded during 1990 and are payable in quarterly installments through 1995 with interest payable quarterly.

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated as of March 30, 1988, which was executed as part of the Debt Restructuring Agreement.

The impact of the Debt Restructuring Agreement has been accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers has accounted for the effects of the restructuring prospectively and has not changed the carrying amount of the debt.

#### Promissory Note - REA:

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner as provided by a conventional loan amortization schedule) at an interest rate of 8.36 percent for the REA Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by REA (REA Debt). For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. The effective interest rate for 1991, 1990, and 1989 on the the REA Promissory Note was 7.9, 7.7, and 7.7 percent, respectively. In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on all prior debt on a timely basis and will not seek to collect from Big Rivers, with respect to any REA debt, any amounts in excess of the obligation on the REA Promissory Note.

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a month-end cash balance of \$10,000.

In connection with the settlement agreement described in note 5, the Debt Restructuring Agreement was amended as of January 1, 1990. The amendment provided that if the variable rates to the aluminum smelters specified in the Settlement Agreement (described in note 5) and in effect on April 1, 1990, remains continuously in effect and unmodified through August 31, 1997, and if during this period, the REA Debt never exceeds by more than \$18 million what the REA Debt would be if only the scheduled annual amounts had been paid, then no Event of Default shall be deemed to have occurred through December 31, 1997. If the REA Debt exceeds \$443,000 on January 1, 1998, then the schedule shall be amended beginning with 2004 and continuing to each immediately successive year such that the amount for any year shall not exceed \$150,000 and such that the scheduled annual amounts in and after 1998 if paid in equal monthly installments for each year will yield a figure that equals the REA Debt as of January 1, 1998.

#### Other Long-term Debt:

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. These bonds will bear a variable rate of interest, determined weekly by the remarketing agent, with the approval of Big Rivers, equal to the minimum rate necessary to

remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit which is due to expire July 1, 1992, and is subject to

#### Notes (Continued)

renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. In absence of notification by Bank of New York to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined and covered by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky, issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the

Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent or greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Chemical Securities, Inc. (formerly Manufacturers Hanover Trust Company) irrevocable standby letter of credit, which is due to expire October 15, 1997, and is subject to renewal. The bonds are subject to mandatory purchase upon expiration of the supporting letter of credit and any renewal thereof. In absence of notification by Chemical Securities, Inc. to renew the letter of credit, Big Rivers will draw down sufficient funds under the letter of credit to purchase the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined and covered by the Debt Restructuring Agreement. The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010.

#### Debt Maturities

At December 31, 1991, Big Rivers had, since September 1987, paid total debt service on the REA Promissory Note in the amount of \$578,680 as opposed to the scheduled minimum debt service level of \$431,554. This \$147,126 excess principal payment can be used to offset future payments under the schedule.

Based on the overpayments to date and the amount required to be paid through December 31, 1997, Big Rivers has calculated the required annual amounts of payments on a straight-line basis to avoid an event of default through December 31, 1997. Under this calculation, the maturities of long-term debt for each of the five years subsequent to December 31, 1991, are estimated to be as follows:

	REA			
	Promissory	Unamortized	Other	
Year	Note	<b>Premium</b>	Debt	<u>Total</u>
1992	\$63,003	(63,003)	6,946	6,946
1993	58,142	(57,816)	7,086	7,412
1994	53,656	(45,176)	6,137	14,617
1995	49,517	(40,326)	7,373	16,564
1996	45,697	(35,737)	3,174	13,134

#### 5. Rate Matters

Big Rivers' rates includes a ratchet billing for demand (where current billing units are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers of Big Rivers' members, National-Southwire Aluminum Company, and Alcan Aluminum Corporation (the aluminum smelters) (see note 9). The variable rate will be effective through August 1997. The rates were designed to recover Big Rivers' cost of providing service. The rates have been determined based on cost of service less specified levels of intersystem sales to nonmembers of approximately 200 megawatts. The variable rate for the aluminum smelters will fluctuate based on the price of aluminum within a defined minimum (18.1 mills per kWh) and maximum (44 mills per kWh).

Effective January 1, 1989, Big Rivers was granted a rate increase by the KPSC of \$1.30 per kW, which increased the demand rate to \$8.80 per kW. The aluminum smelters filed appeals in the Franklin Circuit Court regarding the KPSC's decision.

On February 27, 1990, Big Rivers, the aluminum smelters, and Big Rivers' creditors reached an agreement which eliminated the 1990 review of the variable aluminum tariff, resolved the aluminum smelter complaint before the KPSC, and dismissed all pending KPSC appeals. The KPSC approved the Settlement Agreement on

March 23, 1990, to be effective retroactively to January 1, 1990. The Settlement Agreement preserves the variable aluminum smelter rate as the method of calculating the cash payments to be made by the smelters to Big Rivers. The Settlement Agreement, however, fixes the revenue to be recognized by Big Rivers at 29.1285 mills per kWh through August 1997. Accordingly, any payments in excess or under the 29.1285 mills per kWh brought about by the variable aluminum smelter rate will be recorded as either deferred revenue or a receivable by Big Rivers. During 1990 and 1991, the variable aluminum smelter rate resulted in Big Rivers receiving payments in excess of recognizable revenue based on the 29.1285 mills per kWh. These amounts are recorded as deferred revenue. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the smelters to pay at or near the maximum rate of 44 mills per kWh.

	Cash	Revenue
	Collections	Recognized
1991	\$ 170,441	158,083
1990	188,337	158,138
1989	249,489	249,489
1988	243,422	243,422

### Notes (Continued)

While Big Rivers expects to maintain positive cash flow, the agreed upon rate of 29.1285 mills per kWh will cause Big Rivers to sustain negative net margins in the next few years if additional intersystem sales to nonmembers are not achieved. In addition, the settlement modified certain default provisions under the Debt Restructuring Agreement to afford greater flexibility to Big Rivers from default in its debt payments.

Effective January 1, 1991, Big Rivers was granted a rate increase by the KPSC of \$1.35 per kW, which increased the demand rate to \$10.15 per kW.

Intersystem power sales to nonmembers is a component of full cost recovery under Big Rivers' rate design. During 1989, a three-year 200 MW firm power purchase agreement, effective August 1989, was reached with Oglethorpe Power Corporation (Oglethorpe Power). Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority (TVA). On December 17, 1990, a second long-term contract was signed with Oglethorpe Power for the sale of 103 MW of firm power for ten years, beginning in August 1992. The effectiveness of this agreement is contingent upon Oglethorpe's concurrence with the terms of a TVA transmission service agreement, and approval from REA and the KPSC.

#### 6. Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under Section 501 (c) (12) of the Internal Revenue Code. To retain tax-exempt status under this code provision, at least 85 percent of the organization's income must be generated from sales to the cooperative's members. In 1983, sales to nonmembers resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and

subsequent years, it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax-exempt status.

Big Rivers has generated losses for both accounting and income tax purposes. Thus, there is no provision for current or deferred income tax expense. The following analysis summarizes the net operating loss carryforwards:

	s	
Year of origination	Accounting purposes	Federal Income tax purposes
1983	\$ 10,750	9,460
1984	9,340	87,500
1985	9,640	160,180
1986	123,650	154,790
1987	88,680	94,600
1988	14,490	14,440
1989	20,000	54,760
1990	44,400	79,470
1991	42,930	70,000

These carryforwards may be utilized to offset taxable income for the periods of fifteen years from the year of origination. The difference between accounting and tax losses is primarily due to accelerated depreciation methods being utilized for income tax purposes.

Statement of Financial Accounting Standards (SFAS) No. 96, Accounting for Income Taxes, is to be implemented for fiscal years

#### 7. Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the city-owned, 315-megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 83 percent which is expected to decrease to 82 percent by 1994. The contracts expire in 2003.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay

beginning after December 15, 1992. This requires a change from the deferred method to the asset and liability method of accounting for income taxes. The initial adoption of SFAS No. 96 may be on a prospective or retroactive basis. The impact of adopting this statement has not been determined.

interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obliged to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1991, 1990, and 1989 was \$30,998, \$33,043, and \$29,600, respectively. Such costs are accounted for as power purchased.

#### 8. Pension and Deferred Compensation Plans

Big Rivers has defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with

the requirements of the Employee Retirement Income Security Act of 1974. Big Rivers has adopted the provisions of Statement of Financial Accounting Standard (SFAS) No. 87, Employers' Accounting for Pensions.

The following table sets forth the funded status of the pension plans and amount recognized on the balance sheet at December 31,

Actuarial present value of benefit obligation:	1991	<u> 1990</u>	1989
Accumulated benefit obligation, including vested benefits of			
\$10,748, \$8,481, and \$7,075	\$10,773	8,513	7,113
Projected benefit obligation for services rendered to-date	\$14,459	11,614	9,546
Plan assets at fair value, primarily listed stocks and U.S. Treasury Bonds	15,657	12,422	11,157
Plan assets in excess of projected benefit obligation	1,198	808	1,611
Unrecognized net transition assets	(2,202)	(2,422)	(2,642)
Unrecognized prior service cost	1,343	959	1,056
Unrecognized net loss (gain)	(1,916)	(517)	(1,155)
Unfunded accrued pension cost	\$(1,577)	(1,172)	(1,130)
Net pension costs included the following (income) / expense components:			
Service cost-benefits earned during the year	\$ 1,219	1,047	946
Interest cost on projected benefit obligation	1,046	835	421
Actual return on plan assets	(2,787)	(1,265)	(1,059)
Amortization of transition assets	(220)	(220)	(220)
Amortization of prior service cost	143	96	96
Amortization of deferral of net loss (gain)	1,722	321	480
Net periodic pension costs	\$ 1,123	814	664

	<u> 1991                                  </u>	<u> 1990</u>	<u> 1989</u>
Assumptions used to develop the projected benefit obligation were:			
Discount rates	8.5%	8.5%	8.5%
Rates of increase in compensation levels	4.0	4.0	4.0
Expected long-term rate of return on assets	8.5	8.5	8.5

Total expense related to the pension and deferred compensation plans was \$1,420, \$993, and \$919 in 1991, 1990, and 1989, respectively.

#### 9. Related Parties and Major Customers

A related party relationship exists between Big Rivers and its member distribution cooperatives. Operating revenues from member and nonmembers were as follows:

1991	1990	1989
\$135,805	131,411	173,839
106,368	104,908	146,449
22,390	20,488	20,166
11,932	10,778	10,755
54,751	64,083	38,668
89	68	100
\$331,335	331,736	389,977
	\$135,805 106,368 22,390 11,932 54,751 89	\$135,805

National-Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers

(Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

		Usedsess Usian	C
<u>Year</u>	<u>Green River</u>	Henderson-Union	<u>Combined</u>
1991	\$ 88,892	83,117	172,009
1990	88,624	83,980	172,604
1989	133,124	126,214	259,338

Nonmember sales to Oglethorpe accounted for 10.9 and 11.2 percent of operating revenues in 1991 and 1990, respectively.

Receivables from members at December 31, 1991, 1990, and 1989 were \$20,602, \$23,839, and \$29,081, respectively

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and accepting only such payment therefore as each member receives from its customers.

#### 10. Commitments and Contingencies

As of December 31, 1991, a suit filed by a former coal supplier in the amount of \$15.7 million was pending, as were a number of other legal action and claims involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

Big Rivers has entered into several long-term coal contracts expiring through 2006. Fuel purchased under these contracts in 1991, 1990, and 1989 was \$127,247, \$126,626, and \$115,582 respectively.

## Comparative Statistical Analysis-

	1991	1990	1989	1988
Operating Revenues	\$ 331,334,709	331,736,393	389,976,759	399,277,507
Expenses: Operation and Maintenance	193,288,174	191,389,914	170,941,916	187,344,006
Purchased Power and				
Interchanged, Net	39,248,839	40,263,144	35,434,879	39,158,896
Depreciation and Amortization	44,809,522	44,564,475	44,333,598	49,310,860
Taxes	4,365,522	4,201,594	4,011,142	3,906,621
Interest	95,071,442	97,222,523	101,748,177	103,607,079
Other	(1,008,592)	<u>682,563</u>	<u>752,017</u>	612,200
Total	375,774,907	378,324,213	357,221,729	383,939,662
Operating Margins (Loss)	(44,440,198)	[46,587,820]	32,755,030	15,337,845
Nonoperating Margins (Loss)	1,505,489	2,113,282	2,378,289	3,471,174
Net Margins (Loss)	\$ (42,934,709)	(44,474,538)	35,133,319	18,809,019
Utility Plant at Cost	\$1,466,355,537	1,462,170,906	1,454,882,990	1,451,937,802
Construction Work in Progress	11,986,253	9,204,400	4,162,708	1,226,596
Total Electric Plant Less Accumulated Depreciation	1,478,341, <b>790</b> 3 <b>7</b> 6,616,976	1,471,375,306 331,805,315	1,459,045,698 288,884,804	1,453,164,398 245,556,080
Utility Plant Net	\$1,101,724,814	1,139,569,991	1,170,160,894	1,207,608,318
Total Assets	\$1,225,216,359	1,267,340,928	1,322,367,888	1,386,197,045
System Peak Demand - MW	1,168	1,174	1,177	1,157
Net Generating Capacity Owned - MW	1,459	1,459	1,459	1,459
Net HMP&L Capacity Purchased - MW	263	264	264	264
Other Purchased Capacity - MW				470
, , , , , , , , , , , , , , , , , , , ,	178	178	178	178
,		178 8,191.46	178 8,072.76	7,814.61
Sales to Members - MWh	8,314.32 2,055.13			7,814.61
Sales to Members - MWh Sales to Non-Members - MWh	8,314.32	8,191.46	8,072.76	7,814.61 3,188.51
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh	8,314.32 2,055.13	8,191.46 2,592.86	8,072.76 1,500.96	7,814.61 3,188.51 9,270.21
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh Purchased HMP&L Energy - MWh	8,314.32 2,055.13 8,664.31	8,191.46 2,592.86 9,010.66	8,072.76 1,500.96 8,047.11	7,814.61 3,188.51 9,270.21 1,716.20
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh Purchased HMP&L Energy - MWh Other Purchased Energy - MWh	8,314.32 2,055.13 8,664.31 1,480.77	8,191.46 2,592.86 9,010.66 1,668.90	8,072.76 1,500.96 8,047.11 1,388.66	7,814.61 3,188.51 9,270.21 1,716.20 262.04
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh Purchased HMP&L Energy - MWh Other Purchased Energy - MWh System Load Factor - %	8,314.32 2,055.13 8,664.31 1,480.77 415.91	8,191.46 2,592.86 9,010.66 1,668.90 337.14	8,072.76 1,500.96 8,047.11 1,388.66 314.14	7,814.61 3,188.51 9,270.21 1,716.20 262.04
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh Purchased HMP&L Energy - MWh Other Purchased Energy - MWh System Load Factor - % Permanent Employees at Year-End	8,314.32 2,055.13 8,664.31 1,480.77 415.91	8,191.46 2,592.86 9,010.66 1,668.90 337.14	8,072.76 1,500.96 8,047.11 1,388.66 314.14	3,188.51 9,270.21 1,716.20 262.04
Sales to Members - MWh Sales to Non-Members - MWh Generated - MWh Purchased HMP&L Energy - MWh Other Purchased Energy - MWh System Load Factor - % Permanent Employees at Year-End Average Cost of Coal Used Price Per Ton	8,314.32 2,055.13 8,664.31 1,480.77 415.91	8,191.46 2,592.86 9,010.66 1,668.90 337.14	8,072.76 1,500.96 8,047.11 1,388.66 314.14	7,814.61 3,188.51

### Ten-Year Summary

1987					
1707	1986	1985	1984	1983	1982
300,084,362	227,664,219	236,023,720	258,019,579	258,276,967	232,716,033
169,931,331	130,991,511	133,779,910	143,358,327	136,539,322	124,675,180
39,146,440	38,214,277	39,792,228	47,494,014	55,494,464	46,342,616
53,555,259	18,798,750	17,788,717	18,533,362	17,782,446	17,548,448
3,817,850	2,515,787	2,353,021	2,269,307	2,202,576	1,970,317
124,351,304	51,520,808	39,645,856	39,747,343	38,198,269	40,467,426
597,187	233,931	185,636	128,581	91,698	70,087
391,399,371	242,275,064	233,545,368	251,530,934	250,308,775	231,074,074
(91,315,009)	(14,610,845)	2,478,352	6,488,645	7,968,192	1,641,959
2,684,163	•			949,868	1,888,934
2,004,103	(26,614,194)	1,040,972	(1,749,130)	747,008	1,000,734
(88,630,846)	(41,225,039)	3,519,324	4,739,515	8,918,060	3,530,893
1,448,581,890	1,452,144,009	539,998,444	533,597,067	531,772,691	495,105,598
1,448,505	2,080,925	833,505,325	<u>745,589,266</u>	653,519,304	451,265,803
1,450,030,395	1,454,224,934	1,373,503,769	1,279,186,333	1,185,291,995	946,371,401
196,710,029	143,479,823	124,841,130	106,923,761	91,374,775	<u>74.720.991</u>
1,253,320,366	1,310,745,111	1,248,662,639	1,172,262,572	1,093,917,220	871,650,410
1,421,349,400	1,438,564,861	1 400 400 /1/	4 222 020 420		1 020 257 522
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,438,304,801	1,409,490,616	1,332,830,420	1,225,799,340	1,029,256,522
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,436,304,601	1,409,490,616	1,332,830,420	1,225,799,340	1,029,256,522
990	993	1,042	1,332,830,420	952	947
990 1,459	993 1,448	1,042	1,027	952 1,039	947
990 1,459 270	993 1,448 271	1,042 1,039 271	1,027 1,039 268	952 1,039 270	947 1,039 253
990 1,459	993 1,448	1,042	1,027	952 1,039	947
990 1,459 270 178	993 1,448 271 178	1,042 1,039 271 178	1,027 1,039 268	952 1,039 270 140	947 1,039 253 140
990 1,459 270	993 1,448 271	1,042 1,039 271	1,027 1,039 268 190	952 1,039 270	947 1,039 253
990 1,459 270 178 6,271.32	993 1,448 271 178 6,211.79	1,042 1,039 271 178 6,908.67	1,027 1,039 268 190 7,390.75	952 1,039 270 140 6,719.42	947 1,039 253 140 6,420.88
990 1,459 270 178 6,271.32 3,993.08	993 1,448 271 178 6,211.79 3,303.68	1,042 1,039 271 178 6,908.67 3,290.11	1,027 1,039 268 190 7,390.75 2,075.96	952 1,039 270 140 6,719.42 2,098.82	947 1,039 253 140 6,420.88 1,106.37
990 1,459 270 178 6,271.32 3,993.08 8,321.80	993 1,448 271 178 6,211.79 3,303.68 6,609.70	1,042 1,039 271 178 6,908.67 3,290.11	1,027 1,039 268 190 7,390.75 2,075.96 6,876.37	952 1,039 270 140 6,719.42 2,098.82 6,474.14	947 1,039 253 140 6,420.88 1,106.37 5,848.11
990 1,459 270 178 6,271.32 3,993.08 8,321.80 1,932.61	993 1,448 271 178 6,211.79 3,303.68 6,609.70 1,631.87	1,042 1,039 271 178 6,908.67 3,290.11 6,447.45 1,779.65	1,027 1,039 268 190 7,390.75 2,075.96 6,876.37 1,882.22	952 1,039 270 140 6,719.42 2,098.82 6,474.14 1,724.84	947 1,039 253 140 6,420.88 1,106.37 5,848.11 1,127.18
990 1,459 270 178 6,271.32 3,993.08 8,321.80 1,932.61 284.69	993 1,448 271 178 6,211.79 3,303.68 6,609.70 1,631.87 336.38	1,042 1,039 271 178 6,908.67 3,290.11 6,447.45 1,779.65 291.98	1,027 1,039 268 190 7,390.75 2,075.96 6,876.37 1,882.22 666.72	952 1,039 270 140 6,719.42 2,098.82 6,474.14 1,724.84 790.65	947 1,039 253 140 6,420.88 1,106.37 5,848.11 1,127.18 681.21
990 1,459 270 178 6,271.32 3,993.08 8,321.80 1,932.61 284.69 75.5	993 1,448 271 178 6,211.79 3,303.68 6,609.70 1,631.87 336.38 74.1	1,042 1,039 271 178 6,908.67 3,290.11 6,447.45 1,779.65 291.98 78.1	1,027 1,039 268 190 7,390.75 2,075.96 6,876.37 1,882.22 666.72 84.1	952 1,039 270 140 6,719.42 2,098.82 6,474.14 1,724.84 790.65 78.4	947 1,039 253 140 6,420.88 1,106.37 5,848.11 1,127.18 681.21 74.8
990 1,459 270 178 6,271.32 3,993.08 8,321.80 1,932.61 284.69	993 1,448 271 178 6,211.79 3,303.68 6,609.70 1,631.87 336.38 74.1	1,042 1,039 271 178 6,908.67 3,290.11 6,447.45 1,779.65 291.98 78.1	1,027 1,039 268 190 7,390.75 2,075.96 6,876.37 1,882.22 666.72	952 1,039 270 140 6,719.42 2,098.82 6,474.14 1,724.84 790.65	947 1,039 253 140 6,420.88 1,106.37 5,848.11 1,127.18 681.21

## Corporate Directory

Officers

Morton Henshaw President

Edward F. Johnson Vice President

William B. Briscoe Secretary-Treasurer

J. D. Cooper Assistant Secretary-Treasurer

General Manager W. H. Thorpe

Assistant General Manager Paul A. Schmitz

Directors (Three from each member cooperative)

Green River Electric Corporation Marion Cecil Edward F. Johnson Sandra Wood

Henderson-Union Rural Electric Cooperative Corporation William Briscoe Morton Henshaw C. G. Truitt

Jackson Purchase Electric Cooperative Corporation Johnny L. Hamm Ralph Hardin Delbert Powers

Meade County Rural Electric Cooperative Corporation John C. Burnett J. D. Cooper Joseph A. Hamilton Vice General Managers

Joe L. Craig

Fuels, Environmental Affairs, and Information Systems

J. E. Dolezal Energy Supply

Richard P. Greenwell Production

Ronald W. Johnson Administrative Services and Human Resources

B. Scott Reed Engineering and Transmission

Paul A. Schmitz Finance

W. Hayden Timmons External Relations and Marketing

Superintendents

Steve Moss Wilson Plant

Bruce Shelton Coleman Plant

Barry Wood Reid/Green Plants

Virgil Mitchell Transmission and Substations

Corporate Attorney

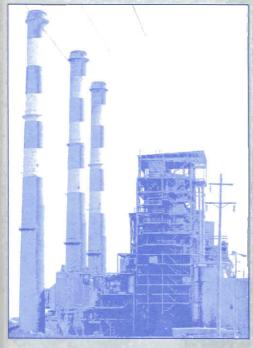
Morton Holbrook General Counsel Holbrook, Wible, Sullivan & Mountjoy P.S.C. Owensboro, Kentucky

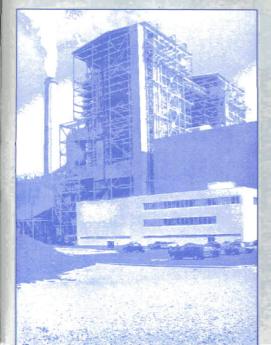
Corporate Auditors

KPMG Peat Marwick Louisville, Kentucky









ANNUAL REPORT 1990

## **FINANCIAL SYNOPSIS**

(Dollars in thousands)

	1990	1989	Increase (Decrease)	%Increase (Decrease)
Operating Revenues	331,736	389,977	(58,241)	(14.9)
Operating Expenses	280,419	254,722	25,697	10.1
Net Margins	(44,475)	35,133	(79,608)	aes.
Accumulated Margins & Equity	(73,882)	(29,407)	(44,475)	(151.2)
Capital Expenditures	14.365	7,592	6,773	89.2
Cost of Fuel Used	118,096	104,830	13,266	12.7
System Peak Demand (Megawatts) Energy Sold to Members	1,174	1,177	(3)	(.3)
(Megawatt-hours)	8,191,465	8,072,761	118,704	1.5
Revenue per kWh Sold (Mills)	30 75	40.72	(9.97)	(24.5)

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Big Rivers Electric Corporation, located in Henderson, Kentucky, is a generation and transmission cooperative owned by the members it serves. It provides reliable wholesale electric service on a not-for-profit basis to its four member distribution cooperatives. These cooperatives, owned by their 81,711 consumer-members, distribute electricity at retail within 22 counties of western Kentucky on a not-for-profit basis.

### PRESIDENT'S AND GENERAL MANAGER'S REPORT

The decade of the nineties began with the corporation heavily involved in activities that will determine its direction into the next century.

The management audit, mandated by the Kentucky Public Service Commission (PSC), was started in 1989 and completed in June this year Sixty-seven recommendations were made However, in some cases the recommendations reflect Big Rivers' efforts that were currently under way or were initiated during the course of the audit Others will require further study regarding cost effectiveness

In the overall assessment, the auditors emphasized that Big Rivers has a strong opera-

tional focus, and that -- "the Production Department epitomizes the corporation's penchant for operational efficiency " They pointed out that the production operating efficiency plays a part in allowing us to participate in the short-term off-system energy and long-term bulk power markets.

They further pointed out that work rules are progressive and labor relations are sound, engineering and transmission operations are solid, coal costs compare favorably with similar utilities, appropriate accounting controls and comprehensive budgeting processes are in place, and excellent benefits and training programs are in place. Additionally, they said that "management processes at Big Rivers, including recent strategic planning initiatives and an informed and involved board of directors, support Big Rivers' operational strengths."

Consultants have been hired to assist us in developing an integrated resource plan, including an evaluation of options to comply with the 1990 Clean Air Act amendments. This study should be completed in the first half of 1991

On June 29, a request was filed with the PSC for the third step of the three-step increase approved by our creditors in the financial workout plan. A hearing on the request was held on October 25 Residential customers' bills will increase an average of \$2.81 for 1,000 kilowatt hours (kWh)

Our request was approved on December 21, granting the full \$6,935,978 requested New rates of \$10 15 per kılowatt (kW) per month (previously \$8.80) demand charge, and an energy charge of \$0.0181506 per kWh were effective January 1, 1991 The commission also approved the proposed time-of-day rate of 125 percent of the energy charge during off-peak hours, and a modification of billing demand for rural delivery points.

The Indiana Utility Regulatory Commission turned down a 21-year contract for sale of 200 megawatts (MW) to Indianapolis Power and Light, so we were back in the off-system sales market again.



On December 17, a contract was signed with Oglethorpe Power Corporation of Tucker, Georgia, for the sale of 100 MW of power for ten years, beginning in August 1992 Oglethorpe is a generation and transmission (G&T) cooperative serving more than 900,000 consumers through 39 member distribution cooperatives in Georgia This contract, subject to PSC and REA approval, begins at the completion of the present three-year contract in July '92

Scott Paper Company announced on November 19 the location of their proposed tissue mill, to be built in the Green River Electric Corporation service area near Newman,

Kentucky. This new industry will use approximately 60 MW of electricity This state-of-the-art mill will use approximately 70 percent recycled paper in the tissue process

Congress passed amendments to the Clean Air Act late in the year. The acid rain and toxic pollutants titles of the bill, as well as permitting, will have a substantial financial impact on Big Rivers' consumers by January 1, 2000. Meeting the 1995 requirements can probably be done with lower sulfur coal from this area. As we said earlier, we are studying our options

Details of these major events can be found elsewhere in this report

Delbert Powers was seated on the Board of Directors in June, representing Jackson Purchase Electric Cooperative Corporation (JPECC) Mr Powers has been a member of the JPECC board since 1986, and is presently its vice president. He replaces Edwin Reid who served on the JPECC board for 15 years, and was a member of Big Rivers' board for 13 years.

All in all, we feel that 1990 was a good year Certainly the decade of the '90s will present new challenges, but we feel that our dedicated directors, management, and employees are equipped to meet them.

We express our heartfelt appreciation to all of them.

Morton Henshaw President, Board of Directors

Motor Lenshow

W. H. Thoyse

William H Thorpe General Manager

#### Aluminum Smelters

Agreement reached with the aluminum smelters on February 27, 1990, brought to a conclusion years of litigation involving Big Rivers' workout plan. debt restructuring agreement, variable aluminum smelter tariff, and the first- and second-step rate increases. To resolve these disputes, the variable tariff was modified prospectively for the period January 1, 1990, through August 31, 1997, via a balancing account mechanism to produce an average power rate of 29.1285 mills per kWh at a 99 percent load factor for Alcan Aluminum Corporation (Alcan) and NSA Incorporated (NSA)

Under the variable tariff, as published aluminum market prices fluctuate between 44.6 and 79 I cents a pound, the smelters will pay 18 1 to 44.0 mills per kWh Any payments made in excess of or less than 29.1285 mills are added to or deducted from the balancing account. This balance is also amortized monthly through the life of the variable rate, resulting in an average rate of 29.1285 mills per kWh during the period ending August 31, 1997. During this year, the smelters paid \$201.1 million for their power usage, and \$28.5 million was credited to the balancing account as prepayments.

#### Sales

Revenues from the sale of electric energy were \$331.7 million, down \$58.2 million, primarily due to the reduced contract demands with the aluminum smelters and the accounting of the revenues received under the new agreements. Alcan's contract was reduced from 365 to 315 MW on April 1, 1990 NSA's contract demand was 317 MW throughout the year, down from 342 MW Alcan's reduction resulted from their decision to not add a fourth

potline as planned in 1982, and NSA's reduction was based on their decision to purchase amounts above 317 MW on an interruptible basis. Alcan and NSA's monthly combined non-coincident peak during 1990 was 695.6 MW. Both smelters purchased interruptible capacity and energy throughout most of the year. Energy purchased by the smelters during the 12-month period totaled 5,916,777.850 kWh, up 54,762,878 from 1989

Weather conditions also affected power sales. Heating and cooling degree days for the year were 5,236 compared to 6,227 last year

A new summer system peak demand of 1,174 MW was set on August 20. While falling short of the all-time system one-hour peak demand of 1,177 set in December of 1989, it nevertheless exceeded the old summer peak of 1,157 set in 1988 by 17 MW. The system one-hour monthly high demands were 1,000 MW or above for the entire year. The annual system load factor was 81,91 percent

Off-system energy sales for the year were approximately 66 percent over sales experienced during 1989. Energy delivered to all of Big Rivers' consumers for the year increased by 1.45 percent. Total off-system revenues amounted to \$64.1 million for the year, up from \$38.7 million during 1989.

The 206-MW sale made to Oglethorpe in late 1989 accounted for a large portion of the offsystem revenue: however, sales to other parties showed a moderate increase.

We reported in 1989 that a 200 MW sale beginning in 1991 had been executed with Indianapolis Power and Light Co (IP&L), which had all of the required approvals except that of the Indiana Utility Regulatory Commission—Late in April, IP&L received word that the Indiana Commission had rejected the contract, and IP&L notified Big Rivers

that they were terminating the contract effective August 2, 1990

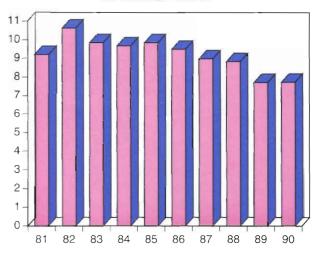
Big Rivers' negotiations with other utilities involving long-term power sales had pretty well been dormant after signing of the contract with IP&L. When the IP&L deal collapsed, negotiations with others were stepped up and have resulted in a 100-MW, ten-year sale to Oglethorpe. This sale will dovetail with the end of the three-year, 200-MW sale

The 100-MW sale was approved by both parties in December 1990, subject to appropriate wheeling arrangements and approvals by the Rural Electrification Administration (REA) and the PSC Big Rivers also has other outstanding offers and all are for ten years or less.

#### **Margins**

As expected in the development of the workout plan, margins for the year were negative. The loss incurred was \$44.5 million. At year-end our total deficit equity was \$73.9 million. It is anticipated that Big Rivers will continue to incur negative margins for the next four years, with the potential that deficit equity

#### **INTEREST RATES**



will reach \$250.0 million before it begins to turn around

#### **Rate Matters**

On December 21, the PSC approved the third-step rate increase as provided in our workout plan. This will produce additional annual revenues of \$6.9 million, increasing the wholesale cost of power for the rural consumers by 6.4 percent, an average of \$2.81 per 1,000 kWh

The order also approved changing the billing demand from a ratcheted non-coincident demand per rural delivery point to a ratcheted coincident demand for each distribution cooperative

Also approved was a Time-of-Day Rate (TDR) available for new or expanded industrial off-peak power usage. The rate will apply during the eight-hour period beginning at 10:01 p.m. and ending at 6 a.m. Energy associated with capacity used during this time, in excess of the normal billing demand, will be billed at a rate equal to 125 percent of the normal energy charge.

#### Debt Service - REA

In 1988, Big Rivers entered into a debt restructuring agreement effective August 31, 1987,

CASH FLOW 1990 Debt Service (in millions of dollars) \$140.3 Fuel 34.0% Operations & Maintenance Capital Other \$82.6 20.0% \$160.4 38.9% 3.5% \$15.0 Total \$412.7

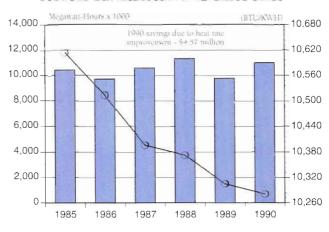
(defined in Note 4 to the financial statements) which provides for minimum debt service payments. The agreement also provides for the payment of cash in excess of a \$10 million balance at the end of the month after paying operating costs and capital expenditures The minimum debt service for 1990 was \$111.0 million and Big Rivers paid \$140 4 million Through 1990, \$180.1 million has been paid in excess of the minimum debt service schedule The minimum for 1991 is \$116.0 million.

#### Generation

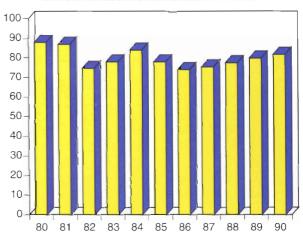
The system's generating units are all coal-fired except for a 65 MW combustion turbine which is primarily used for peaking purposes. Generation for the year was 9,010,660,900 kWh, up 963,546,900 from 1989

The system-wide heat rate was reduced to 10,281 British thermal units (Btu) per kWh generated. This is the sixth consecutive year for improvements in unit efficiency, with a total reduction of 333 Btu per kWh generated from 1985 to 1990. Based on 1985 fuel costs, we have saved consumers more than \$4.5 million annually. The installation of real-time performance monitoring equipment was completed on both units at the Green Plant, which is expect-

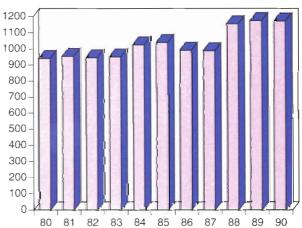
#### SYSTEM GENERATION AND HEAT RATE



SYSTEM LOAD FACTOR - PERCENT



PIEAK DIEMAND (MIEGAWATTS)



ed to further improve the heat rate on these units. Similar equipment was delivered in December for installation at the Coleman Plant during 1991

Adjustment of outage schedules was completed during the year. All units are now on annual maintenance-outage schedules instead of semi-annual, and turbine overhauls are performed

every six years instead of every five years

Production maintenance expense of \$24.7 million was up \$2.6 million from 1989

#### Fuels

Our plants burned 4.9 million tons of coal in generating electricity, an average of 13,398 tons per day. This compares with 4.4 million tons, 12,103 tons per day, burned in 1989 Fuel costs for the year were \$118.1 million, an increase of \$13.3 million. Fuel cost of \$23.2 million associated with Henderson Station Two plants was included in the cost of purchased power.

The average cost was \$28.73 per ton, 129.2 cents per million Btu This compares with \$27.82 per ton, 126.5 cents per million Btu last year. This increase was

due largely to substantial escalation of coal contract prices in the last quarter of the year, because of the increase in diesel fuel prices resulting from the Mideast crisis. Diesel fuel is a major component of the cost of surface mining. Somewhat offsetting this increase was the purchase of low-cost coal on the spot market made possible by the increase in off-system sales during the second half of the year

Big Rivers was unable to complete the buyout of a relatively high-cost long-term contract, as reported in last year's annual report, because financing could not be arranged

About three-fourths of Big Rivers' coal requirements are supplied from mines in the service areas of the corporation's member cooperatives.

The Green and Wilson plants are equipped with flue-gas desulfurization scrubbers, and

these plants burn western Kentucky high-sulfur coal

The Coleman, Reid, and Henderson Station Two plants, which are not equipped with scrubbers, burn lower-sulfur coal from western Kentucky and southern Indiana These plants will be affected in 1995 by the recently enacted acid deposition control amendments to the Clean Air Act Big Rivers has engaged the services of consultants to assist in determining a plan of compliance

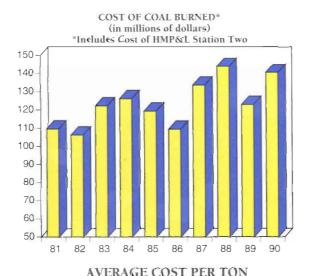
#### Construction

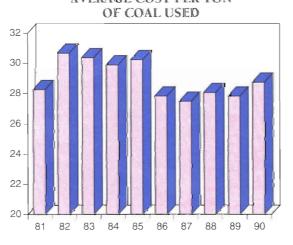
The company has adequate generating capacity and presently has no plans for any additional units. No major construction was in progress at year-end. Total capital expenditures for the year were \$14.5 million, up \$6.9 million from 1989.

Construction was completed on a 161 kilovolt (kV) interconnection with the Tennessee Valley Authority (TVA), as were additional 69 kV transmission lines to four new power delivery points for our member systems, all to improve system operations and reliability of service

The Energy Management System continues to be on schedule for delivery in December 1991. The initial installation, which is a single computer designed for program development, was delivered in July. This device will play a major role in developing the data base that will be off-loaded into the permanent system.

Due to Big Rivers' location in high-risk areas for earthquakes on the New Madrid Fault, precautions are being taken. Emergency battery systems have been strapped down and station transformers have been bolted to foundation pads at all three plant sites. Seismic battery racks have been installed at substations and microwave sites to ensure proper operation of vital system protec-





tion equipment and communication systems in the event of a severe earthquake

#### **Planning**

The long-range corporate strategic plan was updated and approved by Big Rivers' Board of Directors in July The plan provides a formal way for the corporation to identify the critical issues it faces, to study those issues, and determine possible courses of action.

A disaster "React Plan" has been established for our Communications and Transmission Departments. This plan prescribes the actions to be taken under various disaster scenarios that will ensure fast communication and service restoration.

The 1990 Power Requirements Study was completed with a forecast of Big Rivers' energy and peak demand requirements for 1990 through 2010 It shows an expected average annual growth rate of 1.33 percent for peak demand and 1.02 percent for total energy for Big Rivers' native load

For several years, the PSC has been developing a regulation to implement a statewide integrated resource planning process for electric utilities. Late in the year, in Administrative Case No 308, the commission issued a proposed regulation which we expect to be adopted with no more than minor changes. The process will require electric utilities to develop a 15-year plan for supplying their customers at the lowest cost consistent with meeting acceptable standards for quality and reliability of service Big Rivers' plan will be due in September 1991, and updated every two years thereafter Work is already under way on our plan, and we expect to file by the required deadline

#### **Environmental**

The big concern this year was the amendments to the Clean Air Act Acid rain provisions have drawn most of the attention, but the permitting requirements, as well as enforcement and air toxics, are important

Big Rivers has generating units which are affected under both Phase I and Phase II of the acid rain title. Due to the complexity of the new law, as well as the short time frames for determining the compliance plan, Big Rivers has hired consultants to produce, within the framework of an integrated resource plan, a study of the available options for complying with both phases of the act. The study, including recommendations, should be completed by mid-1991

New water discharge permits were issued for the Wilson and Coleman plants during the year The permits contain increased requirements for additional pollutant parameters, increased monitoring and more frequent (monthly) reporting. Preparation for a new permit for the Reid/Green plants was begun this year and will continue through 1991 The increase in the requirements will affect personnel workload and scheduling of projects.

As a result of discussions with our member cooperatives, and the recommendations of the management audit, we initiated additional environmental services for them. These include support, advice, and assistance in complying with state and federal regulations and statutes including Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), Superfund or Comprehensive Environmental Response Compensation and Liability Act (CER-CLA), Superfund Amendments and Reauthorization Act (SARA), training in responding to oil and chemical spills, and planning for future regulation such as storm water runoff

The Central Laboratory continues to carry a heavy load of PCB analyses for the member systems, and is expecting increases in the number and types of analyses to be performed for the members.

#### **Public Affairs**

This year emphasis was placed on developing and implementing a residential marketing program, supporting the marketing efforts of our four member distribution cooperatives. The program is based on the results of a consultant's survey of consumers, builders, and heating and cooling contractors. A marketing representative was hired in August to support and coordinate the activities of the member cooperatives.

Public Relations efforts were intensified with increased one-on-one contacts with public officials and industrial consumers.

#### **Economic**

#### Development

It was a banner year in economic development for the Big Rivers' system and our distribution cooperatives. New industries either starting up or making new location announcements will bring an investment exceeding \$560 million in facilities and create a demand for over 900 employees.

Scott Paper Company highlighted the year's activity with the announcement to locate their \$500 million tissue mill at Newman, Kentucky, in Daviess County

In addition to the new industry activity, our existing industries spent or committed over \$70 million to renovate, update, and expand their existing facilities to better serve their worldwide markets

#### Safety

The safety staff was expanded with the addition of a corporate safety trainer. The trainer's primary responsibilities include planning, coordinating, teaching, and evaluating safety training programs for all levels of employees. As of the end of 1990, over 300 employees had undergone training in CPR and first aid Hazardous Material Communication and Confined Space training, as developed in accordance with Kentucky Occupational Safety and Health (KOSH) Regulations, will continue It is designed to inform employees of potential hazards relating to chemicals in the workplace and of the dangers associated with working in confined spaces. Big Rivers will be adding a training and safety coordinator in 1991 to assist our distribution coopera-

A new record low accident incident rate (accidents per 200,000 mari-hours worked) of 46 was set in 1990. The previous low of 5.4 was established in 1989

Wilson Station employees made a major contribution to this year's safety record by completing a full year without a losttime injury.

#### **Training**

The Front Line Leadership" and "Working" training programs launchied in 1989 were continued. All employees at the Coleman Plans completed the programs in August Green, amd Wilson plants, headquarters, and tramsmission employees will receive training in 1991 and 1992. We are committed to keeping our employees up-to-date in skills required for Big Rivers to compete in today's market

Forty-four employees took advantage of the educational assistance program by enrolling in college classes or pursuing

home study courses to enhance their career potential and value to Big Rivers.

#### **Employees**

Employment at year-end was 868. The turnover rate was 2.5 percent which is considerably lower than the national average for corporations our size

Employees throughout Big Rivers are heavily involved in various community, civic, and business organizations and programs, helping to fulfill Big Rivers' mission of being a good corporate citizen

#### **Management Audit**

During the year, a management audit, directed by the PSC, was completed Big Rivers was the last of the major electric utilities in the state to be audited under legislation directing the PSC to conduct such audits Scott Consulting Group (SCG) of Raleigh, North Carolina, was employed by the PSC, at Big Rivers' expense, to perform the audit The following four paragraphs are a direct quote of the overall assessment by SCG of Big Rivers' operations.

"Management audits assess the performance of utilities in a number of different ways, some involving end results and some involving management methods and processes End results are most often viewed in the context of rate competitiveness, financial strength, productivity, and a company's ability to manage costs Management methods and processes are reviewed to ensure that the company is positioned to improve results where necessary. maintain results as appropriate, and - most importantly - is positioned to address the critical issues it faces

"Big Rivers has a strong operational focus. The production department epitomizes Big Rivers' penchant for operational efficiency The system load factor is very high, forced outage rates are extremely low, heat rate performance is positive, and overall, the production department's operations are efficient. Work rules are progressive and labor relations are sound. The production operation efficiency plays a part in allowing Big Rivers to participate in the short-term offsystem energy and long-term bulk power markets Big Rivers' operational efficiency is also enhanced by the engineering and transmission department's solid operations. System performance is improving, and preventive maintenance on and quality assurance of the system is solid. Operational quality and savings are also realized in the fuels function. Coal costs compare favorably with those of similar utilities, coal quality is consistent, and coal contracts are adequately controlled administered In addition, Big Rivers has appropriate procedures for the rapid procurement of coal when required Appropriate accounting controls exist, as does a comprehensive budgeting process Debt restructuring agreement commitments appear workable and provide a favorable short-term outlook for Big Rivers. The staff and its support provide the most compelling signal of Big Rivers' commitment to its operation Compensation of the staff is both competitive and reasonable, excellent benefits and training programs are in place, and Big Rivers' records management practices are peerless within the utility industry Management processes at Big Rivers, including recent strategic planning initiatives and an informed and involved board of directors, support Big Rivers' operational strengths. Relations with various publics, especially with member cooperatives and the media, have improved

"It is in the area of planning that SCG recognizes improvement opportunities. Admittedly, planning needs exist primarily as a result of a series of changes that have taken or are taking place in the internal and external business environment surrounding Big Rivers Because Big Rivers has focused so intensely on restructuring its debt, long-term planning has in most cases not been formally and aggressively pursued Big Rivers has not aggressively sought to fundamentally and competitively analyze its situation, develop and document a vision for Big Rivers, nor evaluate and fully pursue the courses of action necessary to ensure that results attain or remain at levels required for continued success Recent strategic planning efforts, including the debt restructuring agreement, represent the first steps toward an integrated strategic planning process. Big Rivers needs to continue these efforts, not only at the senior management level, but throughout the organization The marketing function at Big Rivers will benefit from an increased focus by top management on creating a fully developed marketing planning process The marketing organization's effectiveness, marketing results, and relationships with member cooperatives and large industrial customers will all be enhanced by the definition and communication of a clear vision of marketing's role Fuel costs represent a significant portion of Big Rivers' total operating costs Long-term fuel procurement planning will reduce the risk of increased fuel costs adversely affecting the financial health of Big Rivers Although energy and demand forecasts are used within the energy supply function, the forecasts are not formally integrated into the planning activities of the other functional areas within Big Rivers Big Rivers does not use end-use models, formal studies, or have a com-

plete set of modern planning tools or models to support its resource planning activities Human resource planning can be improved to integrate the longrange staffing needs with the requirements of other Big Rivers long-term planning goals and objectives. Performance and productivity indicators are not produced by Big Rivers, making workload based manpower planning difficult to perform Finally, Big Rivers should analyze and aggressively pursue all cost reduction opportunities Because Big Rivers' fully allocated production costs are high relative to neighboring utilities (and therefore competitors), reducing costs and documenting these reductions is critical in establishing a strong competitive position.

"External factors such as competition among utilities and among alternative energy forms has become increasingly intense as a result of excess capacity and supply conditions As price differentials between electricity, gas, and oil have narrowed, an increasing number of market segments have become directly competitive Deregulation trends in both the electric and gas industries should further intensify competition in the future The Kentucky regulatory environment is also becoming more demanding Examples of this include the management audit program and recent possible least-cost planning directives that institute formal, rigorous planning and reporting requirements in addition to requiring equal consideration of demand and supply options. These changes will impact strongly on Big Rivers, both positively and negatively, and will challenge its ability to maintain past performance

In total, the audit resulted in 67 recommendations Eight were to continue functions which Big Rivers was already implementing to improve efficiencies, eight others were to conduct studies to determine if efficiencies and/or cost savings could be realized, and the remainder were recommendations to enhance operations, formalize what we are doing, and to expand certain programs To implement all of the recommendations, SCG estimated that Big Rivers will incur a one-time cost of \$1 4 million and realize an annual net savings of approximately \$2.6 million This includes the estimated installed cost of \$0.5 million for the performance monitors listed in last year's annual report, which are estimated to reduce fuel costs approximately \$10 million per year

Big Rivers is committed to a strong, conscientious effort to even further strengthen the corporation by expeditiously implementing as many of the recommendations calling for better documentation and more formal processes for improving planning and efficiencies. Recommendations involving work force management will be carefully implemented Those recommendations which may be somewhat different than our views will be carefully and intensely studied We are in agreement with the premise that the corporation must continually strive for better management, greater efficiencies, and cost savings Big Rivers will earnestly pursue all avenues to improve its role as a low-cost power supplier in western Kentucky

# INDEPENDENT AUDITORS' REPORT



# KPMG Peat Marwick

Certified Public Accountants

The Fifth Avenue Building 444 South Fifth Street Louisville, KY 40202

Independent Auditors Report

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1990

We have audited the balance sheets of revenues and expenses equilies and cash flows for each and logo and the related statements of revenues and expenses. We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1990 we have audited the balance sheets of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements of revenues and expenses, equities and cash flows for each and 1989, and the related statements are also as the related statements are also as the related statements are also as the related statements of the related statements are also as the related statements are and 1989, and the related statements of revenues and expenses, equities and cash flows for each of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. These financial statements are of the years in the three-year period ended December 31, 1990. of the vears in the three-year period ended December 31, 1990. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion the responsibility of the Corporation's management. The Board of Directors Big Rivers Electric Corporation

We conducted our audits in accordance with generally accepted auditing standards. Those about the conducted our audits in accordance with generally accepted auditing standards about the sudit to obtain reasonable assurance about standards require that we plan and perform the audit to obtain reasonable assurance about We conducted our audits in accordance with generally accepted auditing standards about reasonable assurance with generally accepted auditing standards about accordance with generally accepted auditing standards about the audit to obtain reasonable assurance with generally accepted auditing standards are free of material missiatement. An audit includes examining whether the financial statements are free of material missiatement. standards require that we plan and perform the audit to obtain reasonable assurance about. An audit includes examining. An audit includes examining the amounts and disclosures in the financial statements are free of material misstatement. An obtain reasonable assurance about the financial statements are free of material misstatement in the financial statements are free amounts and disclosures in the financial statements are the amounts and disclosures in the financial statement. on these financial statements based on our audits whether the linancial statements are tree of material misstatement. An audit includes examining, and a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit includes examining of material misstatement in the financial statements and of material misstatement in the financial statements. An audit includes examining of material misstatement in the financial statements are tree of material misstatement. An audit includes examining, and a statement in the financial statements are tree of material misstatement. An audit includes examining, and a statement in the financial statements are tree of material misstatement. An audit includes examining, and a statement in the financial statements are tree of material misstatement. An audit includes examining in the financial statements are tree of material misstatement in the financial statements. An audit includes examining in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statements are tree of material misstatement in the financial statement in the financial st on a test basis, evidence supporting the amounts and disclosures in the financial statements. An atest basis, evidence supporting the amounts and disclosures in the financial estimates made by a test basis, evidence supporting the amounts and disclosures in the financial statement. We helieve that additional assessing the accounting principles used and significant estimates the overall financial statement presentation. We helieve that additional assessment as well as evaluating the overall financial statements. audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that management, as well as evaluating for our opinion our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, 1990 and 1989, and the the financial position of Big Rivers Flecting Cornoration at December 31. In our opinion, the financial statements reterred to above present fairly, in all material respects, and the financial position of Big Rivers Electric Corporation at December 31. 1990 and 1989, and the financial position of Big Rivers Electric Corporation of the vears in the three-year period ended results of its operations and its each flows for each of the vears in the three-year period ended results of its operations and its each flows for each of the vears in the three-year period ended results of its operations. the linancial position of Big Rivers Electric Corporation at December 31, 1990 and 1989, and the results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations and its cash flows for each of the years in the three-year period ended results of its operations. management, as wen as evaluating the overall mane our audits provide a reasonable basis for our opinion

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KPM6 Peat Maurick

February 8, 1991



National Film of Klynveld Peat, Marwick Goerdeler Member Firm of

## STATEMENTS OF REVENUES AND EXPENSES

(In thousands)

Years ended December 31,		
1990	1989	1988
\$331,736	389,977	399,278
118,096 40,263 46,263 27,030 44,565 4,202	104,830 35,435 41,987 24,125 44,334 4,011	121,705 39,158 41,896 23,744 49,311 3,907
280,419	254,722	279,721
51,317	135,255	119,557
97,462 (240) 683	101,890 (142)	103,643 (36) 616
97,905	102,519	104,223
	(19)	(4)
(46,588)	32,755	15,338
2,108	2,376	3,405 66
2,113	2,378	3,471
\$(44,475)	35,133	18,809
	1990 \$331,736 118,096 40,263 46,263 27,030 44,565 4,202 280,419 51,317 97,462 (240) 683 97,905 (46,588) 2,108 5	1990     1989       \$331,736     389,977       118,096     104,830       40,263     35,435       46,263     41,987       27,030     24,125       44,565     44,334       4,202     4,011       280,419     254,722       51,317     135,255       97,462     101,890       (240)     (142)       683     771       97,905     102,519        (19)       (46,588)     32,755       2,108     2,376       5     2       2,113     2,378

See accompanying notes to finanical statements.

(In thousands)

## Years ended December 31, 1990, 1989, and 1988

					Other 6	equities
	Total equities	Accumulated deficit- operating	Accumulated deficit- nonoperating	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1987	\$ (83,349)	(105,927)	(23,930)	42.063	764	3,681
Margins for 1988  Operating  Nonoperating  Patronage allocation	15.338 3,471 	15,338  (33,310)	3,471	33,310		
Balance at December 31, 1988	(64,540)	(123,899)	(20,459)	75,373	764	3,681
Margins for 1989 Operating Nonoperating Patronage allocation	32,755 2,378 	32,755  (52,548)	2.378	52.548		
Balance at Decemer 31, 1989	(29,407)	(143,692)	(18,081)	127,921	76+	3,681
Margins for 1990 Operating Nonoperating	(46,588) 2.113	(46,588)	2,113			
Balance at December 31, 1990	\$ (73,882)	(190,280)	(15,968)	127,921	764	3,681

See accompanying notes to financial statements.

# **BALANCE SHEETS**

(In thousands)

December 31,	
1990	1989
\$1,139,570	1,170,161
27,400 5,574	27,600 5,275
10.253	28,226
	36,027
24,584	25,358
14,811	14,974
79,917	104,585
14,880	14,747
\$1,267,341	1,322,368
\$ (73,882)	(29,407)
1,002,512	1 120 610
	1,139,610
	174,249
1,282,739	1,313,859
10,593	38,193
1,272,146	1,275,666
1,198,264	1,246,259
10,593	38,193
18,605	17,637
9,009	18,311
38,207	74,141
28,486	
2,384	1,968
\$1,267.341	1,322,368
	\$1,139,570 27,400 5,574 10,253 30,269 24,584 14,811 79,917 14,880 \$1,267,341 \$ (73,882) 1,092,512 190,227 1,282,739 10,593 1,272,146 1,198,264 10,593 18,605 9,009 38,207 28,486 2,384

See accompanying notes to financial statements.

# STATEMENTS OF CASH FLOWS

(In thousands)

	Years ended December 31,		31,
Cash flows from operating activities.	1990	1989	1988
Net margins (loss)	\$ (44,475)	35,133	18,809
Adjustments to reconcile net margins (loss)	, , , ,		
to cash provided by operating activities.			
Depreciation and amortization	45,196	44,886	49,796
Amortization of deferred charges	2,078	2,158	2,237
Energy prepayments	28,486		
Allowance for borrowed funds used			
during construction	(240)	(142)	(36)
Change in assets and liabilities.			
Receivables	5,758	1,209	15,699
Fuel for electric generation	774	(2,001)	7,373
Material and supplies	163	666	185
Accounts payable	968	(874)	(10)
Accrued expenses	(9.302)	(3,170)	(747)
Other, net	(1,094)	3,024	(2,799)
Net cash provided by			
operating activities	28,312	80,889	90,507
Cash flows from investing activities.			
Construction expenditures	(14,365)	(7,592)	(4,048)
Refund from vendor relating to	, , ,	. , , ,	. , , , ,
construction expenditures		295	
Deposit on coal contract buyout	(1,000)	(2,500)	
Net cash provided by (used in)			
investing activities	(15,365)	(9,797)	(4,048)
Cash flows from financing activities			
Principal payments on long-term debt	(54,920)	(99,161)	(370,926)
Proceeds from sale of cooperative			
utility trusts	and all the		319,426
Proceeds from bank loan	24,000		
Capitalization refinancing expenses			(3,248)
Net cash used in financing	-		
activities	(30,920)	(99,161)	(54,748)
Net increase (decrease) in cash	<del></del>		
and temporary cash investments	\$ (17,973)	(28,069)	31,711
Supplemental cash flow information -	<del></del>		
Cash paid relating to interest expense	\$ 105,401	102,997	105,867

See accompanying notes to financial statements

## NOTES TO FINANCIAL STATEMENTS

### (1) Summary of Significant Accounting Policies

### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements The wholesale power contracts with the members extend to the year 2023 Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

## (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

### (c) Revenue Recognition

Revenues are based on month-end meter readings.

### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of the allowance. The interest capitalized is determined by applying the effective rate on the REA Promissory Note to qualifying assets included in construction in progress. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Effective January 1, 1989, Big Rivers reduced its Production Steam Plant depreciation rate from 3.5 to 3.1 percent. A change was necessary to recognize the lower operating capacity factor for Big Rivers' generating system following the completion of a new plant. This

depreciation rate reduction will return Big Rivers to the recommended REA guideline The effect of this change was to increase net margins \$5,039 in 1989 Annual rates used to compute depreciation are as follows

Production plant	3%-3.10%
Transmission plant	2 75%
Station equipment	2 75%
General plant	2%-20%
Unclassified plant	
in service	2 75%

## (e) Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market

#### (f) Inventories

Inventories, consisting of non-fuel and fuel for electric generation, are valued at weighted average cost

## (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses, during the current or any prior fiscal year II, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

## (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed non-contributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

## (2) Utility Plant

The following summarizes utility plant	1990	1989
Classified plant in service		
Production plant	\$1,275,582	1,272,227
Transmission plant	78,979	78,910
Station equipment	87,849	87,928
General plant	16,360	15,628
Intangible	190	190
Unclassified plant in service	3,211	
taco I	1,462,171	1,454,883
Less accumulated depreciation and amortization	331,805	288,885
	1,130,366	1,165,998
Construction in progress	9,204	4,163
1 0	\$1,139,570	1,170,161

Construction in progress is comprised of several small projects. The average rate used for the capitalization of interest during construction in 1990, 1989, and 1988 was 7.7 percent

## (3) Deferred Charges

The following summarizes deferred charges

	1990	1989
Unamortized debt expenses Cravat coal contract amendment	\$ 8,367 1,553	8,901 3,097
Insurance claim	1,215	
Deposit on coal contract buyout	3,500	2,500
Other	245	249
	\$14,880	14,747

With approval of REA, on September 29, 1987 and February 25, 1988, Big Rivers refinanced \$250,805 and \$319,426 of Federal Financing Bank (FFB) debt with long-term debt at lower interest rates and incurred refinancing expenses of \$2,937 and \$3,230, respectively. In November 1982, Big Rivers elected to refinance \$90,053 of FFB short-term mortgage notes with long-term notes at lower interest rates. As a result of this election, a refinancing expense of \$4,600 was incurred. These expenses were being amortized over the life of the refinanced debt and

are now being amortized over the term of the REA promissory note (see note 4)

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consumated. Under the terms of the agreement, \$12,500 was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

In 1990, Big Rivers filed a claim with its insurer to recover certain costs of repairs to a substation. Costs incurred, in excess of the policy deductible, to repair the substation are being deferred until settlement of the claim.

On July 18, 1989, Big Rivers endeavored to enter into an agreement to buy out a high-cost, long-term coal supply contract. Big Rivers has made total refundable deposits of \$3,500. Since this agreement was never closed, interest at 10 percent is accumulating on the outstanding balance, and the coal vendor is repaying Big Rivers at the rate of \$1 per ton of coal shipped.

(4) <u>Long-term Liabilities</u>		
A summary of long-term liabilities follows.	1990	1989
Dramissani nata DEA 9 360/	¢ 016.440	929.016
Promissory note - REA 8.36%	\$ 816,448	
Unamortized premium	276,064	210,594
	1,092,512	1,139,610
County of Ohio, Kentucky, promissory note, with variable interest rate of 8.7%		
as of 12/31/90	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable interest rate of 8.7%		
as of 12/31/90	58,800	58,800
Obligation under purchased power contract (see note 7)	27,400	27,600
Bank of New York, Bank Loan 8.0%	8,577	
Manufacturers Hanover Trust Co., Bank Loan 8.0%	12,150	
Other sundry borrowings		4,549
Total long-term liabilities	1,282,739	1,313,859
Less current maturities	10,593	38,193
	\$1,272,146	1,275,666

## Debt Restructuring Agreement.

Prior to 1987, Big Rivers incurred difficulty in obtaining rate increases from the KPSC. As a result, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and the due FFB and National Bank for Cooperatives (CoBank) for REA guaranteed loans. A working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover Trust Company, and Bank of New York, formerly Irving Trust Company, was formed to find a mutually acceptable way of resolving the financial situation. On August 28, 1987, Big Rivers and its creditors agreed in principle to accept a modified debt restructuring plan incorporating certain recommendations of the KPSC.

On March 30, 1988, the Debt Restructuring Agreement, dated as of August 31, 1987, was signed. The Debt Restructuring Agreement provides for amendments to the debt payments for all REA debt and County of Ohio, Kentucky promissory notes. In addition, the Debt Restructuring Agreement provided for the funding of the 8% Bank of New York and Manufacturers Hanover Trust Co., Bank loans upon Big Rivers meeting certain conditions.

All revenues and substantially all assets of Big Rivers are pledged as collateral under a Restated Mortgage and Security Agreement dated as of March 30, 1988, which was executed as part of the Debt Restructuring Agreement

The impact of the Debt Restructuring Agreement has been accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers has accounted for the effects of the restructuring prospectively and has not changed the carrying amount of the debt

Following are descriptions of the components of debt which are covered by the Debt Restructuring Agreement and the aggregate maturities under the amended Debt Restructuring Agreement for each of the five years subsequent to December 31, 1990

#### Promissory Note - REA.

The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner as provided by a conventional loan amortization schedule) at an interest rate of 8.36 percent for the REA Promissory Note, which includes all debts of Big Rivers which are guaranteed or insured by REA (REA Debt) For financial statement purposes, interest expense is being computed on a conventional amortization method rather than the reverse amortization method per the Debt Restructuring Agreement The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. The effective interest rate for 1990 and 1989 on the REA Promissory Note was 77 and 76 percent, respectively In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on the FFB Guarantees and the CoBank Guarantees on a timely basis and will not seek to collect from Big Rivers, with respect to

any REA debt, any amounts in excess of the obligation on the REA Promissory Note

The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a month-end cash balance of \$10,000. The minimum level of future debt service payments under the agreement are

<u>Year(s)</u>	<u>Amount</u>
1991	\$116,000
1992	122,000
1993	127,000
1994	134,000
1995	140,000
1996	144,000
1997	147,000
1998, 1999, 2000, 2001,	
2002, 2003	150,000
2004	146,000
2005	112,000
2006	103,000
2007	103,000
2008, 2009	102,000
2010, 2011	101,000
2012	104,000
2013	000,88
2014	78,000
2015	74,000
2016	56,000
2017	29,000
2018	10,000

In connection with the settlement agreement described in note 5, the Debt Restructuring Agreement was amended as of January 1, 1990 The amendment provided, that if the variable rates to the aluminum smelters specified in the Settlement Agreement (described in note 5) in effect on April 1, 1990, and remain continuously in effect and unmodified through August 31, 1997, and if during this period, the RFA Debt never exceeds by more than \$18 million what the REA Debt would be if only the above scheduled annual amounts had been paid than no Event of Default shall be deemed to have occurred through December 31, 1997 If the REA Debt exceeds \$443,000 on January 1, 1998, then the schedule shall then be amended beginning with 2004 and continuing to each immediately successive year such that the amount for any year shall not exceed \$150,000 and such that the scheduled annual amounts in and after 1998 if paid in equal monthly installments for each year will yield a figure that equals the REA Debt as of January 1, 1998

## Other Long-Term Debt.

On June 30, 1983, the County of Ohio, Kentucky issued \$58,800 of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. Prior to January 10, 1989, the weekly interest rate was a "Selected Percentage," not to exceed 110 percent of the coupon-equivalent 13-week U.S Treasury Bills. Subsequent to January 10, 1989, these bonds will bear a variable rate of interest, determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U S. Treasury Bills These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 15, 1991, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. In absence of notification by Bank of New York to renew the letter of credit Big Rivers will draw down sufficient funds under the letter of credit to redeem the bonds Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined and covered by the Debt Restructuring Agreement The Bank amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010

In November of 1982, the County of Ohio, Kentucky issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent or greater than 110 percent of an index based upon the weekly sales of 91-day U S Treasury Bills These bonds are supported by a Manufacturers Hanover Trust Company irrevocable standby letter of credit, which is due to expire July 15, 1991, and is subject to renewal. The bonds are subject to mandatory purchase upon expiration of the supporting letter of credit and any renewal thereof In absence of notification by Manufacturers Hanover Trust Company to renew the letter of credit Big Rivers will draw down sufficient funds under the letter of credit to purchase the bonds. Draws against the letter of credit would bear interest at prime plus two percent and become Bank Amounts as defined and covered by the Debt Restructuring Agreement The Bank Amounts would be repayable under the same terms and conditions as the redeemed bonds. While these bonds are not dated to mature until October 1, 2015, pursuant to the Debt Restructuring Agreement, Big Rivers is obligated to fully fund these bonds or Bank Amounts by January 31, 2010

### Bank Loans

As provided by the Debt Restructuring Agreement the occurrence of the Settlement Agreement (described in note 5) caused Big Rivers to receive the funding of the bank loans from Bank of New York and Manufacturers Hanover Trust Company These loans bear interest at 8 percent and are repayable in equal quarterly principal installments

#### Debt Maturities

As described above, the amended Debt Restructuring Agreement provides that Big Rivers will not be in default if at December 31, 1997 it maintains a certain level of debt service payment

At December 31, 1990, Big Rivers had paid total debt service of \$495,661 as opposed to the scheduled minimum debt service level of \$315,554 This \$180,107 excess debt service payment can be used to offset future payments under the schedule.

Based on the overpayments to-date and the amount required to be paid through December 31, 1997, Big Rivers has calculated the required annual amounts of payments on a straight-line basis to avoid an event of default through December 31, 1997 Under this calculation, the maturities of long-term debt for each of the five years subsequent to December 31, 1990 are estimated to be as follows.

<u>Year</u>	REA Promissory Note	Other Debt	Total
1991	\$2,629	7,964	10,593
1992	7,864	6,664	14,528
1993	8,491	6,664	15,155
1994	9,169	6,564	15,733
1995	9,900	5,473	15,373

## (5) Rate Matters

On August 10, 1987, the KPSC approved a rate request by Big Rivers, Rate Case 9885, which became effective September 1, 1987 The rate request included an increase in the demand charge of \$1.25 per kW, change to a ratchet billing for demand (where current rates are determined based on the highest metered demand in the past twelve months) and a variable rate to major customers of Big Rivers' members, National-Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) (see note 9) which will be effective for a ten-year period The rates in the rate request were designed to recover Big Rivers' cost of providing service The rates have been determined based on cost of service less specified levels of intersystem sales to nonmembers of approximately 200 megawatts The variable rate for the aluminum smelters will fluctuate based on the price of aluminum within a defined minimum (18.1 mills per kWh) and maximum (44 mills per kWh)

The aluminum smelters and Big Rivers filed appeals regarding the KPSC's decision on rates with the Franklin Circuit Court On August 19, 1988, the Franklin Circuit Court affirmed the decision of the KPSC in Rate Case 9885. The case was appealed to the Kentucky Court of Appeals by the aluminum smelters. On January 26, 1990, the Kentucky Court of Appeals affirmed the decision of the Franklin Circuit Court.

As required in KPSC Rate Case 9885, Big Rivers filed a subsequent rate request proposal on June 30, 1988, in Rate Case 10265. A rate increase of \$1.30 per kW in the demand rate was requested. The KPSC approved the request, which increased the demand rate to \$8.80 per kW, on December 21, 1988, to be effective January 1, 1989. The aluminum smelters filed appeals in the Franklin Circuit Court regarding the KPSC's decision.

On February 27, 1990, Big Rivers, the aluminum smelters, and Big Rivers' creditors reached an agreement which eliminated the 1990 review of the variable aluminum tariff, resolved the present aluminum smelter complaint before the KPSC, and dismissed all pending KPSC appeals. The KPSC approved the Settlement Agreement on March 23, 1990, to be effective retroactively to January 1, 1990.

The Settlement Agreement preserves the variable aluminum smelter rate as the method of calculating the cash payments to be made by the smelters to Big Rivers. The Settlement Agreement however, fixes the revenue to be recognized by Big Rivers at 29.1285 mills per kWh through August 1997. Accordingly, any payments in excess or under the 29 1285 mills per kWh brought about by the variable aluminum smelter rate will be recorded as either deferred revenue or a receivable by Big Rivers. In 1990, the variable aluminum smelter rate resulted in Big Rivers receiving \$28,486 more than recognizable revenue based on the 29 1285 mills per kWh. This amount is recorded as deferred revenue. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the smelters to pay at or near the maximum rate of 44 mills per kWh.

	Range		_Actual_
	<u>Minimum</u>	<u>Maximum</u>	<u>Revenue</u>
1990	\$ 98,731	240,008	189,317
1989	103,034	250,468	249,489
1988	100,135	243,422	243,422

While Big Rivers expects to maintain positive cash flow, the agreed upon rate of 29 1285 mills per kWh will cause Big Rivers to sustain negative net margins in the next few years if additional intersystem sales to nonmembers are not achieved. In addition, the settlement modified certain default provisions under the Debt Restructuring Agreement to afford greater flexibility to Big Rivers from default in its debt payments.

As previously discussed, Big Rivers was ordered in KPSC Rate Case 9885 to file, by July 1, 1990, the third and final rate request. Thus, Big Rivers on June 29, 1990 filed a rate request proposal in Rate Case 90-128. A rate increase of \$1.35 per kW in its demand rate was requested. The KPSC approved the request, which increased the demand rate to \$10.15 per kW, on December 21, 1990, to be effective January 1, 1991. This rate order, and the prior two rate orders effective September 1, 1987 and January 1, 1989, are now final and no longer subject to appeal

Intersystem power sales to nonmembers is a component of full cost recovery under Big Rivers' rate design. During 1989, a three-year 200 MW firm power purchase agreement, effective August 1989, was reached with Oglethorpe Power Corporation (Oglethorpe Power). Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System, which interconnects with the transmission system of the Tennessee Valley Authority (TVA). On December 17, 1990, a second long-term contract was signed with Oglethorpe Power for the sale of 100 MW of firm power for ten years, beginning in August 1992. This contract is subject to approval by the REA, KPSC, and completion of a wheeling contract

In December 1989, the area served by Big Rivers' members experienced extremely cold temperatures resulting in wind-chill readings 45 to 50 degrees below zero, in consequence of which Big Rivers experienced an all-time peak demand of 1,177 MW. Big Rivers filed an application with the KPSC requesting authority to exclude this demand level in the ratchet billing for the non-industrial customers. The requested deviation from the current billing tariff was done to eliminate the adverse impact of the December weather-related demand peak. The KPSC authorized this adjustment on February 1, 1990.

### (6) Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under Section 501(c)(12) of the Internal Revenue Code. To retain tax-exempt status under this code provision, at least 85 percent of the organization's income must be generated from sales to the cooperative's members. In 1983, sales to non-members resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax-exempt status.

Big Rivers has generated losses for both accounting and income tax purposes. Thus, there is no provision for current or deferred income tax expense. The following analysis summarizes the net operating loss carryforwards.

Net operating loss carryforward

Year of origination	Accounting purposes	Federal income tax purposes
1983	\$ 10,750	9,460
1984	9,340	87,500
1985	9,640	160,180
1986	123,650	154,790
1987	88,680	94,600
1988	14,490	14,440
1989	20.000	54,760
1990	44,400	80,000

These carryforwards may be utilized to offset taxable income for the period of lifteen years from the year of origination. The difference between accounting and tax losses is primarily due to accelerated depreciation methods being utilized for income tax purposes.

Statement of Financial Accounting Standards (SFAS) No 96, Accounting for Income Taxes, was issued by the Financial Accounting Standards Board in December 1987 SFAS 96 requires a change from the deferred method to the asset and liability method of accounting for income taxes. This statement must be adopted in 1992 The impact of adopting this statement has not been determined

## (7) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City-owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 84 percent which is expected to decrease to 82 percent by 1994. The contracts expire in 2003.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt. service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a like amount for the right to purchase its allocated

portion of the output The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause The cost of power purchased under the contract for 1990, 1989, and 1988 was \$33,043, \$29,600, and \$33,993, respectively Such costs are accounted for as power purchased

During 1989, a review of the projected capacity allocation showed that Big Rivers' portion of Station Two capacity would be approximately 79 percent when the contracts expire in 2003 Therefore, Big Rivers increased the amounts recorded on the balance sheet related to Station Two by \$3,800. The revision of such amounts in the balance sheet has no effect on net margins, since no changes have been made to date in the manner in which the payments made to the City are recovered in the ratemaking process.

## (8) Pension and Deferred Compensation Plans

Big Rivers has defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement.

Income Security Act of 1974 Big Rivers has adopted the provisions of Statement of Financial Accounting Standards (SFAS) No 87, Employers' Accounting for Pensions

The following table sets forth the funded status of the pension plans and amount recognized on the balance sheet at December 31,

	1990	1989	1988
Actuarial present value of benefit obligation Accumulated benefit obligation, including vested benefits of \$8,481, \$7,075, and \$5,206	\$ 8,513	7,113_	5,266
Projected benefit obligation for services rendered to-date	\$ 11,614	9,546	6,794
Plan assets at fair value, primarily listed stocks and U.S. Treasury Bonds	12,422	11,157	10,097
Plan assets in excess of projected benefit obligation	808	1,611	3,303
Unrecognized net transition assets Unrecognized prior service cost Unrecognized net loss (gain)	(2,422) 959 (517)	(2,642) 1,056 (1,155)	(2,859) 0 (910)
Unfunded accrued pension cost	\$ (1,172)	(1,130)	(466)
Net pension costs included the following (income)/expense components.			
Service cost-benefits earned during the year Interest cost on projected benefit obligation Actual return on plan assets Amortization of transition assets Amortization of prior service cost Amortization and deferral of net loss (gain)  Net periodic pension costs	\$ 1,047 835 (1,265) (220) 96 321 \$ 814	946 421 (1,059) (220) 96 480	725 482 (661) (220) 0 (171)
Assumptions used to develop the projected benefit obligation were			
Discount rates Rates of increase in compensation levels Expected long-term rate of return on assets	8.5% 4.0 8.5	8.5% 4.0 8.5	8.5% 4 0 8.5

Total expense related to the pension and deferred compensation plans was \$973, \$1,382, and \$805, in 1990, 1989, and 1988, respectively

### (9) Revenues and Major Customers

Operating revenues were as follows.

	1990	1989	1988
Members.			
Green River Electric Corporation Henderson-Union Rural Electric	\$131,411	173,839	171,364
Cooperative Corporation	104,908	146,449	136,434
Jackson Purchase Electric Cooperative Corporation Meade County Rural Electric	20,488	20,166	17,659
Cooperative Corporation	10,778	10,755	9,543
Nonmembers	64,083	38,668	64,177
Other Revenue	68	100	101
	\$331,736	389,977	399,278

National-Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Corporation for Alcan Aluminum Corporation) were as follows.

<u>Year</u>	Green River	Henderson-Union	Combined
1990	\$ 88,624	83,980	172,604
1989	\$133,124	126,214	259,338
1988	\$133,598	119,338	252,936

Nonmember sales in 1990 to Oglethorpe accounted for 11.2 percent of operating revenues, and in 1988, nonmember sales to TVA were 11.6 percent of operating revenues.

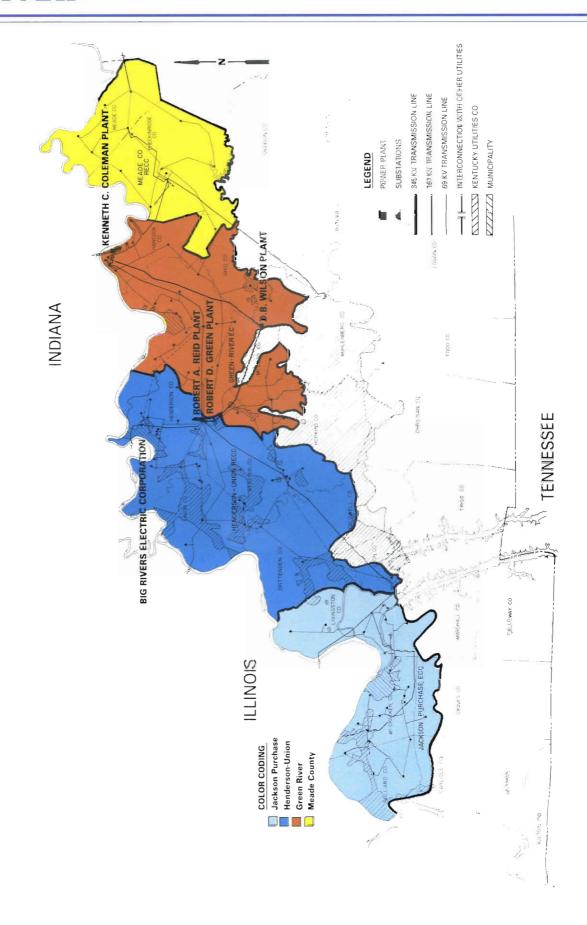
Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial custmers and accepting only such payment therefore as each member receives from its customers.

Receivables from members at December 31, 1990, 1989, and 1988 were \$23,839, \$29,081, and \$29,610, respectively

### (10) Contingencies

As of December 31, 1990, a suit filed by a former coal supplier in the amount of \$18.1 million was pending, as were a number of other legal actions and claims involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

During 1990, Congress passed amendments to the Clean Air Act. The effect on Big Rivers complying with this Act has not been determined.



# **COMPARATIVE STATISTICAL ANALYSIS -**

		1990	1989	1988	1987
Operating Revenues	\$	331,736,393	389,976,759	399,277,507	300,084,362
Expenses.					
Operation and Maintenance Purchased Power and		191,389,914	170,941,916	187,344,006	169,931,331
Interchanged, Net		40,263,144	35,434,879	39,158,896	39,146,440
Depreciation and Amortization		44,564,475	44,333,598	49,310,860	53,555,259
Taxes		4,201,594	4,011,142	3,906,621	3,817,850
Interest		97,222,523	101,748,177	103,607,079	124,351,304
Other		682,585	771,342	616,025	597,798
Total		378,324,235	357,241,054	383,943,487	391,399,982
Operating Margins (Loss)		(46,587,842)	32,735,705	15,334,020	(91,315,620
Nonoperating Margins (Loss)		2,113,304	2,397,614	3,474,999	2,684,774
Net Margins (Loss)	\$	(44,474.538)	35,133,319	18,809,019	(88,630,846
Utility Plant at Cost	\$	1,462,170,906	1,454,882,990	1,451,937,802	1,448,581,890
Construction Work in Progress		9,204,400	4,162,708	1,226,596	1,448,505
Total Electric Plant		1.471,375,306	1,459,045,698	1,453,164,398	1,450,030,395
Less Accumulated Depreciation		331,805,315	288,884,804	245,556,080	196,710,029
Utility Plant Net	\$	1,139,569,991	1,170,160,894	1,207,608,318	1,253,320,366
Total Assets	\$	1,267,340,928	1,322,367,888	1,386,197,045	1,421,349,400
System Peak Demand - MW		1,17+	1,177	1,157	990
Net Generating Capacity Owned - 1	мW	1,459	1,459	1,459	1,459
Net HMP&L Capacity Purchased -		26+	264	264	270
Other Purchased Capacity - MW		178	178	178	178
Sales to Members - MWh		8,191 +6	8,072.76	7,814 61	6,271.32
Sales to Non-Members - MWh		2,592.86	1,500.96	3,188.51	3,993.08
Generated - MWh		9,010.66	8,047 11	9,270.21	8,321.80
Purchased HMP&L Energy - MWh		1,668 90	1,388.66	1,716.20	1,932.61
Other Purchased Energy - MWh		337 14	314 14	262.04	284 69
System Load Factor - %		81 9	80.0	77 6	75.5
Permanent Employees at Year-End		868	857	855	856
Average Cost of Coal Used					
Price Per Ton		28 73	27 82	28.05	27.48
¢/MM BTU		129.2¢	126.5¢	125 7¢	124.3¢

# **TEN YEAR SUMMARY**

1981	1982	1983	1984	1985	1986
240,476,418	232,716,033	258,276,967	258,019,579	236,023,720	227,664,219
120,266,830	124,675,180	136,539,322	143,358,327	133,779,910	130,991,511
58,848,412	46,342,616	55,494,464	47,494,014	39,792,228	38,214,277
17,073,065	17,548,448	17,782,446	18,533,362	17,788,717	18,798,750
1,817,332	1,970,317	2,202,576	2,269,307	2,353,021	2,515,787
37,092,495	40,467,426	38,198,269	39,747,343	39,645,856	51,520,808
92,954	149,400	136,778	150,834	195,269	235,101
235,191,088	231,153,387	250,353,855	251,553,187	233,555,001	242,276,234
5,285,330	1,562,646	7,923,112	6,466,392	2,468,719	(14,612,015)
1,677.56	1,968,247	994,948	(1,726.877)	1,050,605	(26,613,024)
6,962,89	3,530,893	8,918,060	4,739,515	3,519,324	(41,225,039)
483,371,93	495,105,598	531,772,691	533,597,067	539,998,444	.,452,144,009
173,576,48	451,265,803	653,519,304	745,589,266	833,505,325	2,080,925
656,948,41	946,371,401	1,185,291,995	1,279,186,333	1,373,503,769	,454,224,934
58,643,00	74,720,991	91,374,775	106,923,761	124,841,130	143,479,823
598,305,41	871,650.410	1,093,917,220	1,172,262,572	1,248,662,639	1,310,745,111
708,233,62	1,029,256,522	1,225,799,340	1,332,830,420	1,409,490,616	1,438,564,861
95	947	952	1,027	1,042	993
81	1,039	1,039	1,039	1.039	1,448
25	253	270	268	271	271
1.4	140	140	190	178	178
7,482.7	6,420.88	6,719 42	7,390 75	6,908.67	6,211 79
1,455.2	1,106.37	2,098.82	2,075.96	3,290 11	3,303.68
6,164 2	5,848.11	6,474 14	6,876.37	6,447 45	6,609 70
1,822.8	1,127 18	1,724.84	1,882.22	1,779.65	1,631.87
1,097 0	681.21	790.65	666.72	291 98	336.38
87	74.8	78 4	84 1	78.1	74 1
66	680	794	835	827	863
28.2	30.68	30.38	29.91	30.25	27 83

## CORPORATE DIRECTORY

**OFFICERS** 

Morton Henshaw President

Edward F Johnson Vice President

William Briscoe Secretary-Treasurer

J D Cooper Assistant Secretary-Treasurer

**GENERAL MANAGER** 

W H Thorpe

ASSISTANT GENERAL MANAGER

Paul A Schmitz

**DIRECTORS** 

(Three from each member cooperative)

Green River Electric Corporation Marion Cecil Edward F Johnson Sandra Wood

Henderson-Union Rural Electric Cooperative Corporation William Briscoe Morton Henshaw C G Truitt

Jackson Purchase Electric Cooperative Corporation Johnny L. Hamm Ralph Hardin Delbert Powers

Meade County Rural Electric Cooperative Corporation John C. Burnett J D Cooper Joseph A Hamilton VICE GENERAL MANAGERS

J E. Dolezal Energy Supply

Richard Greenwell Production

Ronald W Johnson Administrative Services and Human Resources

B Scott Reed Engineering and Transmission

Paul A Schmitz Finance

W Hayden Timmons
Environmental and Public Affairs

**MANAGERS** 

Don E Augenstein Corporate Services

Gregory F Black Environmental Affairs

C William Blackburn General Accounting

Joe L. Craig Fuels

James V Haner Taxes and Insurance

Kerry R. Hay Production Maintenance Services

Travis D Housley
Engineering and Corporate Planning

Bill Johnson Economic Development

Don C Mann Purchasing Tom Millay Human Resources

James H McIllwain Construction

Mike Thompson Production Performance Services

Benjamın Urbanek Energy Control

Phil Waggoner Information Systems

John West Financial Services

SUPERINTENDENTS

Steve Moss Wilson Plant

Bruce Shelton Coleman Plant

Barry Wood Reid/Green Plants

Virgil Mitchell Transmission and Substations

CORPORATE ATTORNEY

Morton Holbrook General Counsel Holbrook, Wible, Sullivan & Mountjoy P S.C Owensboro, Kentucky

**CORPORATE AUDITORS** 

KPMG Peat Marwick Louisville, Kentucky **BIG RIVERS ELECTRIC** CORPORATION
Post Office Box 24
201 Third Street Henderson, Kentucky 42420 (502)827-2561



## FINANCIAL HIGHLIGHTS

(Dollars in thousands)

	1989	1988	Increase (Decrease)	%Increase (Decrease)
Operating Revenues	389,977	399,278	(9,301)	(2.3)
Operating Expenses	254,722	279,721	(24,999)	(8.9)
Net Margins	35,133	18,809	16,324	86.8
Accumulated Margins & Equity	(29,407)	(64,540)	35,133	_
Capital Expenditures	7,592	4,048	3,544	87.5
Cost of Fuel Used	104,830	121,705	(16,875)	(13.9)
System Peak Demand (Megawatts) Energy Sold to Members	1,177	1,157	20	1.7
(Megawatt-hours)	8,072,761	7,814,607	258,154	3.3
Revenue per kWh Sold (Mills)	40.72	36.28	4.44	12.2

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Big Rivers Electric Corporation, located in Henderson, Kentucky, is a generation and transmission cooperative, and is owned by the members it serves. Its purpose is to provide reliable wholesale electric service on a not-for-profit basis to its four member distribution cooperatives. These cooperatives, owned by their 80,625 consumer-members, distribute electricity at retail within 22 counties of western Kentucky, on a not-for-profit basis.

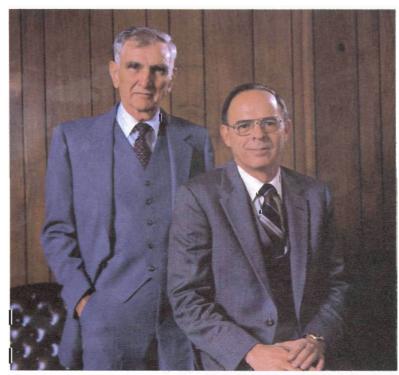
## PRESIDENT'S AND GENERAL MANAGER'S REPORT

The decade of the '80s was extremely turbulent and frustrating for Big Rivers Electric Corporation. It began with great promise for growth, and construction of the D.B. Wilson Plant was started in 1980. By 1982, the economy had turned downward, aluminum prices dropped significantly, and by 1984 Big Rivers faced financial difficulties. During the ensuing years, the corporation was embroiled in Kentucky Public Service Commission (KPSC) hearings, lawsuits, threatened foreclosure by the Rural Electrification Administration (REA), and negotiations to resolve its financial problems. However, these trying times resulted in a complete restructuring of debt and a workout plan which promises a stable, progressive future.

Closing out this turbulent decade, 1989 can best be described as a record year which provided increased momentum in regaining our financial strength and stability. Records and accomplishments were:

- A new system peak demand of 1,177 megawatts (MW) was recorded on December 22, breaking the previous high of 1,157 MW established on August 18, 1988.
- For the first year ever, each monthly system peak demand was in excess of 1,000 MW.
- The highest member energy requirement in a 24-hour period was also recorded on December 22, with 27,310 megawati-hours (MWh), for an average system hourly demand of 1,138 MW.

- Energy sales to members totalled 8,072,761,464 kilowatt-hours (kWh), which was 258,154,390 kWh greater than the previous high of 7,814,607,074.
- Margins for the year were \$35,133,319, the largest ever, which reduced our deficit equity to \$29,406,971.
- Payments totaling \$202,159,245 were made for debt service, the most ever paid in one year.
- \$186,484,389 was paid on our total government debt, reducing the principal amount of outstanding debt due REA to \$929,015,682.
- \$15,674,856 was paid on pollution control bonds and other debt.
- Two intersystem power
- sales contracts of 200 MW each were executed. The first, a 3-year contract with Oglethorpe Power Corporation of Tucker, Georgia, is their first firm power agreement with a utility other than Georgia Power Company. The second, a 21-year contract with Indianapolis Power & Light Company (IPL) was executed in September. IPL will begin purchasing 100 MW on January 1, 1991. and the second 100 MW on January 1, 1993. Indiana Utility Regulatory Commission approval is pending. For 1990, a "reservation charge" will be paid by IPL in return for Big Rivers' guarantee to make the capacity available beginning in 1991.
- Valley Grain Products, Inc., a new industrial customer



Morton Henshaw

William H.L. Thorpe

of Henderson-Union Rural Electric Cooperative Corporation (Henderson-Union), became the first company to receive service under a KPSC-approved economic development rate.

Southwire Company of Carrollton, Georgia, a member of Green River Electric Corporation (Green River Electric), doubled production at its Hancock County, Kentucky, rod and cable mill and became the second industrial customer qualifying for this new rate.

These new milestones in our continuing operations were gratifying, but of even more importance is the settlement of disputes with our members' two largest companies, the aluminum smelters.

On February 27, 1990, Big Rivers, Henderson-Union, Green River Electric, Alcan Aluminum (Alcan), and National-Southwire Aluminum (NSA) asked the KPSC for prompt approval of a settlement which assures Big Rivers the same revenue level as contemplated in the Debt Restructuring Agreement with our creditors and assures the viability of the smelters when aluminum prices are low.

The variable rate (fluctuates with the market price of aluminum) will remain in effect, however, through a balancing account, the settlement results in Big Rivers receiving an average of 29.1285 mills per kWh from January 1, 1990, through August 31, 1997. This rate is subject to fuel cost adjustments, changes in law or regulations (including acid rain and taxes) and the load factor at which the smelters operate.

If approved, the settlement eliminates the 1990 review of the variable aluminum tariff, resolves the present NSA complaint before the KPSC, dismisses all pending KPSC appeals, as well as litigation in the Kentucky courts regarding the first two rate increases and the Debt Restructuring Agreement. The parties have agreed to not initiate new litigation or complaints pertaining to the variable aluminum rate during the term of the rate (August 1997) or oppose Big Rivers' third rate increase which will be filed with the KPSC by July 1, 1990, to be effective January 1, 1991. If approved, this will increase the demand charge from \$8.80 per KW per month to \$10.15. In addition, the settlement provisions under the Debt Restructuring Agreement were modified, giving Big Rivers more flexibility in meeting its debt service obligations.

A management audit of the Corporation, as required by Kentucky law for the state's largest utilities, began in October. Big Rivers is the last corporation

of this group to be scrutinized. All interviews have been completed and all requested documents have been furnished to the auditing group. The audit is scheduled to be complete, with recommendations, by mid-April 1990.

The details in the remainder of this report, we believe, indicate that Big Rivers is now on a firm footing and is well positioned to meet the challenges of the future.

Big Rivers' management and Board of Directors sincerely appreciate the dedication and perseverance of our employees during the past ten years, and we look forward to working together during the promising years ahead.

Morton Henshaw President, Board of Directors

W. H. Thorpse

Motor Henshow

William H. Thorpe General Manager

## **Finance**

Operating revenues were \$389,976,759, which was a decrease of \$9,300,745 from last year, resulting primarily from a reduction in sales to the Tennessee Valley Authority (TVA) due to restart of some of their nuclear units. During 1989, intersystem sales were \$38,667,981 compared to \$64,176,995 during 1988. However, revenues from members increased by \$16,209.050 to \$351,208,585, largely due to the increased revenues from the aluminum smelters, and an increase in rates for non-smelter consumers on January 1, 1989. During the year, both smelters operated at full capacity, using 234,333,016 kWh more than in 1988. Non-smelter energy sales reached an all-time high of 2,210,746,492 kWh. With the 10.7 percent rate increase on non-smelter load, revenues were \$91,869,993 for this segment of our business.

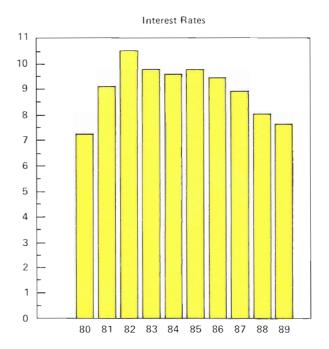
The cost of fuel burned was down 14.6 percent, to \$122,897,982, primarily reflecting the reduction in intersystem sales.

During the year, a change was made in the rate of depreciation for our production facilities from 3.5 percent to the REA recommended rate of 3.1 percent. This change recognizes a reduction in the capacity factor at which our generating facilities operate following completion of the Wilson Plant.

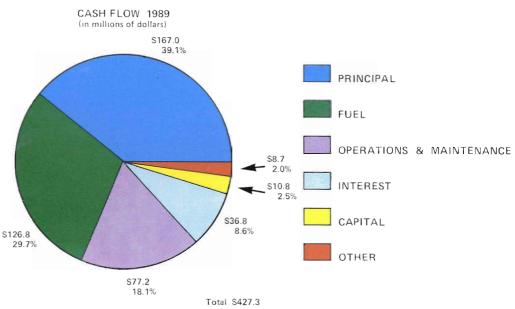
Interest recorded on long-term debt was \$101,724,933, down \$1,706,341 from last year. During the year, Big Rivers reduced its long-term debt by \$99.161,516 through the application of positive cash flow. Our average cost of debt is 7.68 percent per annum. Interest recorded for the year reflects the amount of expense applicable on a conventional

loan basis, and in accordance with generally accepted accounting principles. Under the Debt Restructuring Agreement, debt service payments to REA are discounted at an annual rate of 8.36 percent, commencing September 1, 1987. Debt service payments made in the earlier years are largely credited to principal, while payments made in the later years of the debt instrument are mostly payments of interest. The difference of accrued, and paid, interest appears in our long-term debt obligations.

Margins were \$35,133,319, up \$16,324,300, or 86.8 percent from last year. On September 1, 1987, the KPSC ordered Big Rivers to charge the aluminum smelters a variable rate for a ten-year period, which is tied to the published price of primary aluminum. This variable rate has a floor of 18.1 mills per kWh when aluminum prices fall to and below 44.625 cents per pound, and a cap of 44.0 mills when prices are greater than 79.143 cents per pound. During



1989, the smelters paid an average of 43.68 mills per kWh excluding any fuel adjustments. Big Rivers' settlement with the smelters, pending approval of the KPSC, in the remaining seven years and eight months of the variable rate period, will levelize its revenues from the smelters at 29.1285 mills per kWh.



## **Fuels**

Big Rivers' plants burned 4.42 million tons of coal in generating electricity, an average of 12,103 tons per day. This compares with 5.13 million total tons, 14,013 tons per day, burned in 1988.

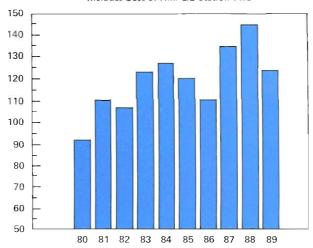
The average cost was \$27.82 per ton, equivalent to 126.5 cents per million British Thermal Units (BTU). This compares with \$28.05 per ton, 125.7 cents per million BTU last year.

A former coal supplier was awarded \$2,582,177 in arbitration of a contract dispute over the amount of price increase for compliance with the requirements of the Surface Mining Control and Reclamation Act. This cost is included in the December 1989 coal inventory figures. It will be charged to operations as coal is burned, and accounted for through the average inventory method beginning with the December 1989 burn.

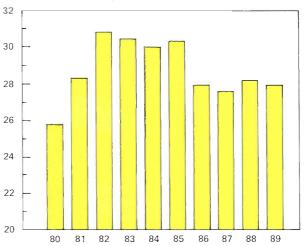
Negotiations were completed for the buyout of a relatively high-cost, long-term contract, dependent upon Big Rivers finalizing negotiations for a replacement contract and securing the financing. A substantial reduction is expected in Big Rivers' average fuel cost during the remaining term of the original contract which extends through year 2004.

A new contract was executed with a coal supplier to replace one that expired at the end of 1989. The new contract is at a lower cost, and the price was reduced for another contract with that supplier expiring during 1990. The new contract will also provide a supply of low-cost, lower-sulfur coal for the Coleman Plant, if lower-sulfur coal is required for the plant prior to 2001 as a result of "acid rain" legislation.

Cost of Coal Burned\* (in Millions of Dollars) \*Includes Cost of HMP&L Station Two



Average Cost Per Ton of Coal Used



are supplied from mines in the service areas of the Corporation's member cooperatives.

## Production

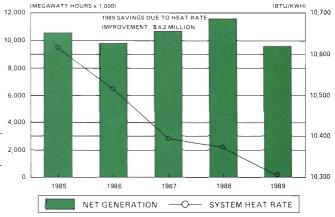
Big Rivers continued to concentrate on improving its efficiency and reducing the cost of producing electricity. Heat rate improvements have been made for the fifth consecutive year. The table below illustrates the improvements made from 1985 through 1989, a total reduction of 291 BTU per kWh generated. Based upon 1989 fuel costs, this translates into an annual savings of \$4,200,000 for consumers.

Electronic data acquisition and real-time performance monitoring packages will be installed over the next three years at the Coleman and Green Plants, with a projected further heat rate improvement of one-half to

Fuel cost savings are passed directly to the consumer through the fuel adjustment clause, lowering the cost of power to our consumers and making Big Rivers more competitive.

Western Kentucky highsulfur coal is burned in the Green and Wilson plants (50 percent of our capacity) which are equipped with flue-gas desulfurization scrubbers. Lower-sulfur compliance coal from southern Indiana and western Kentucky is burned at the older Coleman, Reid, and Henderson Station Two units which do not have scrubbers. About three-fourths of Big Rivers' coal requirements

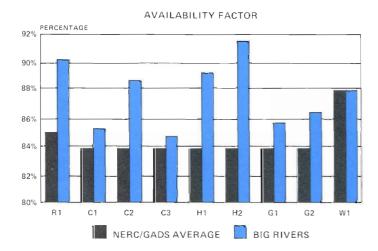
### SYSTEM GENERATION AND HEAT RATES

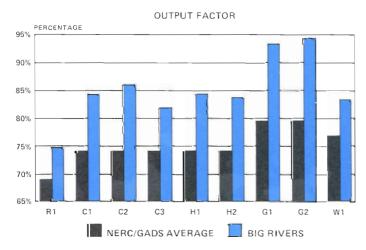


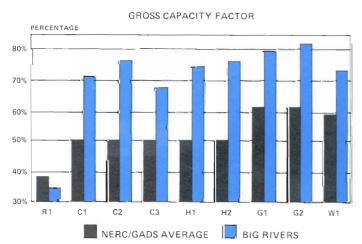
three percent, producing annual savings from \$750,000 to as much as \$4.3 million. The

Wilson Plant was equipped with these systems when it was constructed, and they have proven to be very beneficial in cost control and generation optimization.

Big Rivers' generating units

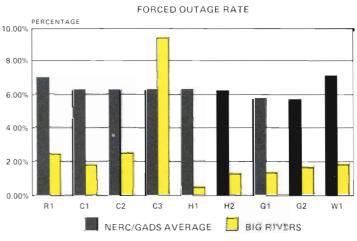






exceeded national five-year averages for similar sized units' availability, gross capacity factor, and output factor, as shown in the following charts. The national statistics used in these charts were taken from reports issued by the North American Electric Reliability Council.

Unit forced outage rates, with the exception of Coleman Unit No. 3, are also lower than the national averages for similar units.



Major repairs and modifications during the year included the replacement of stack and scrubber liners at the Green Plant, installation of additional soot blowers to the boiler on Green Unit Two and rebuilding of components of the Henderson Municipal Power and Light (HMP&L) Station Two cooling towers. A permanent dibasic acid system at the Wilson Plant was installed to enhance the utilization of limestone in the scrubbing operations. We also installed sequence-of-events recorders on the three Coleman Plant units, replaced soal piping on Coleman Unit One, and rehabilitated 1,800 feet of railroad track at Wilson.

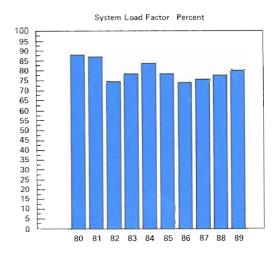
## **Energy Supply**

As mentioned in the President's and General Manager's Report, Big Rivers recorded a new system peak demand of 1,177 MW on December 22 at 10:00 a.m., during a period of record-breaking, below-zero temperatures in our service area.

The aluminum smelters' combined non-coincident peak demand during the year was 696.3 MW. Alcan Aluminum (Alcan) has a contract demand of 365 MW, which will be reduced to 315 MW in April 1990, and National Southwire Aluminum (NSA) has a contract demand which can range from 292 to 317 MW. Prior to October 1989, NSA's contract demand could vary from 320 to 345 MW. NSA also purchased an additional 20 to 45 MW of supplemental capacity at various times throughout the year. Total smelter energy usage during the year was 5,862,014,972 kWh, which was the highest usage since 1981, and the third highest on record. Together, the smelters operated at a 96.1 percent load factor.

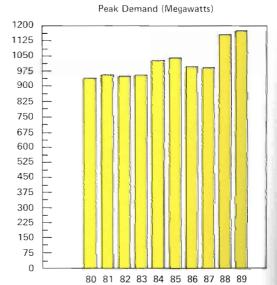
Energy requirements for the non-smelter load have grown at an annual average percentage rate of 3.43 percent since 1985, while the non-coincident demand has increased an average of 5.13 percent annually.

In July, a 3-year 200 MW firm-power contract was signed with Oglethorpe Power Corporation. Energy is wheeled to Oglethorpe through the TVA system, and has been delivered at 100 percent load factor since August 23. In September, a 21-year power contract for 200 MW was executed with Indianapolis Power & Light Company (IPL). Beginning in 1991, energy will be delivered from Big Rivers' system to IPL by Hoosier Energy Rural Electric Cooperative, Inc. and Southern Indiana



Gas and Electric Company in accordance with transmission service agreements negotiated by IPL. Indiana Utility Regulatory Commission approval is pending. In 1984, the Municipal Energy Agency of Mississippi contracted for 54 MW of capacity through September 1995. These contracts complete our planned long-term, firm-power sales to other utilities.

Big Rivers owns 1,394 MW of coal-fired, steam-generating capacity, and under an agreement with HMF&L, operates two coal-fired, steam-generating units with a total net capacity of 315 MW. Under this agreement, we are required to take



and pay for all capacity in excess of HMP&L's needs. During 1989, Big Rivers was allocated 265 MW from these units prior to June 1, and 264 MW for the remainder of the year. We also own a 65 MW combustion turbine, and purchase 178 MW of hydroelectric peaking capacity from Southeastern Power Administration (SEPA). In addition to interconnections with HMP&L and SEPA, we maintain interconnection agreements with the following neighboring utilities: Southern Illinois Power Cooperative, Hoosier Energy, Southern Indiana Gas and Electric Company, Kentucky Utilities Company, Louisville Gas and Electric Company, and East Kentucky Power Cooperative. Access to TVA is accomplished through the SEPA agreement.

## Construction

Capital expenditures in 1989 totaled \$7,592,486. The following chart illustrates the capital expenditures made during the last five years.

Big Rivers has adequate generating capacity and has no

plans for any additional units. No major construction was in progress at year-end and our capital budget for 1990 is \$15,988,490.

During 1989, six transmission lines totalling nearly 12 miles were constructed by our own work crews. We also added a new print shop and a new facility for our Communications Department. Orders were placed for an energy management system (EMS) with Harris Corporation, and for an AS400 mainframe computer with IBM. Installation of the mainframe computer is expected to be completed during the first quarter of 1990, and the EMS is scheduled for operation in 1991.

## Environmental

Big Rivers continues to meet its responsibilities of compliance with regulations, and prudent management of its operations, to minimize the effects on our environment. We continuously monitor plant stack emissions and routinely monitor wastewater quality. Acid rain legislation will have an

it will be at many other utilities, since more than 50 percent of our coal-fired generating capacity is already equipped with sulfur dioxide scrubbers. Waste management of scrub ber sludge and ash is a costly

adverse impact on our cost of

operation, but that impact

should not be as significant as

Waste management of scrubber sludge and ash is a costly process in normal utility operations. Big Rivers is fortunate to have all its scrubber sludge and most of its ash disposed of in nearby surface coal mines permitted for this purpose. This results in more economical disposal of the large quantities of waste material that would otherwise accumulate at the plant sites, which would require continued maintenance of the disposal areas and monitoring of surface and ground water.

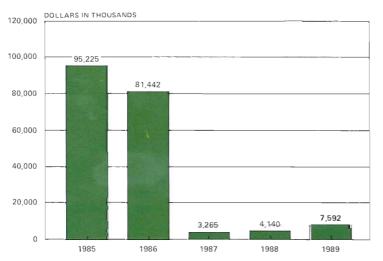
## **Human Resources**

Big Rivers has embarked upon widespread, intensive personnel training. We began programs for both supervisory and non-supervisory employees, which are expected to continue for the next five years. Both programs use a behavior-modeling approach to teach the skills needed to be effective and efficient in today's working environment.

Forty-three employees increased their skills and value to the corporation by completing higher-education courses at nearby colleges and universities.

Training programs related to the handling of hazardous materials and the proper methods to be used when working in confined space contributed to another record-setting safety year. During 1989, the Reid

## CAPITAL EXPENDITURES



Plant employees completed 417 days without a lost-time injury. The incidence rate for reported injuries and lost-time injuries decreased, while the number of man-hours worked increased. The number of lost-time days dropped drastically, from 422 to 57. Several departments had no reported injuries for all of 1989, which brought special recognition to the 487 bargaining unit employees and 23 supervisors in those departments.

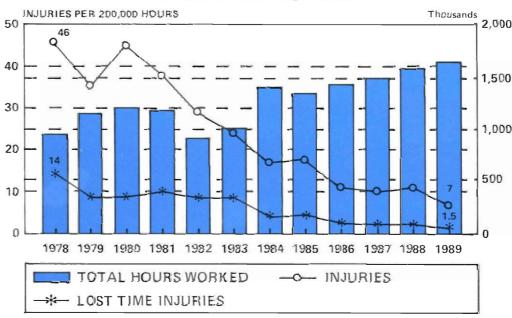
The success of Big Rivers' safety awareness training program is exemplified by the significant decrease in total accidents during the last ten years. Total accidents decreased from a high of 259 in 1980 to a low of

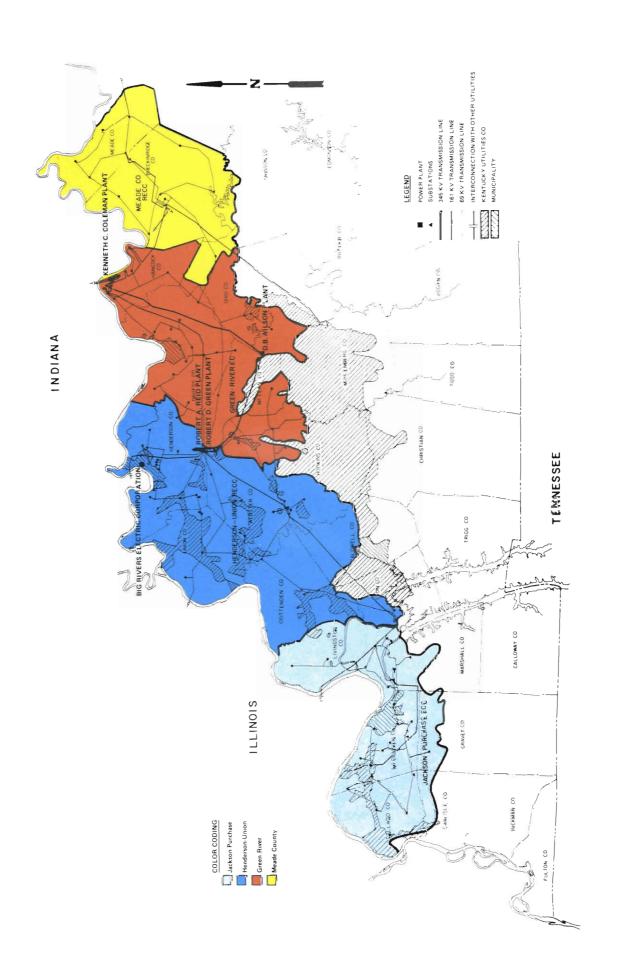
58 in 1989. The incidence rate (accidents per 200,000 manhours worked) has dropped from 14 in 1978 to a record low of 1.5 in 1989.

Employee turnover continues at a rate well below the national average for corporations our size. Total separations for the year were 18, for a .33 percent annual turnover rate. Total employment at the end of the year was 857.

In June, Johnny L. Hamm was elected to the Board of Directors, representing Jackson Purchase Electric Cooperative Corporation, replacing Paul Buchanan. Mr. Hamm is President of Jackson Purchase, and has been a member of that board since 1985.

### ACCIDENT INCIDENCE RATE





## INDEPENDENT AUDITORS' REPORT

The Board of Directors
Big Rivers Electric Corporation:

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1989 and 1988, and the related statements of revenues and expenses, equities and cash flows for each of the years in the three-year period ended December 31, 1989. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation at December 31, 1989 and 1988, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1989, in conformity with generally accepted accounting principles.

As discussed in notes 4, 5, and 10 to the financial statements, on March 30, 1988, Big Rivers and its creditors entered into a Debt Restructuring Agreement whereby government related debt was restructured into a Total Government Debt Note (REA Promissory Note). The principal repayments of the REA Promissory Note are contingent upon the available cash flow, as defined by the Debt Restructuring Agreement. Big Rivers' ability to recover its costs and repay its debt is dependent upon Big Rivers obtaining Kentucky Public Service Commission approval of the March 1, 1990 settlement agreement described in note 5, obtaining the third and final rate proposal as outlined in the KPSC August 10, 1987 order and selling approximately fifteen percent of capacity to nonmembers. The ultimate outcome of these matters cannot presently be determined. Accordingly, no adjustments relating to the recoverability and classification of reported asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties have been recognized in the accompanying financial statements.

KPMG Peat Marwick

Louisville, Kentucky February 2, 1990 Except as to note 5 which is as of February 27, 1990

## STATEMENTS OF REVENUES AND EXPENSES

			(In thousands)
	1989	Years ended December 31,	1987
Operating revenues (note 9)	\$389,977	399,278	300,084
Operating expenses: Operations: Fuel for electric generation Power purchased and interchanged, net Other Maintenance Depreciation and amortization Taxes	104,830 35,435 41,987 24,125 44,334 4,011	121,705 39,158 41,896 23,744 49,311 3,907	108,791 39,146 39,725 21,415 53,555 3,818
Total operating expenses	254,722	279,721	266,450
Electric operating margins	135,255	119,557	_33,634
Interest and other deductions: Interest (note 4) Allowance for borrowed funds used during construction (note 2) Other deductions	101,890 (142) 771	$   \begin{array}{r}     103,643 \\     \hline     (36) \\     \hline     616   \end{array} $	124,410 (59) 598
Total interest and other deductions	102,519	104,223	124,949
Other capital credits and patronage allocations	(19)	(4)	
Operating margins (loss)	32,755	15,338	(91,315)
Nonoperating margins (loss): Interest earned Other	$ \begin{array}{r} 2,376 \\ 2 \\ 2,378 \end{array} $	$ \begin{array}{r} 3,405 \\ \phantom{00000000000000000000000000000000000$	2,684 
Net margins (loss)	\$ 35,133	18,809	(88,631)

See accompanying notes to financial statements.

## STATEMENTS OF EQUITIES

(In thousands)

Years ended December 31, 1989, 1988, and 1987

					Other equities		
	Total equities	Accumulated deficit - operating	Accumulated deficit - nonoperating	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service	
Balance at December 31, 1986	\$ 5,282	(14,612)	(26,614)	42,063	764	3,681	
Margins (loss) for 1987: Operating Nonoperating	(91,315) 2.684	(91,315)	2,684		- -		
Balance at December 31, 1987	(83,349)	(105,927)	(23,930)	42,063	764	3,681	
Margins for 1988: Operating Nonoperating Patronage allocation	15,338 3,471 —	15,338 — (33,310)	3.471 —	33,310	_ _ 		
Balance at December 31, 1988	(64,540)	(123,899)	(20,459)	75.373	764	3,681	
Margins for 1989: Operating Nonoperating Patronage allocation	32,755 2,378 —	32,755 — (52,548)	2,378 	52,548	_ _ 	_ 	
Balance at December 31, 1989	\$(29,407)	(143,692)	(18,081)	127,921 ———	764	3,681	

See accompanying notes to financial statements.

## BALANCE SHEETS

(1	n	thousands	

	December 31,	
Assets	1989	1988
Utility plant, net (notes 2, 4, and 5) Productive capacity under purchased	\$1,170,161	1,207,608
power contract (note 7) Other deposits and investments, at cost	27,600 5,275	$23,800 \\ 4,754$
Current assets:  Cash and temporary cash investments Receivables (note 9) Fuel for electric generation	28,226 36,027 25,358	56,295 37,236 23,357
Material and supplies	14,974	15,640
Total current assets	104,585	132,528
Deferred charges (note 3)	14,747	17,507
	<u>\$1,322,368</u>	1,386,197
Equities and Liabilities		
Capitalization: Equities	\$ (29,407)	(64,540)
Long-term liabilities (notes 4 and 5): REA debt Other long-term debt	1,139,610 174,249	1,235,649 173,571
Total long-term liabilities	1,313,859	1,409,220
Less current maturities	38,193	57,163
Total long-term liabilities, net of current maturities	1,275,666	1,352,057
Total capitalization	1,246,259	1,287,517
Current liabilities: Current maturities of long-term		
liabilities (notes 4 and 5)	38,193	57,163
Accounts payable Accrued expenses	17,637 18,311	$ \begin{array}{r} 18,511 \\ 21,481 \end{array} $
Total current liabilities	74,141	97,155
Deferred credits Commitments and contingencies (notes 3, 4, 5, and 10)	1,968	1,525
	\$1,322,368 ————	1,386,197

## STATEMENTS OF CASH FLOWS

		(1)	n thousands)
	Years ended December 31,		
	1989	1988	1987
Cash flows from operating activities:			_
Net margins (loss)	\$ 35,133	18,809	(88,631)
Adjustments to reconcile net margins (loss)	* 50000 A 2000 Co-00	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	,
to cash provided by operating activities:			
Depreciation and amortization	44,886	49,796	53,995
Amortization of deferred charges	2,158	2,237	2,232
Interest expense refinanced with REA			
borrowings	_	$\rightarrow$	87,406
Allowance for borrowed funds used			
during construction	(142)	(36)	(59)
Change in assets and liabilities:		V /	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Receivables	1,209	15,699	(23,501)
Fuel for electric generation	(2,001)	7,373	(2,300)
Material and supplies	666	185	(1,031)
Accounts payable	(874)	(10)	(1,436)
Accrued expenses	(3,170)	(747)	19,781
Other, net	3,024	(2,799)	47
Net cash provided by			
operating activities	80,889	90,507	46,503
operating activities			40,000
Cash flows from investing activities:			
Construction expenditures	(7,592)	(4,048)	(3,213)
Refund from vendor relating to	(1,50-)	(2,020)	(0,=10)
construction expenditures	295	_	6,702
Deposit on coal contract buyout	(2,500)	_	0,102
Deposit on coal contact says at	(2,000)		
Net cash provided by (used in)			
investing activities	(9,797)	(4,048)	3,489
	(5,151)	(1,010)	
Cash flows from financing activities:			
Principal payments on long-term debt	(99,161)	(370,926)	(283,622)
Proceeds from sale of cooperative	(00,100)	(0.0,020)	(===,===)
utility trusts	_	319,426	250,805
Capitalized refinancing expenses	_	(3,248)	(2,920)
Net cash used in financing			
activities	(99,161)	(54,748)	(35,737)
	(,/	(,)	(00,000)
Net increase (decrease) in cash			
and temporary cash investments	\$ (28,069)	31,711	14,255
Supplemental cash flow information -	A 2 A 2 2 2 2		<b>.</b> /
Cash paid relating to interest expense	\$ 102,997	105,867	34,294

## NOTES TO FINANCIAL STATEMENTS December 31, 1989, 1988, and 1987

### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

#### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

### (c) Revenue Recognition

Revenues are based on month-end meter readings.

## (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs, and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of the allowance. The interest capitalized is determined by applying the effective rate on the REA Promissory Note to qualifying assets included in construction in progress. Capitalization of interest is discontinued when the project is completed and the asset is ready for ser-

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Big Rivers has reduced its Production Steam Plant depreciation rate from 3.5 to 3.1 percent for the current year. A change was necessary to recognize the lower operating capacity factor for Big Rivers' generating system following the completion of a new

plant. This depreciation rate reduction will return Big Rivers to the recommended REA guideline. The effect of this change was to increase net margins \$5,039 in 1989. Annual rates used to compute depreciation are as follows:

Production plant	3%-3.10%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-20%
Unclassified plant	
in service	2.75%

#### (e) Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

#### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at weighted average cost.

#### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses, or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twentyfive years.

### (2) Utility Plant

The following summarizes utility plant:	1989	1988
Classified plant in service:		
Production plant	\$1,272,227	1,272,121
Transmission plant	78,910	77,399
Station equipment	87,928	87,447
General plant	15,628	13,943
Intangible	190	190
Unclassified plant in service	<u>-</u>	837
	1,454,883	1,451,937
Less accumulated depreciation	288,885	245,556
	1,165,998	$\overline{1,206,381}$
Construction in progress	4,163	1,227
	\$1,170,161	1,207,608

Construction in progress is comprised of several small projects. The average rate used for the capitalization of interest during construction in 1989 and 1988 was 7.7 percent and 1987 was 8.0 percent.

### (3) Deferred Charges

The following summarizes deferred charges:

	1989	1988
Unamortized debt expenses	\$ 8,901	9,539
Cravat coal contract amendment	3,097	4,618
Insurance claim	_	2,607
Deposit on coal contract buyout	2,500	_
Other	249	743
	\$14,747	17,507

With approval of REA, on September 29, 1987 and February 25, 1988, Big Rivers refinanced \$250,805 and \$319,426 of Federal Financing Bank (FFB) debt with long-term debt at lower interest rates and incurred refinancing expenses of \$2,937 and \$3,230, respectively. In November 1982, Big Rivers elected to refinance \$90,053 of FFB short-term mortgage notes with long-term notes at lower interest rates. As a result of this election, a refinancing expense of

\$4,600 was incurred. These expenses were being amortized over the life of the refinanced debt and are now being amortized over the term of the REA promissory note (see note 4).

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12,500 was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

In 1988, Big Rivers filed a claim with its insurer to recover certain costs of repairs to a turbine. Costs incurred, in excess of the policy deductible, to repair the turbine were deferred until settlement of the claim.

On July 18, 1989, Big Rivers entered into an agreement to buy out a high-cost, long-term coal supply contract. Closing of this agreement is contingent upon, among other things, Big Rivers obtaining sultable financing and KPSC approval. Big Rivers has made a refundable deposit of \$2,500, representing less than 5 percent of the total cost of this agreement, which will apply to the final settlement.

#### (4) Long-term Liabilities

A summary of long-term liabilities follows:

A summary of rong-term habitures to nows.		
	1989	1988
Promissory note - REA 8.36%	\$ 929,016	1,091,308
Unamortized premium	210,594	144,341
	1,139,610	1,235,649
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 6.65%	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 6.65%	58,800	58,800
Obligation under purchased power contract (see note 7)	27,600	23,800
Other sundry borrowings	4,549	7,671
Total long-term habilities	1,313,859	1,409,220
Less current maturities	38,193	57,163
	\$1,275,666	1,352,057

Promissory Note - REA:

Prior to 1987, Big Rivers incurred difficulty in obtaining rate increases from the KPSC. As a result, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due FFB for REA guaranteed loans. A working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover Trust Company, and Bank of New York, formerly Irving Trust Company, was formed to find a mutually acceptable way of resolving the financial situation. On August 28, 1987, Big Rivers and its creditors agreed in principle to accept a modified debt restructuring plan incorporating certain recommendations of the KPSC.

On March 30, 1988, the Debt Restructuring Agreement, dated as of August 31, 1987, was signed. The Debt Restructuring Agreement provides for a reverse amortization repayment schedule (payments will be applied to principal in a reverse manner as provided by a conventional loan amortization schedule) at an interest rate of 8.36 percent for the REA Promissory Note. The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a month-end cash balance of \$10,000, except at the end of December where Big Rivers may defer payment if the previous monthly payments have met the minimum requirements. In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on the FFB Guarantees and the CoBank (National Bank for Cooperatives [CoBank], formerly Louisville Bank for Cooperatives) Guarantees on a timely basis and will not seek to collect from Big Rivers, with respect to any REA debt, any amounts in excess of the obligation on the REA Promissory Note.

The impact of the Debt Restructuring Agreement has been accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers has accounted for the effects of the restructuring prospectively and has not changed the carrying amount of the debt. Interest expense is being computed on a conventional amortization method for accounting purposes rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. The effective interest rate for 1989 and 1988 on the REA Promissory Note was 7.608 and 7.676 percent, respectively. Accrued interest at December 31, 1987 was subsequently reduced by \$4,406, due to the retroactive effect of the Debt Restructuring Agreement. This amount has been recorded as a reduction in interest expense during 1988.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the Restated Mortgage and Security Agreement dated as of March 30, 1988, which was executed as part of the Debt Restructuring Agreement.

Other Long-Term Debt:

On September 29, 1987, the CoBank loaned Big Rivers \$250,805 to refinance higher interest rate FFB loans. Big Rivers issued three notes to three trusts established with CoBank, each guaranteed by the REA (a CoBank Guarantee) maturing from September 1988 through September 2017. Each trust has issued to CoBank certificates representing the beneficial interest in such trusts. In the same manner as the September 29, 1987 refinancing, on February 25, 1988, Big Rivers refinanced \$319,426 of higher interest rate FFB loans with a loan from CoBank. Big Rivers issued three notes to three trusts established with CoBank, each guaranteed by the REA (a CoBank Guarantee) maturing through February 2017. Each trust has issued to CoBank certificates representing the entire beneficial interest in such trusts. Big Rivers received a principal reduction of \$37,734 on the REA Promissory Note as a result of this refinancing. This principal reduction has been included in the unamortized premium account as part of the debt restructuring and will be realized prospectively through a lower effective interest rate.

On June 30, 1983, the County of Ohio, Kentucky issued \$58,800 of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. Prior to January 10, 1989, the weekly interest rate was a "Selected Percentage," not to exceed 110 percent of the couponequivalent 13-week U. S. Treasury Bills. Subsequent to January 10, 1989, these bonds will bear a variable rate of interest, determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Bank of New York irrevocable standby letter of credit, which is due to expire July 15, 1991, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds by January 31, 2010.

In November of 1982, the County of Ohio, Kentucky issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent or greater than 110

percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Manufacturers Hanover Trust Company irrevocable standby letter of credit, which is due to expire July 15, 1991, and is subject to renewal. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. While these bonds are not dated to mature until October 1, 2015, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds by January 31, 2010.

In January 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2,983 from the Jackson Purchase Electric Cooperative Corporation. On February 10, 1984, a board resolution was passed whereby Big Rivers was to assume from Jackson Purchase the loans associated with these facilities, pending REA approval. This debt is reflected in other sundry borrowings in 1988. On January 13, 1989, that resolution was rescinded and a revised resolution was passed whereby general funds would be used to pay Jackson Purchase for these transmission facilities. This debt was retired on November 28, 1989.

The aggregate maturities of long-term debt for each of the five years subsequent to December 31, 1989, are estimated to be as follows.

<u>Year</u>	REA Promissory <u>Note</u>	Other <u>Debt</u>	Total
1990	\$35,946	2,247	38,193
1991	33,442	3,827	37,269
1992	42,281	3,225	45,506
1993	50,779	3,180	53,959
1994	62,016	3,126	65,142

The maturities of long-term debt relating to the REA Promissory Note are dependent upon the available cash flow of Big Rivers. The above represents the maturities based on the minimum debt service payments required under the Debt Restructuring Agreement, except for 1990 which includes the effect of the actual January 1990 principal payment.

#### (5) Rate Matters

On August 10, 1987, the KPSC approved a rate request by Big Rivers, Rate Case 9885, which became effective September 1, 1987. The rate request included an increase in the demand charge of \$1.25 per kW, rdange to a ratchet billing for demand (where current rates are determined based on the highest metered demand in the past twelve months) and a variable rate to the aliminum smelters (see note 9) which will be effective for a ten-year period. The rates in the rate request were designed to recover Big Rivers' cost of providing service. The rates have been determined based on cost of service less specified levels of intersystem sales to nonmembers of approximately 200 megawatts. The variable rate for the aluminum smelters will fluctuate based on the price of aluminum within a defined minimum (18.1 mills per kWh) and maximum (44 mills per kWh). The range of revenues based on the variable aluminum rate compared to actual revenues billed were as follows:

	Ra	nge	
Year	Minimum	Maximum	Actual
1989	\$103,034	250,468	\$249,489
1988	100,135	243,422	243,422
1987	29,016	70,535	70,535

The aluminum smelters and Big Rivers filed appeals regarding the KPSC's decision on rates with the Franklin Circuit Court. On August 19, 1988, the Franklin Circuit Court affirmed the decision of the KPSC in Rate Case 9885. The case was appealed to the Kentucky Court of Appeals by the aluminum smelters. On January 26, 1990, the Kentucky Court of Appeals affirmed the decision of the Franklin Circuit Court. A petition for rehearing has been filed by the aluminum smelters and the Attorney General of the Commonwealth of Kentucky.

As required in KPSC Rate Case 9885, Big Rivers filed a subsequent rate request proposal on June 30, 1988, in Rate Case 10265. A rate increase of \$1.30 per kW in the demand rate was requested. The KPSC approved the request, which increased the demand rate to \$8.80 per kW, on December 21, 1988, to be effective January 1, 1989. The aluminum smelters filed appeals in the Franklin Circuit Court regarding the KPSC's decision. Those appeals are pending at December 31, 1989.

A complaint by the aluminum smelters has been filed with the KPSC seeking a reexamination of the variable rate as established in Case 9885. Since the KPSC in its Order for Case 9885 stated that Big Rivers was to file a rate proposal by July 1, 1990, and at this time the variable rate could be reviewed, Big Rivers has filed a motion with the KPSC to overrule or, alternatively, set the hearing not earlier than March 15, 1990.

On February 27, 1990, Big Rivers, the aluminum smelters, and Big Rivers' creditors reached an agreement which eliminated the 1990 review of the variable aluminum tariff, resolved a complaint by an aluminum smelter before the KPSC, and dismissed all pending KPSC appeals. This settlement, pending KPSC approval, allows Big Rivers and the distribution cooperatives to supply power to the aluminum smelters at an average cost equal to that contemplated in the Debt Restructuring Agreement (see note 4). While preserving the variable aluminum smelter rate, Big Rivers will receive revenue of 29.1285 mills per kWh effective 1990 through August 31, 1997, as adjusted for fuel cost, changes in governmental laws or regulations which increase cost of service by Big Rivers, and the load factor at which the smelters operate. This settlement was brought about in part by the high aluminum prices in 1989 and 1988, which caused the smelters to pay at or near the maximum rate of 44 mills per kWh. While Rig Rivers expects to maintain positive

cash flow, the agreed upon rate of 29.1285 mills per kWh will cause Big Rivers to sustain negative net margins in the next few years if additional intersystem sales to nonmembers are not achieved. In addition, the settlement modified certain default provisions under the Debt Restructuring Agreement to afford greater flexibility to Big Rivers from default in its debt payments.

As previously discussed, intersystem power sales to nonmembers is a component of full cost recovery under Big Rivers' rate design. During 1989, a twenty-one year intersystem power sales contract of 200 megawatts was executed with Indianapolis Power & Light Company (IPL). This contract has been approved by the REA, and KPSC, and is pending approval by the Indiana Utility Regulatory Commission. All interconnection agreements to deliver the power to IPL have been executed and approved by the appropriate parties. A long-term firm power purchase agreement has also been reached with Oglethorpe Power Corporation (Oglethorpe Power). Oglethorpe Power is a joint owner of the Georgia Integrated Transmission System which interconnects with the transmission system of the Tennessee Valley Authority (TVA). This is a three-year agreement commencing on August 1, 1989 to sell and deliver Oglethorpe Power 200 megawatts of long-term firm capacity and associated energy.

Big Rivers' ability to recover costs is dependent upon the continued success of Big Rivers in maintaining the granted rate increases as described above in this note, and obtaining the third and final rate proposal as outlined in the KPSC August 10, 1987 order.

In December 1989, the area served by Big Rivers' members experienced extremely cold temperatures resulting in windchill readings 45 to 50 degrees below zero, in consequence of which Big Rivers experienced an all-time peak demand of 1,177 MW. Big Rivers filed an application with the KPSC requesting authority to exclude this demand level in the ratchet hilling for the non industrial customers. The requested deviation from the current billing tariff was done to eliminate the adverse impact of the December weather-related demand peak. The KPSC authorized this adjustment on February 1, 1990.

#### (6) Income Taxes

Big Rivers was initially formed as a tax-exempt cooperative organization under Section 501(c)(12) of the Internal Revenue Code. To retain tax-emenant status under this code provision, at least 85 percent of the organization's income must be generated from sales to the cooperative's members. In 1983, sales to ununembers resulted in Big Rivers being unable to meet the 85 percent requirement. In a letter dated March 23, 1984, the Internal Revenue Service notified Big Rivers that effective for 1983 and subsequent years, it would be considered a taxable organization until such year that sales to members would satisfy the 85 percent requirement and Big Rivers formally reapplies for tax-exempt status.

The allowance for a deduction for patronage allocation for both accounting and income tax purposes results in no current or deferred income tax expense. The following analysis summarizes the net operating loss and investment tax credit carryforwards:

Net operating loss carryforward

Year of origination	Accounting purposes	Income tax purposes	Investment tax credit carryforward
1983	\$ 10,750	9,460	270
1984	9,340	87,500	56,300
1985	9,640	160,180	1,170
1986	123,650	154,790	_
1987	88,680	94,600	_
1988	14,490	14,440	_
1989	20,000	50,000	_
1000	20,000	-00,000	

These carryforwards may be utilized to offset taxable income for the period of fifteen years from the year of origination. The original amounts of investment tax credit carryover have been reduced by 35 percent to account for the reduction required pursuant to Section 49(c) of the Internal Revenue Code of 1986. The difference between accounting and tax losses is primarily due to accelerated depreciation methods being utilized for income tax purposes.

Statement of Financial Accounting Standards (SFAS) No. 96, Accounting for Income Taxes, was issued by the Financial Accounting Standards Board in December 1987. SFAS 96 requires a change from the deferred method to the asset and liability method of accounting for income taxes. This statement must be adopted in 1992.

#### (7) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City-owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 84 percent which is expected to decrease to 82 percent by 1994. The contracts expire in 2003.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to cetire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity, and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended, or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1989, 1988, and 1987 was \$29,600, \$33,993, and \$34,082, respectively. Such costs are appropriated for as power purchased.

A review of the projected capacity allocation has shown that Big Rivers' portion of Station Two capacity will be approximately 79 percent when the contracts expire in 2003. Therefore, Big Rivers has increased the amounts recorded on the balance sheet related to Station Two by \$3,800. The revision of such amounts on the balance sheet has no effect on net margins, since no changes have been made to date in the manner in which the payments made to the City are recovered in the rate-making process.

#### (8) Pension and Deferred Compensation Plans

Big Rivers has defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee

Retirement Income Security Act of 1974. Big Rivers has adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 87, Employers' Accounting for Pensions.

The following table sets forth the funded status of the plans and amount recognized on the balance sheet at December 31,

	1989	1988	1987
Actuarial present value of benefit obligation:			
Accumulated benefit obligation, including vested benefits	Ф 7.119	T 000	5 402
of \$7,075, \$5,206, and \$5,281	\$ 7,113	5,266	5,403
Projected benefit obligation for services rendered-to-date	\$ 9,546	6,794	7,304
Plan assets at fair value, primarily listed stocks and			
U.S. Treasury Bonds	11,157	10,097	9,696
Plan assets in excess of projected benefit obligation	1,611	3,303	2,392
Thursdaynized not tunnsition assets	(2,642)	(2,859)	(3,082)
Unrecognized net transition assets Unrecognized prior service cost	1,056	(2,000)	(0,002)
Unrecognized net loss (gain)	(1,155)	(910)	379
Unfunded accrued pension cost	\$(1,130)	(466)	(311)
Not newsign weets included the following (income) (arrenge		===	
Net pension costs included the following (income)/expense components:			
Service cost-benefits earned during the year	\$ 946	725	850
Interest cost on projected benefit obligation	421	482	451
Actual return on plan assets	(1,059)	(661)	(493)
Amortization of transition assets	(220)	(220)	(220)
Amortization of prior service cost	96	(171)	(91.4)
Amortization and deferral of net loss (gain)	480	(171)	(214)
Net periodic pension costs	\$ 664	<u>155</u>	374
Assumptions used to develop the projected benefit obligation were:			
Though product and the description of the projection which	1000	1000	1005
	1989	1988	1987
Discount rates	8.5%	8.5%	7.5%
Rates of increase in compensation levels	4.0	4.0	4.0
Expected long-term rate of return on assets	8.5	8.5	7.5

Total expense related to the pension and deferred compensation plans was \$1,382, \$805, and \$1,069 in 1989, 1988, and 1987, respectively.

#### (9) Revenues and Major Customers

Operating revenues were as follows:

	1989	1988	1987
	<del></del>	<del></del>	
Members:			
Green River Electric Corporation Henderson-Union Rural Electric	\$173,839	171,364	124,931
Cooperative Corporation Jackson Purchase Electric	146,449	136,434	75,156
Cooperative Corporation Meade County Rural Electric	20,166	17,659	14,722
Cooperative Corporation	10,755	9,543	8,168
Nonmembers	38,668	64,177	77,020
Other Revenue	100	101	87
	\$389,977	399,278	300,084

National-Southwire Aluminum Company and Alcan Aluminum Corporation (the aluminum smelters) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

Year Green River		Henderson-Union	Combined	
1989	\$133,124	126,214	259,338	
1988	133,598	119,338	252,936	
1987	92,026	60,102	152,128	

In 1988 and 1987, revenue from the TVA, a nonmember, accounted for 11.6 and 20.6 percent of operating revenues.

Big Rivers agrees to indemnify its member cooperatives by performing their power supply agreements with certain industrial customers and accepting only such payment therefore as each member receives from its customers.

Receivables from members at December 31, 1989, 1988, and 1987 were \$29,081, \$29,610, and \$29,500, respectively.

#### (10) Litigation

As discussed in note 5, the aluminum smelters and the Attorney General of the Commonwealth of Kentucky have filed appeals regarding the KPSC's approval of the Debt Restructuring Agreement and the KPSC's decisions on rates in Case 10265 with the Franklin Circuit Court. Those appeals

are pending at December 31, 1989.

There are a number of other pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

# COMPARATIVE STATISTICAL ANALYSIS -

	1989	1988	1987	1986
Operating Revenues	\$ 389,976,759	399,277,507	300,084,362	227,664,219
Expenses: Operation and Maintenance Purchased Power and	170,941,916	187,344,006	169,931,331	130,991,511
Interchanged, Net	35,434,879	39,158,896	39,146,440	38,214,277
Depreciation and Amortization	44,333,598	49,310,860	53,555,259	18,798,750
Taxes	4,011,142	3,906,621	3,817,850	2,515,787
Interest	101,748,177	103,607,079	124,351,304	51,520,808
Other	771,342	616,025	597,798	235,101
Total	357,241,054	383,943,487	391,399,982	242,276,234
Operating Margins (Loss)	32,735,705	15,334,020	(91,315,620)	(14,612,015)
Nonoperating Margins (Loss)	2,397,614	3,474,999	2,684,774	(26,613,024)
Net Margins (Loss)	\$ 35,133,319	18,809,019	(88,630,846)	(41,225,039)
Utility Plant at Cost	\$ 1,454,882,990	1,451,937,802	1,448,581,890	1,452,144,009
Construction Work in Progress	4,162,708	1,226,596	1,448,505	2,080,925
Total Electric Plant	1,459,045,698	1,453,164,398	1,450,030,395	1,454,224,934
Less Accumulated Depreciation	288,884,804	245,556,080	196,710,029	143,479,823
Utility Plant Net	\$ 1,170,160,894	1,207,608,318	1,253,320,366	1,310,745,111
Total Assets	\$ 1,322,367,888	1,386,197,045	1,421,349,400	1,438,564,861
System Peak Demand - MW	1,177	1,157	990	993
Net Generating Capacity Owned - MW	1,459	1,459	1,459	1,448
Net HMP&L Capacity Purchased - MW		264	270	271
Other Purchased Capacity - MW	178	178	178	178
Sales to Members - MWh	8,072.76	7,814.61	6,271.32	6,211.79
Sales to Non-Members - MWh	1,500.96	3,188.51	3,993.08	3,303.68
Generated - MWh	8,047.11	9,270.21	8,321.80	6,609.70
Purchased HMP&L Energy - MWh	1,388.66	1,716.20	1,932.61	1,631.87
Other Purchased Energy - MWh	314.14	262.04	284.69	336.38
System Load Factor - %	80.0	77.6	75.5	74.1
Permanent Employees at Year-End	857	855	856	863
Average Cost of Coal Used				
Price Per Ton	27.82	28.05	27.48	27.83
$\phi/MM$ BTU	126.5¢	125.7¢	124.3¢	127.6¢

# TEN YEAR SUMMARY

1985	1984	1983	1982	1981	1980
236,023,720	258,019,579	258,276,967	232,716,033	240,476,418	179,429,591
133,779,910	143,358,327	136,539,322	124,675,180	120,266,830	91,232,809
39,792,228 17,788,717 2,353,021 39,645,856 195,269	47,494,014 $18,533,362$ $2,269,307$ $39,747,343$ $150,834$	55,494,464 17,782,446 2,202,576 38,198,269 136,778	46,342,616 17,548,448 1,970,317 40,467,426 149,400	58,848,412 17,073,065 1,817,332 37,092,495 92,954	52,947,305 11,516,775 1,441,297 18,528,992 56,197
233,555,001	251,553,187	250,353,855	231,153,387	235,191,088	175,723,375
2,468,719 1,050,605	6,466,392 (1,726,877)	7,923,112 994,948	1,562,646 1,968,247	5,285,330 1,677,561	3,706,216 1,080,410
3,519,324	4,739,515	8,918,060	3,530,893	6,962,891	4,786,626
539,998,444 833,505,325	533,597,067 745,589, <b>26</b> 6	531,772,691 653,519,304	495,105,598 451,265,803	483,371,934 173,576,481	313,289,264 186,458,271
1,373,503,769 124,841,130	1,279,186,333 106,923,761	1,185,291,995 91,374,775	946,371,401 74,720,991	656,948,415 58,643,004	499,747,535 42,843,216
1,248,662,639	1,172,262,572	1,093,917,220	871,650,410	598,305,411	456,904,319
1,409,490,616	1,332,830,420	1,225,799,340	1,029,256,522	708,233,625	560,828,507
1,042	1,027	952	947	956	948
1,039 271 178	1,039 268 190	1,039 270 140	1,039 $253$ $140$	816 253 140	816 256 140
6,908.67 3,290.11	7,390.75 2,075.96	6,719.42 2,098.82	6,420.88 1,106.37	7,482.78 1,455.27	7,529.34 475.36
6,447.45 1,779.65 291.98	6,876.37 1,882.22 666.72	$6,474.14 \\ 1,724.84 \\ 790.65$	5,848.11 1,127.18 681.21	6,164.23 1,822.87 1,097.02	5,187.78 1,989.04 966.38
78.1	84.1	78.4	74.8	87.1	88.7
827	835	794	680	667	622
30.25 137.7¢	29.91 135.6¢	30.38 L38.4¢	30,68 143.3¢	28.26 132.9¢	26.14 123.5

### CORPORATE DIRECTORY

**OFFICERS** 

Morton Henshaw

President

Edward F. Johnson

Vice President

William B. Briscoe

Secretary-Treasurer

J. D. Cooper

Assistant Secretary-Treasurer

GENERAL MANAGER

W. H. Thorpe

ASSISTANT GENERAL MANAGER

Paul A. Schmitz

DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation

Marion Cecil

Edward F. Johnson

Sandra Wood

Henderson-Union Rural Electric

Cooperative Corporation

William Briscoe

Morton Henshaw

C. G. Truitt

Jackson Purchase Electric

Cooperative Corporation

Johnny L. Hamm

Ralph Hardin

Edwin L. Reid

Meade County Rural Electric

Cooperative Corporation

John C. Burnett

J. D. Cooper

Joseph A. Hamilton

VICE GENERAL MANAGERS

J. E. Dolezal

Energy Supply

Richard Greenwell

Production

Ronald W. Johnson

Administrative Services and

Human Resources

B. Scott Reed

Engineering and Transmission

Paul A. Schmitz

Finance

W. Hayden Timmons

Environmental and Public Affairs

MANAGERS

Don E. Augenstein

Corporate Services

Gregory F. Black

Environmental Affairs

C. William Blackburn

General Accounting

Joe L. Craig

Fuels

James V. Haner

Taxes, Insurance & Budgets

Travis D. Housley

Engineering and Corporate Planning

Bill Johnson

Economic Development

Don C. Mann

Purchasing

Tom Millay

Human Resources

James H. McIllwain

Construction

Benjamin Urbanek

Energy Control

Phil Waggoner

Information Systems

John West

Financial Services

SUPERINTENDENTS

Steve Moss

Wilson Plant

Bruce Shelton

Coleman Plant

Barry Wood

Reid/Green Plants

Virgil Mitchell

Transmission and Substations

CORPORATE ATTORNEY

Morton Holbrook

General Counsel

Holbrook, Wible,

Sullivan & Helmers P.S.C.

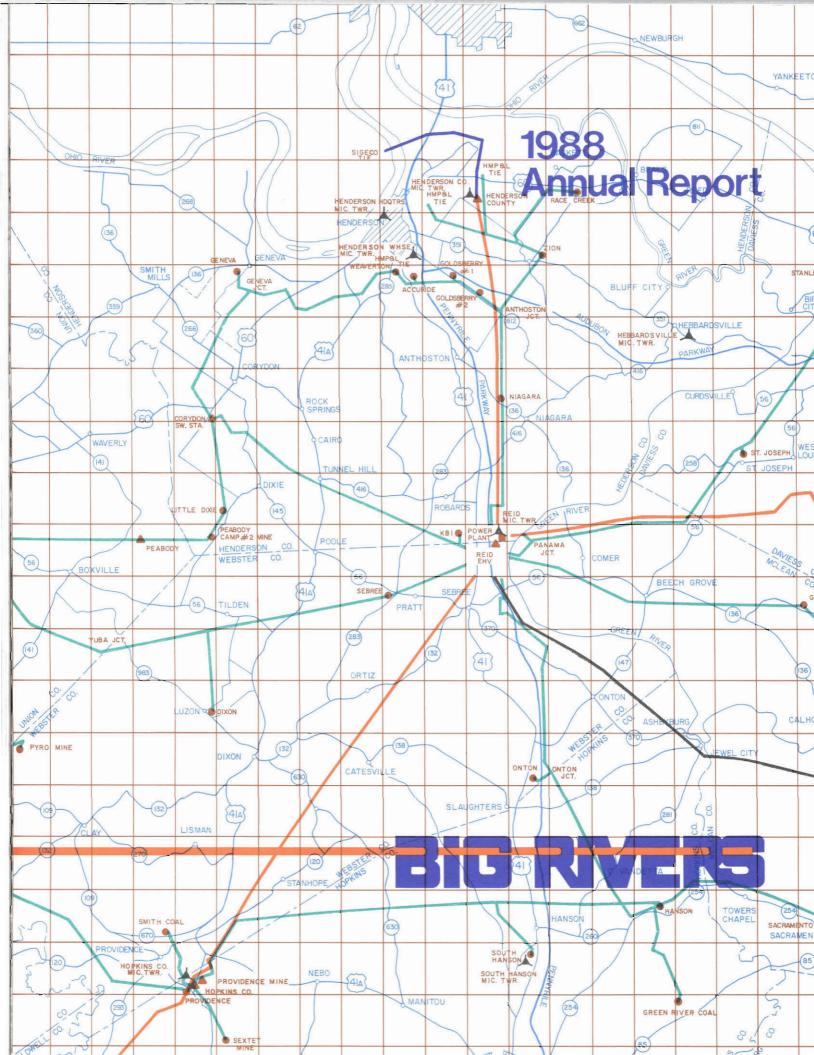
Owensboro, Kentucky

CORPORATE AUDITORS

KPMG Peat Marwick

Louisville, Kentucky





## FINANCIAL HIGHLIGHTS

(Dollars in thousands)

	1988	1987	Increase (Decrease)	%Increase (Decrease)
Operating Revenues	399,278	300,084	99,194	33.1
Operating Expenses	279,721	266,450	13,271	5.0
Net Margins (Loss)	18,809	(88,631)	107,440	<del></del>
Construction Expenditures Energy Sales (Megawatt Hours)	3,409	3,272	137	4.2
To Members	7,814,607	6,271,315	1,543,292	24.6
Intersystem	3,188,515	3,993,075	(804,560)	(20.1)
System Peak Demand in				
Megawatts	1,157	990	167	16.9
Cost of Fuel Used in	,			
Generation	121,705	108,791	12,914	11.9
Assets	1,386,197	1,421,349	(35, 152)	(2.5)
Accumulated Margins and Equity	(64,540)	(83,349)	18,809	-
Employees Full Time	855	856	(1)	(.1)
Revenue Per kWh Sold (Mills)	36.28	29.23	7.05	24.1

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Flow for application to amounts owed them under reimbursement agreements supporting their letters of credit issued for County of Ohio, Kentucky, Pollution Control Bonds totaling \$142,000,000, and REA receives the remainder.

Financial: Revenues for 1988 were \$399 million, up \$100 million from 1987. This increase resulted primarily from the increase in power consumed by the aluminum smelters, which operated at full capacity for most of the year, and the rate increase approved on September 1, 1987. Net margins of \$18.8 million were at the highest level in Big Rivers' history. This level was attained principally from the variable rates applicable to the aluminum smelters. The price of aluminum was above 80 cents a pound for the entire year, allowing Big Rivers to charge the maximum of 44 mills per kilowatt hour (kWh) consumed by the smelters. Had the price of aluminum been at 45 cents a pound or less for the entire year, and all other things been equal, Big Rivers would have charged the smelters 18.1 mills per kWh, would have had \$143 million less in revenues, and would have incurred a negative margin of \$124 million,

Fuel costs were \$123 million, up \$15 million from 1987, reflecting an increase in sales to 11 billion kWh, up 739 million kWh. Interest costs were \$103.6 million, down \$20.8 million, reflecting a \$4.7 million adjustment recorded during 1988 for interest expensed in 1987. Agreement executed on March 30, 1988, was retroactively effective to August 31, The remaining \$16.1 million decrease resulted from a decrease in the effective interest rate from 8.94 percent to 7.77 percent realized with the execution of the agreement and the second refinancing of \$319 million under the Burdick amendment completed on February 25.

Energy Supply: During the hot, dry summer of 1988, utility system load demands grew daily and it appeared there would be no end to the setting of new record peaks. The Big Rivers' system was no exception. On Monday, June 1, the system peaked at 1,050 megawatts, exceeding an all-time peak load of 1,042 megawatts set in January 1985. Daily system peaks continued to hover slightly above the 1,000 megawatt level un-

til June 13, when an all-time record of 1,113 megawatts was set. The 1,113 megawatt peak stood throughout the month of July, but was broken with a record demand of 1,157 megawatts on August 18.

There were several contributing factors to Big Rivers' record-setting demands. The most significant being the return to service of Alcan's third potline, an increase of approximately 100 megawatts, plus an increase in demand by NSA of 35 megawatts.

The heating and cooling degree days for 1988 totalled 6,322, which exceeded the 1987 total of 5,913 by 409 degree days.

Revenue from intersystem power sales totalled \$64 million, compared to \$77 million during 1987. The decrease in off-system sales revenue was due in part to the increase of system loads resulting in less capacity and energy being available for intersystem sales.

Sales to Big Rivers' member cooperatives totaled 7,814,607,074 kWh, an increase of 1,543,291,661 kWh, or 24.6 percent over 1987. The growth rate of "non-smelter" electric energy usage over the past two years has exceeded previous levels, increasing at an average annual rate of 4.23 percent.

<u>Fuels:</u> Big Rivers burned 5.13 million tons of coal in generating electricity, an average of 14,013 tons per day. This compares with 4.82 million total tons, 13,215 tons per day, burned in 1987.

The average cost of coal used in generating electricity was \$28.05 per ton, 125.7 cents per million British Thermal Units (BTU). This compares with \$27.48 per ton, 124.3 cents per million BTU last year.

Coal inventories were increased to 77 days supply at the beginning of 1988 in preparation for a possible United Mine Workers strike at the expiration of the labor contract in January. A new contract was negotiated without a strike, and the inventories were reduced during the year to 56 days at year-end.

Coal requirements during 1988 were supplied almost entirely by the minimum quantities required to be received under long-term and medium-term coal contracts. About three-fourths of the requirements were supplied from mines in

western Kentucky, providing approximately 700 jobs in coal mining and transportation in the service areas of Big Rivers' member cooperatives.

The Green and Wilson Plants both are equipped with flue-gas desulfurization scrubbers, and these plants burn western Kentucky high-sulfur coal. The older Coleman and Reid Plants and Henderson Station Two, which are not equipped with scrubbers, burn lower-sulfur coal (necessary for compliance with sulfur dioxide emissions regulations) from western Kentucky and southern Indiana.

The scrubber sludge and ash produced at the Green and Wilson Plants are hauled by truck to nearby surface mines for disposal. This allows economical disposal of the large quantities of waste material produced by the scrubbers.

Engineering And Transmission: Big Rivers is seeking a buyer for up to 200 megawatts of capacity on a long-term basis. Several proposals have been made to regional utilities in response to specific inquiries. Market prospects have been enhanced by the hot summer of 1988 with its record-setting peak demands incurred by many utilities.

Three 69 kV transmission line projects totaling 16 miles were completed this year. Eleven miles were built on the Meade County Rural Electric Cooperative Corporation system, creating a loop feed to two of their substations which will improve service reliability to the northern part of Meade County. The remaining five miles were built to serve two coal mine loads on the Henderson-Union Rural Electric Cooperative Corporation system.

Substation construction consisted of the modification of an existing 161 kV to 13.8 kV installation that serves one of Green River Electric Corporation's aluminum customers in Hancock County. The modification provided for additional operating flexibility and enhanced service reliability, and makes it possible to serve additional customers from this substation.

Two aging and failing multi-paired communication system cables have been replaced with a fiber optic system to add reliability and remove the danger of electrical shock when servicing the cable and termination equipment.

Today's engineering standards and practices were used to evaluate the protective relaying systems employed by our older power plants. This evaluation resulted in the replacement of some systems, and the addition of some protection that was not in existence at the time of the original design. These enhancements provide a higher level of protection for the generating equipment.

Transmission personnel began a large scale substation equipment maintenance program that resulted in the complete overhaul of 42 oil circuit breakers. Thirteen power transformers were tested, 1,600 relays were tested, and 170 meters were calibrated. Approximately 1,900 transmission line poles were treated for protection against internal decay and other damage. Seventy-five poles were found to be beyond repair and were replaced. One thousand acres of transmission line right-of-way was chemically treated or hand cleared.

Labor Relations And Corporate Affairs: The Labor Relations and Corporate Affairs Department successfully negotiated a new three-year labor contract with the International Brotherhood of Electrical Workers (IBEW) Local 1701. This contract provides wage increases for each year, an improvement in the retirement benefit formula, and a one-day bonus for one year of perfect attendance.

An audit of our Affirmative Action Program by the U.S. Department of Labor Office of Federal Contract Compliance found Big Rivers in compliance with all federal laws governing this program.

The Corporate safety program continues to set new records. Twenty-four supervisors were honored for having no reported injuries within their departments for the year. The Coleman Plant, with its 141 employees, broke all no-lost-time accident records by working two consecutive years without a lost-time injury. There were some 68,000 more man-hours worked in 1988; however, the accident rate per man-hour worked matched the preceding year's record low. Extensive safety training was under way covering the proper removal of asbestos materials and the new rigorous hazardous chemical regulations.

A full year of concentrated training for management and supervisory personnel was carried out throughout the Big Rivers' system. Closely related to the training program was the development and implementation of a new Performance Appraisal System for all employees.

Employees showed continuing interest in making themselves more valuable to the corporation with 47 employees receiving educational assistance, and nearly 10 percent of the employees took advantage of the confidential Employee Assistance Program.

Production: Plant efficiency and performance improvements continue to be of primary importance at all plants. With major emphasis on performance, average heat rate has improved for the third straight year and scrubber operating costs have been reduced. During the year we changed our preventive maintenance program to perform major turbine-generator overhauls every six years rather than every five years.

Henderson Unit No. 1 was removed from service in September 1988, for a routine turbine-generator inspection/over-haul, replacement of condenser tubes, and removal of asbestos from the turbine-generator and mill areas.

Coleman Unit No. 3, which failed on November 15, 1987, during attempts to bring it on line following routine maintenance, was returned to service on April 3, 1988. Portions of the turbine and generator were damaged; and cost of repairs was \$3,200,000. The failure was covered by insurance, but at year-end we had not settled the claim with the insurance carrier.

The stack liner on Green Unit No. 1 was replaced with a titanium-clad liner. The Green Unit No. 2 stack liner is scheduled for replacement during the spring of 1989.

The maintenance management system has been extended into the Electrical and Instrumentation Department.

The Technical Training Coordinator position was filled in July of 1988, and a comprehensive technical training program is being assembled with training to begin in January 1989. The training will begin with supervisors, followed by operators,

and then expand into the Scrubber, Mechanical, and Instrument and Electrical Departments.

Environmental: The Environmental Department, in addition to continued efforts in obtaining water discharge permits for the Coleman and Wilson Plants, carried out several special studies in support of the Production Department, and participated in a national study of proposed acid rain legislation. The Central Laboratory began analyzing oils for polychlorinated biphenyls (PCBs) for Big Rivers and its member cooperatives.

Personnel: Joseph A. Hamilton, vice president of Meade County RECC, joined our board in January, replacing William E. Seaton, who retired in 1987. Mr. Hamilton has served Meade County RECC since 1975. Ralph Hardin, a member of Jackson Purchase Electric Cooperative Corporation Board of Directors since 1981, replaced Bill Doom on our board in June.

Earl Millspaugh, Vice General Manager of Production and Construction, will retire on February 1, 1989. Richard Greenwell has been appointed to fill Mr. Millspaugh's position. Mr. Greenwell has been employed by Big Rivers in various production positions since 1967.

Summary: Big Rivers' employees continue to be a very positive force in our progress, and management and the Board of Directors are extremely grateful for their efforts. The new three-year contract, the low employee turnover rate, the employee safety record, and the employees' desire to improve productivity exemplify the cooperative spirit.

A full year of operation in a stable, positive atmosphere has been extremely gratifying for the directors and employees of the organization. However, all of us must continue to be diligent in operating as efficiently as possible to provide reasonably priced electricity to Big Rivers' 79,306 consumers. We pledge our strongest efforts to this end.

Morton Henshaw President, Board of Directors

William H. Thorne

William H. Thorpe General Manager

## INDEPENDENT AUDITORS' REPORT

The Board of Directors
Big Rivers Electric Corporation:

We have audited the balance sheets of Big Rivers Electric Corporation as of December 31, 1988 and 1987 and the related statements of revenues and expenses, equities and cash flows for the years then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and signicant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation at December 31, 1988 and 1987, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

As discussed in note 1 to the financial statements, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No. 101 entitled "Regulated Enterprises - Accounting for the Discontinuance of Application of SFAS No. 71." Big Rivers, in accordance with the transition

provisions of SFAS 101, is delaying application until 1989. Accordingly, adjustments which may result from the application of this pronouncement, if any, have not been recognized in the accompanying financial statements.

As discussed in notes 2, 5 and 10 to the financial statements, on March 30, 1988, Big Rivers and its creditors entered into a Debt Restructuring Agreement whereby government related debt was restructured into a Total Government Debt Note. The principal repayments of the Total Government Debt Note are contingent upon the available cash flow, as defined by the Debt Restructuring Agreement. Big Rivers' ability to recover its costs and repay its debt is dependent upon the continued success of Big Rivers in maintaining the two granted rate increases which have been appealed, obtaining the third and final rate proposal as outlined in the KPSC August 10, 1987 order and selling approximately fifteen percent of capacity to nonmembers. The ultimate outcome of these matters cannot presently be determined. Accordingly, no adjustments relating to the recoverability and classification of reported asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties have been recognized in the accompanying financial statements.

Peat Marwick Main & Co.

Louisville, Kentucky February 7, 1989

## STATEMENTS OF REVENUES AND EXPENSES

	(In thousands)	
	Years ended 1988	December 31, 1987
Operating revenues (note 9)	\$399,278	300,084
Operating expenses: Operations:		<del>.</del>
Fuel for electric generation Power purchased and interchanged, net Other Maintenance	121,705 39,158 41,896	108,791 39,146 39,725
Depreciation and amortization Taxes	23,744 49,311 3,907	21,415 53,555 3,818
Total operating expenses	279,721	266,450
Electric operating margins	119,557	33,634
Interest and other deductions: Interest (note 5) Allowance for borrowed funds used during construction (note 3)	103,643	124,410 (59)
Other deductions	616	598
Total interest and other deductions	104,223	124,949
Operating margins (loss)	15,334	(91,315)
Nonoperating margins Interest earned Other	3,405 66	2,684
	3,471	2,684
Other capital credits and patronage allocations	4	_
Net margins (loss)	\$18,809	(88,631)

See accompanying notes to financial statements.

(In thousands)

#### Years ended December 31, 1988 and 1987

Other equities Donated Consumers' Accumulated Accumulated capital contributions Total deficit deficit -Patronage and to equities operating nonoperating capital memberships debt service Balance at December 31, 1986 5,282 (14,612)(26,614)42,063 764 3,681 Margins (loss) for 1987: Operating (91,315)(91,315)2,684 Nonoperating 2,684 Balance at December 31, 1987 42,063 3,681 (83,349)(105,927)(23,930)764 Margins for 1988: 15,334 15,334 Operating Nonoperating 3,471 3,471 Other capital credits and patronage allocations 4 4 (33,310)33,310 Patronage Allocation 3,681 Balance at December 31, 1988 \$(64,540) (123,899)(20,459)75,373 764

See accompanying notes to financial statements.

### BALANCE SHEETS

	(In thousar	nds)
Assets	Decen 1988	nber 31, 1987
Utility plant, net (notes 2, 3 and 5)	\$1,207,608	1,253,320
Productive capacity under purchased		
power contract (note 7)	23,800	25,700
Other deposits and investments, at cost	4,754	3,898
Current assets:		
Cash and temporary cash investments (note 5)	56,295	24,584
Receivables (note 9)	37,236	52,935
Fuel for electric generation	23,357	30,730
Material and supplies	15,640	15,825
Total current assets	1.32,528	124,074
Deferred charges (note 4)	17,507	14,357
	\$1,386,197	1,421,349
Equities  Long-term liabilities (notes 2 and 5):	\$ (64,540)	(83,349)
	ψ (01,010)	(00,010)
Restructured debt	1,091,308	1,287,149
Unamortized premium	144,341 1,235,649	1,287,149
Other long-term debt	168,883	
		170,783
Total long-term liabilities Less current maturities	1,404,532 57,163	1,457,932 9,344
Total long-term liabilities	1,404,532	1,457,932
Total long-term liabilities Less current maturities Total long-term liabilities,	1,404,532 57,163	1,457,932 9,344
Total long-term liabilities Less current maturities Total long-term liabilities, net of current maturities	1,404,532 57,163 1,347,369	1,457,932 9,344 1,448,588
Total long-term liabilities Less current maturities Total long-term liabilities, net of current maturities  Total capitalization	1,404,532 57,163 1,347,369	1,457,932 9,344 1,448,588
Total long-term liabilities Less current maturities  Total long-term liabilities, net of current maturities  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2 and 5)	1,404,532 57,163 1,347,369	1,457,932 9,344 1,448,588
Total long-term liabilities Less current maturities  Total long-term liabilities, net of current maturities  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2 and 5) Accounts payable	1,404,532 57,163 1,347,369 1,282,829	1,457,932 9,344 1,448,588 1,365,239
Total long-term liabilities Less current maturities  Total long-term liabilities, net of current maturities  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2 and 5)	1,404,532 57,163 1,347,369 1,282,829	1,457,932 9,344 1,448,588 1,365,239
Total long-term liabilities Less current maturities  Total long-term liabilities, net of current maturities  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2 and 5) Accounts payable	1,404,532 57,163 1,347,369 1,282,829 57,163 18,511	1,457,932 9,344 1,448,588 1,365,239 9,344 18,521
Total long-term liabilities Less current maturities  Total long-term liabilities, net of current maturities  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2 and 5) Accounts payable Accrued expenses	1,404,532 57,163 1,347,369 1,282,829 57,163 18,511 26,169	1,457,932 9,344 1,448,588 1,365,239 9,344 18,521 26,916

### STATEMENTS OF CASH FLOWS

		In thousands)
	Years ended 1988	December 31, 1987
Cash flows from operating activities:		
Net margins (loss) Adjustments to reconcile net margins (loss) to cash provided by operating activities:	\$ 18,809	(88,631)
Depreciation and amortization Amortization of deferred charges Interest expense refinanced with REA	49,796 3,043	53,995 2,232
borrowings Allowance for borrowed funds used	_	87,406
during construction Change in assets and liabilities:	(36)	(59)
Receivables Fuel for electric generation Material and supplies Accounts payable Accrued expenses	15,699 7,373 185 (10) (747)	(23,501) $(2,300)$ $(1,031)$ $(1,436)$ $19,781$
Other, net	(3,605)	47
Net cash provided by operating activities	90,507	46,503
Cash flows from investing activities:		
Construction expenditures Refund from vendor relating to construction expenditures	(4,048)	(3,213) 6,702
Net cash provided by (used in) investing activities	(4,048)	3,489
Cash flows from financing activities:		
Principal payments on long-term debt Proceeds from sale of cooperative	(370,926)	(283,622
utility trusts Capitalized refinancing expenses	319,426 (3,248)	250,80€ (2,920
Net cash used in financing activities	(54,748)	(35,737
Net increase in cash and temporary cash investments	\$31,711	14,255
Supplemental cash flow information - Cash paid relating to interest expense	\$105,867	34,294

See accompanying notes to financial statements.

### NOTES TO FINANCIAL STATEMENTS

December 31, 1988, 1987 (Dollars in thousands)

#### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

#### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Revenue Recognition

Revenues are based on month-end meter readings.

#### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Annual rates used to compute depreciation are as follows:

Production plant	3%-3,50%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-20%
Unclassified plant	
in service	2,75%

#### (e) Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

#### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at weighted average cost.

#### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year is capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins are used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance is allocated to patrons on a patronage basis and any amount so allocated is included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

#### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (i) Statement of Financial Accounting Standards No. 101

In December of 1988, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No. 101 entitled "Regulated Enterprises - Accounting for the Discontinuance of Application of SFAS No. 71." In accordance with the transition provisions of SFAS No. 101, Big Rivers is delaying application of the statement until 1989. Accordingly, adjustments resulting from the application of this pronouncement, if any, have not been determined.

#### (2) Rate Matters

On August 10, 1987, the KPSC approved a rate request by Big Rivers, Rate Case 9885, which became effective September 1, 1987. The rate request included an increase in the demand charge of \$1.25 per kW and a variable aluminum smelter rate where rates will fluctuate based on the price of aluminum within a defined minimum and maximum price. During 1988, Big Rivers received the highest allowable variable smelter rate as aluminum prices were at the defined maximum. The order also stated that Big Rivers should file subsequent rate proposals on or before July 1, 1988 and July 1, 1990. The aluminum smelters and Big Rivers filed appeals regarding the KPSC's decision on rates with the Franklin Circuit Court. On August 19, 1988, the Franklin Circuit Court affirmed the decision of the KPSC in Rate Case 9885. The case has now been appealed to the Kentucky Court

of Appeals by the aluminum smelters. Those appeals are pending at December 31, 1988.

As required in KPSC Rate Case 9885, Big Rivers filed a subsequent rate request proposal on June 30, 1988, in Rate Case 10265. A rate increase of \$1.30 per kW in its demand rate was requested. The KPSC approved the requested rate increase on December 21, 1988, to be effective January 1, 1989. The aluminum smelters filed appeals in the Franklin Circuit Court regarding the KPSC's decision. Those appeals are pending at December 31, 1988.

Big Rivers' ability to recover costs is dependent upon the continued success of Big Rivers in maintaining the two granted rate increases which have been appealed, obtaining the third and final rate proposal as outlined in the KPSC August 10, 1987 order and selling approximately 15 percent of capacity to non-members.

#### (3) Utility Plant

The following summarizes utility plant:

	1988	1987
Classified plant in service:		
Production plant	\$1,272,121	1,270,902
Transmission plant	77,399	43,389
Station equipment	87,447	86,413
General plant	13,943	13,408
Intangible	190	190
Unclassified plant in service	837	34,279
	1,451,937	1,448,581
Less accumulated depreciation	245,556	196,710
	1,206,381	1,251,871
Construction in progress	1,227	1,449
	\$1,207,608	1,253,320

Construction in progress is comprised of several small projects. The average rates used for the capitalization of interest during construction in 1988 and 1987 were 8.0 percent and 9.9 percent, respectively.

#### (4) Deferred Charges

The following summarizes deferred charges which include certain other assets:

1988	1987
\$9,539	6,786
4,618	6,360
2,607	6
743	1,205
\$17,507	14,357
	\$9,539 4,618 2,607 743

With approval of REA, on September 29, 1987, and February 25, 1988, Big Rivers refinanced \$250,805 and \$319,426 of FFB debt with long-term debt at lower interest rates and incurred refinancing expenses of \$2,937 and \$3,230, respectively. In

November 1982, Big Rivers elected to refinance \$90,053 of FFB short-term mortgage notes with long-term notes at lower interest rates. As a result of this election, a refinancing expense of \$4,600 was incurred. These expenses were being amortized over the life of the refinanced debt and are now being amortized over the term of the restructured debt (see note 5).

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12,500 was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

Big Rivers has filed a claim with its insurer to recover certain costs of repairs to a turbine. Cost incurred, in excess of the policy deductible, to repair the turbine are being deferred until settlement of the claim.

#### (5) Long-term Liabilities

A summary of long-term liabilities follows:

	1988	1987
Restructured debt:		
REA 8.36% promissory note	\$1,091,308	_
Unamortized premium	144,341	_
REA 2% and 5% mortgage notes payable	_	83,557
Federal Financing Bank (FFB) 7.370% to 10.808% mortgage		
notes payable	_	696,294
Government arrearage	_	256,504
Louisville Bank for Cooperatives (LBC) cooperative		
utility trusts with interest at 9.3325% to 10.7825%	_	250,794
	1,235,649	1,287,149
Other long-term debt:		
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 7.0%	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 6.501%	58,800	58,800
Obligation due to Jackson Purchase Electric Cooperative		*
Corporation	2,983	2,983
Obligation under purchased power contract (see note 7)	23,800	25,700
	1,404,532	1,457,932
Less current maturities	57,163	9,344
	\$1,347,369	1,448,588

#### Restructured debt:

Prior to 1987, Big Rivers incurred difficulty in obtaining rate increases from the KPSC. As a result, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due FFB for REA guaranteed loans. These amounts are reflected in government arrearage in 1987. A working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover Trust Company and Irving Trust Company was formed to find a mutually acceptable way of resolving the financial situation. On August 28, 1987, Big Rivers and its creditors agreed in principle to accept a modified debt restructuring plan incorporating certain recommendations of the KPSC.

On March 30, 1988, the Debt Restructuring Agreement, dated as of August 31, 1987, was signed. Except for the concept of a Total Covernment Debt Note (the REA Promissory Note), the Debt Restructuring Agreement basically incorporates the modified debt restructuring plan. The Debt Restructuring Agreement provides for an 8.36 percent reverse amortization of the REA Promissory Note. The Debt Restructuring Agreement establishes a minimum level of debt service payments, while requiring additional debt service payments depending on the available monthly cash flow, as defined by the Debt Restructuring Agreement. Big Rivers may retain for working capital needs a month end cash balance of \$10,000, except at the end of December where Big Rivers may defer payment if the previous monthly

payments have met the minimum requirements. In return for Big Rivers making all payments on the REA Promissory Note, the REA will make all payments required on the FFB Guarantees and the LBC Guarantees on a timely basis and will not seek to collect from Big Rivers, with respect to any REA Debt, any amounts in excess of the obligation on the REA Promissory Note.

The impact of the Debt Restructuring Agreement has been accounted for as a troubled debt restructuring involving a modification of terms. Accordingly, Big Rivers has accounted for the effects of the restructuring prospectively and has not changed the carrying amount of the debt. Interest expense is being computed on a conventional amortization method for accounting purposes rather than the reverse amortization method per the Debt Restructuring Agreement. The resulting difference is reflected as unamortized premium and will be adjusted throughout the term of the REA Promissory Note. The effective interest rate for 1988 on the REA Promissory Note was 7.676 percent. Accrued interest at December 31, 1987, was subsequently reduced by \$4,697 due to the retroactive effect of the Debt Restructuring Agreement. This amount has been recorded as a reduction in interest expense during 1988.

On September 29, 1987, the LBC loaned Big Rivers \$250,805 to refinance higher interest rate FFB loans. Big Rivers issued three notes to three trusts established with LBC, each guaranteed by the REA (an LBC Guarantee) maturing from September 1988 through September 2017. Each trust has issued to LBC certificates representing the beneficial interest in such trusts. In the

same manner as the September 29, 1987 refinancing, on February 25, 1988 Big Rivers refinanced \$319,426 of higher interest rate FFB loans with a loan from LBC. Big Rivers issued three notes to three trusts established with LBC, each guaranteed by the REA (an LBC Guarantee) maturing through February 2017. Each trust has issued to LBC certificates representing the entire beneficial interest in such trusts. Big Rivers received a principal reduction of \$37,734 on the REA Promissory Note as a result of this refinancing. This principal reduction was determined by discounting at 8.36 percent from August 31, 1987 the periodic savings to result from such refinancing. This principal reduction has been included in the unamortized premium account as part of the debt restructuring and will be realized prospectively through a lower effective interest rate.

#### Other long-term debt:

On June 30, 1983, the County of Ohio, Kentucky, issued \$58,800 of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. Prior to January 10, 1989, the weekly interest rate was a "Selected Percentage," not to exceed 110 percent, of the coupon-equivalent 13week U.S. Treasury Bills. Subsequent to January 10, 1989, these bonds will bear a variable rate of interest, determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not to exceed 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by an Irving Trust Company irrevocable standby letter of credit due to expire July 15, 1991. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. While these bonds are not dated to mature until June 1, 2013, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds by January 31, 2010.

In November of 1982, the County of Ohio, Kentucky, issued \$82,500 of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio, Kentucky issued Pollution Control Refunding Demand Bonds, Series 1985, the proceeds of which were used to refinance the 1982 Interim Bonds. The Refunding Bonds bear interest at a variable rate, which is the lesser of (a) 13 percent per annum or (b) a rate determined weekly by the Remarketing Agent, with the approval of Big Rivers, equal to the minimum rate necessary to remarket the bonds in a secondary market at par plus accrued interest, but not less than 40 percent or greater than 110 percent of an index based upon the weekly sales of 91-day U.S. Treasury Bills. These bonds are supported by a Manufacturers Hanover Trust Company irrevocable standby letter of credit due to expire July 15, 1991. The bonds are subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof. While these bonds are not dated to mature until October 1, 2015, pursuant to the Restructuring Agreement, Big Rivers is obligated to fully fund these bonds by January 31, 2010.

In January of 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2,983 from the Jackson Purchase Electric Cooperative Corporation. On February 10, 1984, a board resolution was passed whereby Big Rivers was to assume from Jackson Purchase the loans associated with these facilities, pending REA approval. On January 13, 1989, that resolution was rescinded and a revised resolution was passed whereby general funds will be used to pay Jackson Purchase for these transmission facilities.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the Restated Mortgage and Security Agreement dated as of March 30, 1988.

The aggregate maturities of long-term debt for each of the five years subsequent to December 31, 1988, are estimated to be as follows:

Year	Restructured debt	Other debt	Total	
1989	\$52,280	4,883	57,163	
1990	21,468	1,900	23,368	
1991	28,343	1,900	30,243	
1992	36,796	1,900	38,696	
1993	44,882	1,900	46,782	

The maturities of long-term debt relating to the restructured debt are dependent upon the available cash flow of Big Rivers. The above represents the maturities based on the minimum debt service payments required under the Debt Restructuring Agreement, except for 1989 which includes the effect of the actual January 1989 principal payment.

#### (6) Income Taxes

Prior to 1983, Big Rivers was tax exempt under Section 501 (c) (12) of the Internal Revenue Code which requires that at least 85 percent or more of income consist of amounts collected from members for the sole purpose of meeting losses and expenses. Nonmember gross income for the years 1983 through 1988 have exceeded the 15 percent allowable, therefore, Big Rivers has been a taxable cooperative for those years. The allowance for a deduction of patronage allocation results in no current or deferred income tax expense. The following analysis summarizes the net operating loss and investment tax credit carryforwards:

# Net operating loss carryforward

Year of origination	Accounting purposes	Income tax purposes	Investment tax credit carryforward
1983	\$10,750	9,460	270
1984	9,340	87,500	56,300
1985	9,640	160,180	1,170
1986	123,650	154,790	
1987	88,680	94,600	_
1988	14,490	16,740	_

These carryforwards may be utilized to offset taxable income for the period of 15 years from the year of origination. The original amounts of investment tax credit carryover have been reduced by 35 percent to account for the reduction required pursuant to Section 49(c) of the Internal Revenue Code of 1986.

#### (7) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 84 percent which is expected to decrease to 82 percent by 1993. The contracts expire in 2003.

Under the terms of the contracts with the City, Big Rivers bas agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the

principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1988 and 1987 was \$33,993 and \$34,082, respectively. Such costs are accounted for as power purchased.

#### (8) Pension and Deferred Compensation Plans

Big Rivers has defined benefit pension plans covering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

In 1987, Big Rivers changed its method of accounting for its defined benefit pension plans by adopting the provisions of Statement of Financial Accounting Standards (SFAS) No. 87, Employers' Accounting for Pensions.

The following table sets forth the funded status of the plans and amount recognized in the balance sheet at December 31,

	1988	1987
Actuarial present value of benefit obligation:		
Accumulated benefit obligation, including vested benefits of \$5,206 and \$5,281	\$5,266	5,403
Projected benefit obligation for services rendered to date	\$6,794	7,304
Plan assets at fair value, primarily listed stocks and		
U.S. Treasury Bonds	10,097	9,696
Plan assets in excess of projected benefit obligation	3,303	2,392
Unrecognized net transition assets	(2,859)	(3,082)
Unrecognized net loss (gain)	(910)	379
Unfunded accrued pension cost	\$(466)	(311)
Net pension costs included the following (income) /expense		
components:		
Service cost-benefits earned during the year	\$725	850
Interest cost on projected benefit obligation	482	451
Actual return on plan assets	(661)	(493)
Amortization of transition assets	(220)	(220)
Amortization and deferral of net gain	(171)	(214)
Net periodic pension costs	\$155	374

Assumptions used to develop the projected benefit obligation were:

	1988	1987	
Discount rates	8.5%	7.5%	
Rates of increase in compensation levels	4.0	4.0	
Expected long-term rate of return on assets	8.5	7.5	

Total expense related to the pension and deferred compensation plans was \$805 and \$1,069 in 1988 and 1987, respectively.

A-100	1988	1987
Members:		
Green River Electric Corporation	\$171,364	124,931
Henderson-Union Rural Electric	190 494	75 150
Cooperative Corporation  Jackson Purchase Electric	136,434	75,156
Cooperative Corporation	17,659	14,722
Meade County Rural Electric		
Cooperative Corporation	9,543	8,168
Nonmembers	64,278	77,107
	\$399,278	300,084

National-Southwire Aluminum Company and Alcan Aluminum Corporation purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation

for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

Year	Green River	Henderson-Union	Combined
1988	\$133,598	119,338	252,936
1987	92,026	60,102	152,128

Big Rivers agrees to indemnify its member cooperatives by accepting as full payment for power supplied to any of its members and sold by the member to an industrial customer, only such payment therefore as the member shall receive from its customer.

Receivables from members at December 31, 1988 and 1987 were \$29,610 and \$29,500, respectively.

#### (10) Litigation

As discussed in note 2, a suit was filed with the Kentucky Court of Appeals by the aluminum smelters regarding the KPSC's decision on rates in Case Number 9885 and the Franklin Circuit Court's affirmation of that decision. The aluminum smelters have filed appeals regarding the KPSC's approval of the Debt Restructuring Agreement and the KPSC's decisions on rates in

Case Number 10265 with the Franklin Circuit Court. Those appeals are pending at December 31, 1988.

There are a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers financial position or results of operations.

# COMPARATIVE STATISTICAL ANALYSIS -

	1988	1987	1986	1985
Operating Revenues	\$ 399,277,507	300,084,362	227,664,219	236,023,720
Expenses:				
Operation and Maintenance Purchased Power and	187,344,006	169,931,331	130,991,511	133,779,910
Interchanged, Net	39,158,896	39,146,440	38,214,277	39,792,228
Depreciation and Amortization	49,310,860	53,555,259	18,798,750	17,788,717
Taxes	3,906,621	3,817,850	2,515,787	2,353,021
Interest	103,607,079	124,351,304	51,520,808	39,645,856
Other	616,025	597,798	235,101	195,269
Total	383,943,487	391,399,982	242,276,234	233,555,001
Operating Margins (Loss)	15,334,020	(91,315,620)	(14,612,015)	2,468,719
Nonoperating Margins (Loss)	3,474,999	2,684,774	(26,613,024)	1,050,605
Net Margins (Loss)	\$ 18,809,019	(88,630,846)	(41,225,039)	3,519,324
Utility Plant at Cost	\$1,451,937,802	1,448,581,890	1,452,144,009	539,998,444
Construction Work in Progress	1,226,596	1,448,505	2,080,925	833,505,325
Total Electric Plant	1,453,164,398	1,450,030,395	1,454,224,934	1,373,503,769
Less Accumulated Depreciation	245,556,080	196,710,029	143,479,823	124,841,130
Utility Plant Net	\$1,207,608,318	1,253,320,366	1,310,745,111	1,248,662,639
Total Assets	\$1,386,197,045	1,421,349,400	1,438,564,861	1,409,490,616
March and March			-	
Member Maximum Demand — MW	1157	000	000	7.07
Installed Steam Generating	1,157	990	993	1,04
Capacity — Net MW	1,394	1,394	1,383	97
Purchased Steam Generating Capacity		L 20 04:	1,000	91
HMP&L Station Two — Net MW	264	2.70	271	27
Peaking and Standby Capacity	201		771.3	
Reid Combustion Turbine - MW	65	65	65	6
Purchased Peaking - MW	178	1.78	1.78	17
Purchased Standby - MW	0	0	0	
KWh — Millions —				
Sales to Members	7,814.61	6,271.32	6,211.79	6,908.6
Sales to Non-Members	3,188.51	3,993.08	3,303.68	3,290.1
Generated	9,270.21	8,321.80	6,609.70	6,447.4
Purchased				
HMP&L Station Two	1,716.20	1,932.61	1,631.87	1,779.6
Other	262.04	284.69	336.38	291.9
System Load Factor – %	77.6	75.5	74.1	7.8
Employees at Year-End	855	856	863	8.2
Average Cost of Coal Used				
Price Per Ton	28.05	27.48	27.83	30.2
¢ / MM BTU	125.7€	124.3¢	1.27.6 €	137.

# TEN YEAR SUMMARY

1979	1980	1981	1982	1983	1984
124,077,992	179,429,591	240,476,418	232,716,033	258,276,967	258,019,579
53,217,700	91,232,809	120,266,830	124,675,180	136,539,322	143,358,327
52,238,507 5,976,160 780,799 4,988,213 23,017	52,947,305 11,516,775 1,441,297 18,528,992 56,197	58,848,412 17,073,065 1,817,332 37,092,495 92,954	46,342,616 17,548,448 1,970,317 40,467,426 149,400	55,494,464 17,782,446 2,202,576 38,198,269 136,778	47,494,014 18,533,362 2,269,307 39,747,343 150,834
117,224.396	175,723,375	235,191,088	231,153,387	250,353,855	251,553,187
6,853,596 1,219,271	3,706,216 1,080,410	5,285,330 1,677,561	1,562,646 1,968,247	7,923,112 994,948	6,466,392 (1,726,877)
8,072,867	4,786,626	6,962,891	3,530,893	8,918,060	4,739,515
283,281,046 125,427,944	313,289,264 186,458,271	483,371,934 173,576,481	495,105,598 451,265,803	531,772,691 653,519,304	533,597,067 745,589,266
408,708,990 32,900,415	499,747,535 42,843,216	656,948,415 58,643,004	946,371,401 74,720,991	1,185,291,995 91,374,775	1,279,186,333 106,923,761
375,808,575	456,904,319	598,305,411	871,650,410	1,093,917,220	1,172,262,572
480,817,488	560,828,507	708,233,625	1,029,256,522	1,225,799,340	1,332,830,420
910	943	956	947	952	1,027
751	751	974	974	974	974
255	256	253	253	270	268
65 40 100	65 40 100	65 40 100	65 40 100	65 40 100	65 190 0
7,029.28 58.50 3,911.05	7,529.34 475.36 5,187.78	7,482.78 1,455.27 6,164.23	6,420.88 1,106.37 5,848.11	6,719.42 2,098.82 6,474.14	7,390.75 2,075.96 6,876.37
1,931.09 1,387.12 85.3 555	1,989.04 966.38 88.1 622	1,822.87 1,097.02 87.1 667	1,127.18 681.21 74.8 680	1,724.84 790.65 78.4 794	1,882.22 666.72 84.1 835
20.84 95.24	26.14 123.5¢	28.26 1.32.9¢	30.68 143.3¢	30.38 138.4¢	29.91 135.6¢

### CORPORATE DIRECTORY

**OFFICERS** 

Morton Henshaw

President

Edward F. Johnson

Vice President

William B. Briscoe

Secretary-Treasurer

Joseph A. Hamilton

Assistant Secretary-Treasurer

GENERAL MANAGER

W. H. Thorpe

ASSISTANT GENERAL MANAGER

Paul A. Schmitz

DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation

Marion Cecil

Edward F. Johnson

Sandra Wood

Henderson-Union Rural Electric

Cooperative Corporation

William Briscoe

Morton Henshaw

C. G. Truitt

Jackson Purchase Electric

Cooperative Corporation

Paul Buchanan

Ralph Hardin

Edwin Reid

Meade County Rural Electric

Cooperative Corporation

John C. Burnett

J. D. Cooper

Joseph A. Hamilton

VICE GENERAL MANAGERS

J. E. Dolezal

Energy Supply

Ronald W. Johnson

Corporate Services

and Labor Relations

Earl A. Millspaugh

Production and Construction

B. Scott Reed

Engineering and Transmission

Paul A. Schmitz

Finance

W. Hayden Timmons

Environmental and Public Affairs

MANAGERS

Don E. Augenstein

Corporate Services

Gregory F. Black

Environmental Affairs

C. William Blackburn

General Accounting

Joe L. Craig

Fuels

James V. Haner

Taxes, Insurance & Budgets

Travis D. Housley

Engineering

Don C. Mann

Purchasing

Tom Millay

Personnel

James H. McIllwain

Construction

Benjamin Urbanek

Energy Control

Phil Waggoner

Electronic Data Processing

John West

Financial Services

SUPERINTENDENTS

Richard Greenwell

Power Production

Barry Wood

Reid/Green Plants

Virgil Mitchell

Transmission

Steve Moss

Wilson Plant

Bruce Shelton

Coleman Plant

CORPORATE ATTORNEY

Morton Holbrook

General Counsel

Holbrook, Wible, Sullivan & Helmers P.S.C.

Owensboro, Kentucky

CORPORATE AUDITORS

Peat Marwick Main & Co.

Louisville, Kentucky



# 1987 Annual Report



# FINANCIAL HIGHLIGHTS

### (Dollars in thousands)

	1987	1986	Increase (Decrease)	%Increase (Decrease)
Operating Revenues Operating Expenses Net Margins (Loss)	300,084 266,451 (88,631)	227,664 190,520 (41,225)	72,420 75,931 47,406	31.8 39.9 115.0
Construction Expenditures Energy Sales (Megawatt Hours)	3,272	81,442	(78,170)	(96.0)
To Members Intersystem	6,271,315 3,993,075	6,211,794 3,303,675	59,521 689,400	$\frac{1.0}{20.9}$
System Peak Demand in Megawatts Cost of Fuel Used in	990	993	(3)	(:3)
Generation Assets	108,791 1,421,349	87,203 1,438,565	21,588 $(17,216)$	24,8 (1.2)
Accumulated Margins and Equity Employees Full Time Revenue Per kWh Sold (Mills)	(83,349) 856 29,23	5,282 863 27,54	(88,631) (7) 1.69	(.8) 6.1

## PRESIDENT'S AND GENERAL MANAGER'S REPORT

Following several years of frustration and perplexity, Big Rivers ended 1987 in a positive mood as:

We worked to finalize details of a workout plan with our major creditors.

The Kentucky Public Service Commission (PSC) approved a rate increase for our 75,000 consumer-members and set a variable rate for our major power users, two aluminum smelters.

The two aluminum smelters we serve began operating near capacity as the improved demand for aluminum brought about substantial increases in price.

A federal judge affirmed our contentions in a contract dispute with another utility.

We will address the rate increase issue first. In late 1986 we filed a change of rate request with the PSC. On March 17, 1987, the PSC denied the requested increase and ordered us to renegotiate a long-term debt workout plan, negotiate a flexible rate plan with the aluminum smelters and meet with the state Attorney General to explain the negotiated rate plan and how the interest of all other consumers would be protected.

After several weeks of negotiations, Big Rivers reached an improved workout plan with our creditors — Manufacturers Hanover, Irving Trust and the federal government. Simultaneously, we tried unsuccessfully to come to mutual terms with the aluminum smelters for flexible rates.

The Commission engaged Arthur Anderson & Company, an accounting firm, to audit certain operating costs of Big Rivers and the two aluminum companies, Alcan Ingot & Recycling (Alcan) at Sebree and National-Southwire Aluminum (NSA) at Hawesville. The PSC also hired internationally known aluminum expert Anthony Bird of England to assist in evaluating this extensive and complicated rate case.

As ordered by the PSC, Big Rivers on July 20 filed a compliance report, business plan, revised workout plan in the form of an "agreement in principle" which contained a minimum debt service schedule in lieu of unspecified targets, and a proposed tariff for a flexible rate structure for the aluminum smelters. Beginning August 4, the Commission heard testimony from witnesses of intervenors, the Commission and Big Rivers.

On August 10, 1987, the PSC ordered a rate increase and presented the following findings in part:

- "1. Big Rivers' existing rates are unjust and unreasonable in that they are insufficient to produce the revenue needed to pay operating expenses, service the debt as restructured, and maintain financial integrity.
- 2. NSA's motions to dismiss and for postponement of the decision should be denied.
- 3. Big Rivers' revised workout plan, in conjunction with the rates approved in this Order, will provide a long-term resolution of Big Rivers' financial difficulties.
- 4. The economic stability of Big Rivers' two major customers, NSA and Alcan, will be enhanced by the implementation of power rates that vary with the market price of aluminum.
- 5. Big Rivers should file subsequent rate proposals (on) or before July 1, 1988 and July 1, 1990.
- 6. Big Rivers should continue to charge its existing rates until it has filed with the Commission: (1) written notice from its principal creditors evidencing their approval of the workout plan as modified by this order and their acceptance of the rates found reasonable herein; (2) a written agreement evidencing the termination of the pending foreclosure action in the U.S. District Court for the Western District of Kentucky, Civil Action No. 85-0012-0-(J); and (3) written notice evidencing the withdrawal of the existing loan embargo for all Kentucky cooperatives.
- 7. The rates set forth in Appendix A to this Order are the fair, just, and reasonable rates to be charged on and after Big Rivers files the documentation required by Finding No. 6, above, but not earlier than September 1, 1987."

The above conditions were met, and new rates were effective on September 1.

Big Rivers' rates are \$7.50 per kilowatt (kW) demand based on the highest 30-minute metered demand during the month, the preceding 11 months, or the contract demand for all delivery points except those which by contract cannot be exceeded by more than two percent without Big Rivers' prior permission. The finding also included an energy charge of \$0.017284 per kilowatt-hour (kWh) which includes a fuel base of \$0.01295.

For the aluminum industry a Variable Aluminum Smelter Rate was set with a demand charge of \$7.50 per kW per month of contract demand and a credit of 10.3778 mills for each kWh consumed, being computed as the demand charge rate converted to mills per kWh at a 99 percent load factor; and a pivot energy charge of 32.0 mills per kWh used when the price of aluminum is 62 cents per pound. The formula used to determine the energy rate is for each 1 cent rise in the metal price above 62 cents, a 0.7 mill increase in energy rate will occur and for each 1 cent fall in the metal price below 62 cents, a 0.8 mill decrease in the energy rate will occur, resulting in a range from a lower rate limit of 18.1 mills per kWh to an upper rate limit of 44.0 mills per kWh subject to adjustments for fuel cost changes. The price of aluminum is based on the average monthly "Metals Week, U.S. Transactions" price of aluminum as reported in Metals Week, for the month prior to the month charges are incurred.

Big Rivers and its lenders are continuing to negotiate the workout plan contract, in accordance with the provisions of the "agreement in principle," which is expected to be completed during the first quarter of 1988.

Big Rivers and the aluminum companies filed appeals of the PSC's decision with the Franklin Circuit Court. Those appeals were pending as 1987 came to a close.

During early 1986, a contractual dispute arose between Big Rivers and Municipal Energy Agency of Mississippi (MEAM) concerning the 54-megawatt purchase power contract. On June 18, 1987, an arbitration panel ruled in favor of Big Rivers. Big Rivers then filed suit with the United States District Court, Western District of Kentucky at Owensboro, requesting that the court make the arbitrators decision an award of the court. On December 23, the court ruled in favor of Big Rivers. MEAM is required to pay Big Rivers approximately \$18 million for service rendered and complete the remaining 7 years of the contract. MEAM has appealed the court's ruling to U.S. Sixth Circuit Court.

As reported last year, an application with REA to authorize the refinancing without penalty of several loan advances from the Federal Financing Bank had been filed. Such refinancing was completed and approved during September of this year. Big Rivers consequently refinanced approximately \$251 million, which will result in an annual savings of \$900,000.

The year was successful for marketing surplus power on a short-term basis to other utilities. The primary purchaser of Big Rivers' surplus energy was the Tennessee Valley Authority. Intrasystem load requirements turned sharply

upward in July as the air conditioning load, coupled with the restart of Alcan's second potline, began to develop. Unlike a year ago, the weather in August 1987 extended the air conditioning load throughout the month and most delivery points recorded a new peak for the year.

Revenue from intersystem power sales for both capacity and energy totaled \$67.0 million during the year which excludes \$8.6 million in uncollected monies MEAM owes us. This compares to a total sales of \$68.9 million for the year of 1986.

Sales for 1987 to our distribution members were 6,271,315,413 kWh, which is a 59,521,440 kWh increase of approximately one percent from the previous year. Alcan returned its second potline to service during August. The remaining Alcan potline is scheduled to return to service during the first quarter of 1988.

The Big Rivers' system recorded a coincident peak demand of 990 MW on August 21. The system's rural load, other than for the large industrials, increased both in demand and energy over 1986. The 1987 rural and other consumers' load demand increased 4.76 percent, while the energy associated with this load increased 5.62 percent.

Total heating and cooling degree days for 1987 were 5,905 compared to 5,961 total for 1986. The decrease in total degree days was mostly attributable to the mild winter weather that was experienced across the Big Rivers' system during 1987.

The Energy Supply Department upgraded communications equipment to maintain vital links throughout the Big Rivers' system as well as our ties to other utilities.

With the completion of the construction program during the past few years, 1987 marked the beginning of a change in emphasis for the Engineering and Transmission Departments. The emphasis has evolved from design and construction to the challenge of maintaining reliable service to our members while exporting large amounts of power. These power exports are pressing our transmission system to its operating limit during peak load conditions.

To meet this challenge, the Engineering Department is performing a system-wide study of its relay protection schemes to insure that rapid system restoration is achieved in recovering from electrical disturbances. Our electrical system has been computer modeled to guarantee that system stability is maintained.

The Production/Construction Department has continued to exceed its primary objectives

despite the austerity program. Effective management with an emphasis on performance has for the second consecutive year resulted in heat rate improvements.

Trucks bringing coal to our Robert D. Green and D.B. Wilson plants haul sludge back to the strip mines, significantly lowering landfill operating costs and reducing future land requirements.

We inspected and performed major overhauls on Green Unit No. 2 and Kenneth C. Coleman Unit No. 1, during the year. Both units were returned to service with improved efficiency. Mechanical maintenance was completed on all other units

On November 15, Coleman Unit No. 3 failed during attempts to bring it back on line following routine maintenance. Major portions of the turbine and generator were damaged. The 150 MW unit is expected to be returned to service in March of 1988. Cost to repair the unit is estimated at \$3 million. Cause of the failure at year's end was unknown.

During late December Big Rivers and M.W. Kellogg reached an agreement which permitted Big Rivers to accept for service the scrubber as installed at the Wilson Plant.

The maintenance management system has been expanded to include Electrical and Instrumentation Departments. This system readily provides information regarding maintenance manhours, equipment repair cost and equipment history. Late in the year, we began replacing Green Unit No. 1 stack liner. The original castable, in-place gunnite liner is being replaced with 1/16" thick titanium clad.

Big Rivers used 4.82 million tons of coal in generating electricity in 1987. This compares with 4.46 million tons burned last year.

The average cost of coal used in generating electricity was \$27.48 per ton, 124.3 cents per million British Thermal Units (BTU). This compares with \$28.16 per ton, 128.8 cents per million BTU in 1986.

The coal requirements during 1987 were supplied almost entirely by the minimum quantities required to be received under long-term and medium-term coal contracts. About three-fourths of the requirements were supplied from mines in western Kentucky. The Green and Wilson plants both are equipped with flue gas desulfurization scrubbers, and these plants burn western Kentucky high-sulfur coal. The older Coleman and Reid plants and Henderson Station Two are not equipped with scrubbers, and these plants burn lower-sulfur coal (neces-

sary for compliance with sulfur dioxide emissions regulations) from western Kentucky and southern Indiana.

The Environmental Department spends much time and effort to guarantee that our plants meet compliance standards of federal and state statutes and regulations. Several new regulations this year required special consideration. They pertained to community right-to-know, workers right-to-know and asbestos reporting and handling requirements.

The department keeps a close watch on pending acid rain legislation because the impact to our member systems' consumers could be costly.

Kentucky's environmental regulatory agencies approved the removal of the stack gas reheat requirement at the Wilson Plant. This change saves approximately \$1 million a year in operating costs.

An 18-month contract with our bargaining unit was signed in April. The International Brotherhood of Electrical Workers Local 1701 membership supported an agreement containing no wage increases and several medical insurance cost containment features. A new and more uniform method of distributing overtime was added, and a new paid partial sick-day provision was included.

Records are meant to be broken, and this year was no exception in corporate safety. Thanks to the dedication of our employees and their increased safety awareness, Big Rivers once again achieved a significant reduction in its safety record over the previous year's record by reducing the lost-time days by 57 percent and the lost-time injuries by 19 percent.

Additionally, we are pleased to report that on April 10, 1987, the Coleman Plant became the first power plant in Big Rivers' history to achieve two years (non-consecutive) without a lost-time injury. This plant continues to set a corporate record for the number of days worked without a lost-time injury - 629 continuous days as of December 31, 1987.

The Employee Assistance Program, which offers help to employees or their families facing personal problems, moved into its fifth year. Through the Education Assistance Program, more than 70 employees continued their education in job-related areas.

Total employment at year's end was 856. Turnover rate for the year continued to be significantly below national levels.

We express our appreciation to William E. Seaton who retired from our board in December. He served 12 years, and for the past four was Assistant Secretary/Treasurer. Mr. Seaton represented Meade County Rural Electric Cooperative Corporation.

We are pleased to report that we began a financial turnaround in 1987. Many factors made this possible: the perseverance of our Board of Directors; the dedication of our employees; the cooperation of our creditors; the trust of our suppliers; the support of our elected officials; the increased demand for aluminum; and the eventual decisive action of the PSC in perhaps its most complex situation ever encountered. Although the change in direction has begun, it is in a very tender embryonic state. Nurturing this embryo will be our challenge for several years to come.

Morton Henshaw President, Board of Directors

W. H. Thoyse

William H. Thorpe General Manager

### AUDITORS' REPORT

The Board of Directors Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1987 and 1986 and the related statements of revenues and expenses, equities and cash flows for each of the years in the three-year period ended December 31, 1987. Our examinations were 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.

As discussed more fully in note 2, Big Rivers Electric Corporation (Big Rivers) began in 1980 the construction of the D.B. Wilson Generating Station which consisted of two generating units (Wilson 1 and Wilson 2). However, due to the anticipated surplus power of Wilson 1, Wilson 2 was cancelled. On November 1, 1986, Wilson 1, with a cost of \$855 million, was commercialized. In April 1984, a rate increase request was filed with the Kentucky Public Service Commission (KPSC) which included partial recovery of the fixed costs of Wilson 1. However, due to the adverse economic impact on two major industrial customers of its member cooperatives, the rate increase request was withdrawn. In November 1984, a second rate increase request was filed with the KPSC which did not include costs of Wilson 1. On May 6, 1985, the KPSC denied that request concluding that the rate filing would not have been necessary but for the presence of. Wilson 1 and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition. In November 1984, the Rural Electrification Administration (REA) notified Big Rivers that it would not make any further advances under the loan commitment relating to the construction costs of Wilson 1. Subsequently, Big Rivers defaulted on REA loans and on January 18, 1985, a foreclosure suit was filed against Big Rivers. During 1985 and 1986 a committee, including Big Rivers and representatives of parties involved, developed a mutually acceptable debt restructuring plan to resolve Big Rivers' financial difficulties. On August 7, 1986, Big Rivers filed for a rate increase which incorporated the debt restructuring plan. The KPSC on March 17, 1987 denied Big Rivers' rate request and ordered that a new case, including a renegotiated debt restructuring plan, be heard on July 28, 1987. On August 10, 1987, the KPSC approved Big Rivers' rate request. The resulting rate increase is being appealed by Big Rivers' two major industrial customers. Subsequent to the KPSC order, the foreclosure complaint between Big Rivers and REA was dismissed and Big Rivers and its major creditors have agreed in principle to a modified debt restructuring plan. The KPSC accepted this agreement in principle as evidence of the creditors approval of the modified debt restructuring plan. As a result of the acceptance of the agreement in principle by the KPSC and the dismissal of the foreclosure suit, Big Rivers is accounting for its debt in accordance with the existing terms of the modified debt restructuring plan. However, as discussed in note 5, certain provisions of the modified debt restructuring plan are currently under additional negotiation. The provisions which are expected to change relate to interest rates and principal repayments. Accordingly, the principal maturities of long-term liabilities are expected to change from those currently reflected in the financial statements. Big Rivers' ability to recover costs is dependent upon the continued success of Big Rivers' ongoing efforts which include negotiating the contractual provisions to the modified debt restructuring plan, maintaining the granted rate increase which has been appealed, obtaining the subsequent rate proposals as outlined in the KPSC August 10, 1987 order, and selling a substantial portion of the capacity and energy available. If the aforementioned is not accomplished, Big Rivers may be unable to continue in existence. The accompanying financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary should Big Rivers be unable to recover the costs of Wilson 1 or should Big Rivers be unable to continue in existence.

Big Rivers elected to carry approximately \$27 million of costs relating to Wilson 2, which was cancelled in 1984, as a deferred charge in the 1985 financial statements. Management's intention was to recover these costs in future rates and through sales of excess power; however, generally accepted accounting principles required that such costs be charged to operations if recoverability was not probable. In 1986, Management concluded that recoverability of these costs was no longer feasible and, accordingly, these costs were charged to operations.

In our opinion, except for the write-off in 1986 of the deferred charge referred to in the preceding paragraph which should have been written off in 1984, and, subject to the effect on the financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classifications of liabilities referred to in the second preceding paragraph been known, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1987 and 1986 and the results of its operations and cash flows for each of the years in the three-year period ended December 31, 1987, in conformity with generally accepted accounting principles consistently applied during the period subsequent to the change, with which we concur, in the actuarial method used in determining pension costs in 1985 as described in note 9 to the financial statements and, except for the changes, with which we concur, in the method of determining depreciation as described in note 1 to the financial statements and in the method of accounting for pension costs as described in note 9 to the financial statements.

Peat Marwick Main & Co.

Louisville, Kentucky February 5, 1988, except as to note 13, which is as of February 25, 1988

## STATEMENTS OF REVENUES AND EXPENSES

	(In thousands)		
	Years ended December 31,		
	1987	1986	1985
Operating revenues (note 10)	\$300,084	227,664	236,024
Operating expenses:			
Operations:			
Fuel for electric generation	108,791	87,203	94,699
Power purchased and interchanged, net	39,146	38,214	39,792
Other	39,725	28,597	25,054
Maintenance	21,415	15,192	14,027
Depreciation and amortization	53,555	18,799	17,789
Taxes	3,818	2,516	2,353
Total operating expenses	266,450	190,521	193,714
Electric operating margins	33,634	37,143	42,310
Interest and other deductions:			
Interest	124,410	124,873	122,612
Allowance for borrowed funds used			
during construction (note 3)	(59)	(73,353)	(82,966)
Other deductions	598	235	195
Total interest and other deductions	124,949	51,755	39,841
Operating margins (loss)	(91,315)	(14,612)	2,469
Nonoperating margins (loss):			
Interest earned	2,684	1,067	1,154
Interest earned credited to construction		57 Mar. 101	(113)
Write-off of Wilson 2 costs (note 11)	<u></u>	(27,681)	_
	2,684	(26,614)	1,041
Other capital credits and patronage allocations	_	1	9
Net margins (loss)	\$(88,631)	(41,225)	3,519

# STATEMENTS OF EQUITIES

(In thousands)

		Years ended Decemb	per 31, 1987, 198	and 1985 Other equities	
	Total equities	Accumulated deficit	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1984 Margins for 1985:	\$ 42,949	_	38,543	763	3,643
Operating	2,469	_	2,469		_
Nonoperating	1,041	_	1,041		_
Other capital credits and	-,		-,		
patronage allocations	9		9	_	_
Capital surcharge	39	_	_	1	38
Balance at December 31, 1985	46,507	_	42,062	764	3,681
Margins (loss) for 1986:					
Operating	(14,612)	(14,612)		_	_
Nonoperating	(26,614)	(26,614)	_	_	_
Other capital credits and					
patronage allocations	1	_	1	_	_
Balance at December 31, 1986	5,282	(41,226)	42,063	764	3,681
Margins (loss) for 1987:					
Operating	(91,315)	(91,315)	_		_
Nonoperating	2,684	2,684	_	_	
Other capital credits and patronage allocations			_	_	_
Balance at December 31, 1987	\$(83,349)	(129,857)	42,063	764	3,681

## BALANCE SHEETS

	(In thousands)	
	December 31,	
Assets	1987	1986
Utility plant, net (notes 2 and 3)	\$1,253,320	1,310,745
Productive capacity under purchased		
power contract (note 8)	25,700	27,500
Other deposits and investments, at cost	3,898	3,651
Current assets:		
Cash and temporary cash investments	24,584	10,329
Receivables	52,935	29,434
Fuel for electric generation	30,730	28,430
Material and supplies	15,825	14,794
Total current assets	124,074	82,987
Deferred charges (note 4)	14,357	13,682
	\$1,421,349	1,438,565
Equities and Liabilities		
Equities and Liabilities  Capitalization: Equities	\$ (83,349)	5,282
Capitalization:	\$ (83,349)	5,282
Capitalization: Equities	\$ (83,349) 1,448,588	5,282 25,700
Capitalization: Equities Long-term liabilities, net of current		
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)	1,448,588	25,700
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization	1,448,588	25,700
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities:	1,448,588 1,365,239	25,700 30,982
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities: Current maturities of long-term	1,448,588	25,700 30,982 1,183,732
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2, 5 and 13) Matured debt and interest (note 6) Accounts payable	1,448,588 1,365,239	25,700
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2, 5 and 13) Matured debt and interest (note 6)	1,448,588 1,365,239 9,344	25,700 30,982 1,183,732 195,711
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2, 5 and 13) Matured debt and interest (note 6) Accounts payable	1,448,588 1,365,239 9,344 	25,700 30,982 1,183,732 195,711 19,957
Capitalization: Equities Long-term liabilities, net of current maturities (notes 2, 5 and 13)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (notes 2, 5 and 13) Matured debt and interest (note 6) Accounts payable Accrued expenses	1,448,588 1,365,239 9,344 18,521 26,916	25,700 30,982 1,183,732 195,711 19,957 7,135

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	Years en 1987	ded December 3 1986	31, 1985	
Cash flows from operating activities:				
Net margins (loss) Adjustments to reconcile net margins (loss) to cash provided by operating	\$(88,631)	(41,225)	3,519	
activities: Depreciation and amortization Amortization of deferred charges Write-off of Wilson 2 costs Interest refinanced with REA	53,995 2,232 —	19,361 2,497 27,681	18,301 3,013 —	
borrowings Allowance for borrowed funds used	87,406	108,588	110,978	
during construction Change in assets and liabilities	(59)	(73,353)	(82,966)	
Accounts receivable Fuel inventory Materials and supplies Accounts payable Accrued expenses Other - net	(23,501) (2,300) (1,031) (1,436) 19,781 47	(3,130) 4,408 (1,429) 729 1,760 (630)	(2,284) 4,675 (1,738) (14,862) (207) (1,657)	
Net cash provided by operating activities	46,503	45,257	36,772	
Cash flows from investing activities:				
Construction expenditures Refund from vendor relating to	(3,213)	(8,089)	(11,735)	
construction expenditures	6,702			
Net cash provided by (used in) investing activities	3,489	(8,089)	(11,735)	
Cash flows from financing activities:				
Repayment of long-term debt and matured debt and interest Proceeds from sale of cooperative	(283,622)	(39,175)	(104,417	
utility trusts	250,805		_	
Proceeds from bond issue Capitalized refinancing expenses Capital surcharge	(2,920)	_ _ _	83,300 - 39	
Net cash used in financing activities	(35,737)	(39,1.75)	(21,078	
Net increase (decrease) in cash and temporary cash investments	\$14,255	(2,007)	3,959	

#### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are established by the Kentucky Public Service Commission (KPSC) and subject to approval by the United States Department of Agriculture Rural Electrification Administration (REA).

Big Rivers utilizes the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers, as the primary source of borrowed funds.

#### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Revenue Recognition

Revenues are based on month-end meter readings.

#### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight line method over the estimated service lives of the depreciable assets. Annual Rates used to compute depreciation are as follows:

Production plant	3%-3.50%
Transmission plant	2.75%
Station equipment	2,75%
General plant	2%-20%
Unclassified plant	

in service 2.75%-3.50%

The sinking fund depreciation method was adopted for the Wilson Plant, the 345 kV transmission lines and related substations which were commercialized in November 1986. This method equates depreciation expense to payments of principal on long-term debt. In 1987, Statement of Financial Accounting Standards No. 92 was issued which addressed the use of an annuity method for depreciation. As a result, Big Rivers determined that the sinking fund depreciation method was not acceptable for financial statement purposes. Accordingly, Big Rivers has returned to providing for depreciation using the straight-line method for all utility plant and unclassified plant in service. The effect of the change in the 1987 financial statements was to provide approximately \$31 million additional depreciation utilizing the straight-line method rather than the sinking fund method. However, for rate making purposes Big Rivers may elect to continue using the sinking fund depreciation method for Wilson Plant and the 345 kV transmission lines and substations.

#### (e) Temporary Cash Investments

Temporary cash investments consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

#### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at weighted average cost.

#### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

#### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (i) Statements of Cash Flows

Big Rivers has adopted Statement of Financial Accounting Standards No. 95, Statement of Cash Flows and has restated 1986 and 1985 to reflect such changes.

#### (2) D. B. Wilson Generating Station

As a result of Power Requirements Studies (load forecasts) made in 1977 and supplemented by studies completed in 1979 and 1980, Big Rivers began in 1980 the construction of the D. B. Wilson Generating Station (Wilson Station) consisting of two 395 megawatt (net capacity) generating units (Wilson 1 and Wilson 2) at an estimated cost of \$1,1 billion to be financed by long-term debt borrowings guaranteed by the REA. Another Power Requirement Study was completed in 1981 which produced a significantly lower load forecast than the previous studies. Based on the new forecast, it became apparent that the Wilson 2 unit would not be needed as previously planned and construction activity was delayed. At the same time, the status of Wilson 1 was reviewed and it was determined that the amount of money invested by that time and the added cost that would result in a delay made it more economic to continue construction. Due to the surplus capacity of Big Rivers upon completion of Wilson 1, construction of Wilson 2 was subsequently cancelled. On November 1, 1986, Wilson 1 was commercialized and during 1986 costs associated with Wilson 2 were written off (see note

In April 1984, a \$57.6 million rate increase request, including partial recovery of the fixed costs of Wilson 1, was filed with the KPSC. At the same time, the aluminum industry, which accounts for a significant portion of Big Rivers' sales, experienced another sharp decline in primary aluminum prices. As a result, inclusion of Wilson Station costs in Big Rivers' rates would yield non-competitive rates to the aluminum smelters (identified in note 10), jeopardizing their continued operation. In October 1984, Big Rivers withdrew its rate increase request. In November 1984, a \$16.7 million rate increase was filed which did not include the production and fixed costs associated with Wilson 1. In May 1985, the KPSC denied the request concluding that the rate filing would not have been necessary but for the presence of the Wilson Station and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition.

In November 1984, REA notified Big Rivers that further advances of funds under the loan commitments from REA would not be forthcoming unless and until evidence, satisfactory to REA, of the economic feasibility of Big Rivers was submitted. Big Rivers filed suit requesting the United States District Court to order REA to approve the release of \$27.6 million previously requested by Big Rivers. Failing to receive these loan funds, Big

Rivers used internally generated funds to pay the amounts due contractors for Wilson Station and other construction projects. As a result, Big Rivers was unable to pay principal and interest payments due in November and December 1984 to REA and the Federal Financing Bank (FFB). REA, by letter dated January 3, 1985, citing default, and, pursuant to the loan agreement, demanded payment in full before January 17, 1985, of all outstanding debt and accrued interest (see note 5). The amount was not paid and on January 18, 1985, a foreclosure suit was filed against Big Rivers. Big Rivers filed an answer to this suit (see note 12).

REA stated that the suit filed January 18, 1985 gave Big Rivers more time to study a merger with East Kentucky Power Cooperative (East Kentucky) proposed by REA in November 1984 as the resolution to Big Rivers' financial problems. Big Rivers and East Kentucky approved a consultant to conduct a study of the feasibility of merger and to study other organizational alternatives. Big Rivers' Board of Directors in their April 12, 1985 meeting, approved consolidation, as permitted by Kentucky Statutes, with East Kentucky. In June 1985, REA rejected the merger proposal jointly submitted by Big Rivers' and East Kentucky's Boards of Directors. No further action has been taken regarding merger.

In 1985, a working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover and Irving Trust (the banks providing letters of credit on the pollution control bonds) was formed to find a mutually acceptable way of resolving the financial situation. In late July 1986, Big Rivers developed a debt restructuring plan with its creditors which would enable it to add the D. B. Wilson Plant to its system without causing "rate shock" to consumers, and would resolve the litigation between Big Rivers and the Federal Government.

On August 7, 1986, Big Rivers filed for an overall 3.58% rate increase, an increase of \$1.25 per kW, in its demand rates and to modify billing demand to provide for a peak demand ratchet. Under Big Rivers' proposed rate increase — the first since January 1981 — residential rates would rise an average of 13% at retail, but no net increase to the aluminum smelters over 1985 levels would result because of their high load factors and because of Big Rivers' efficient management of coal purchases.

The KPSC on March 17, 1987 denied Big Rivers' rate request, mandated that Big Rivers meet certain conditions including a renegotiated debt restructuring plan and ordered that a new case be heard. Big Rivers met the conditions set forth by the order and a hearing was held on August 4, 1987.

On August 10, 1987 the KPSC approved Big Rivers' rate request, which became effective September 1, 1987. The rate request included an increase in the demand charge of \$1.25 per kW and a variable aluminum smelter rate. The order also stated that Big Rivers should file subsequent rate proposals on or before July 1, 1988 and July 1, 1990. Subsequent to the KPSC order and prior to the effective date, the foreclosure complaint between Big Rivers and the United States of America was dismissed without prejudice. Big Rivers and its creditors agreed in principle to a modified debt restructuring plan (see note 5). The aluminum smelters and Big Rivers have filed appeals regarding the KPSC's decision on rates with the Franklin Circuit Court. Those appeals

are pending at December 31, 1987.

Big Rivers' ability to recover costs is dependent upon the continued success of Big Rivers' ongoing efforts which include negotiating the contractual provisions to the modified debt restructuring plan, maintaining the granted rate increase which has been appealed, obtaining the subsequent rate proposals as outlined in the KPSC August 10, 1987 order, and selling a substantial portion of the capacity and energy available.

#### (3) Utility Plant

The following summarizes utility plant:

1986	1987	
thousands)	(In thou	
		Classified plant in service:
1,276,497	\$1,270,902	Production plant
41,771	43,389	Transmission plant
65,549	86,413	Station equipment
12,757	13,408	General plant
190	190	Intangible
55,380	34,279	Unclassified plant in service
1,452,144	1,448,581	
143,480	196,710	Less accumulated depreciation
1,308,664	1,251,871	
2,081	1,449	Construction in progress
1,310,745	\$1,253,320	
	\$1,253,320	

Construction in progress at December 31, 1987 and 1986 is comprised of several small projects. As discussed in note 2, Big Rivers commercialized Wilson 1 on November 1, 1986 and ceased capitalization of interest, construction costs and operating costs on that date. In addition, sales resulting from Wilson 1 through

October 31, 1986 were credited to construction in progress. The average rates used for the capitalization of interest during construction in 1987, 1986 and 1985 were 9.9%, 10.5%, and 10.8%, respectively.

(4) Deferred Charges

Deferred charges consisted of the following:

1987	1986	
(In thousands)		
\$2,897	355	
6,360	8,068	
3,889	4,032	
627	441	
584	786	
\$14,357	13,682	
	(In tho \$2,897 6,360 3,889 627 584	

Subsequent to authorization by REA, Big Rivers refinanced \$251 million of FFB debt with long-term debt at a lower interest rate on September 27, 1987. The issuance expenses associated with this refinancing are being amortized over the life of the long-term debt.

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12.5 million was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

In November 1982, Big Rivers elected to refinance \$90 million of FFB short-term mortgage notes with long-term notes at a lower interest rate. As a result of this election, a premium of \$4.6 million was required. The premium is being amortized over the term of the long-term mortgage notes.

	1987	1986
	(In th	ousands)
Rural Electrification Administration (REA) - 2% and 5% mortgage notes		
payable, maturing from April 1998 through April 2014	\$ 83,557	87,346
Federal Financing Bank (FFB) - 7.370% to 10.808% mortgage notes payable,		
maturing from December 2010 through December 2018	696,294	949,482
Government Arrearage	256,504	
Louisville Bank for Cooperatives - cooperative utility trusts with interest		
at 9.3325% to 10.7825%, maturing from September 1988 through September 2017	250,794	_
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 7.0%, maturing October 2015	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable interest rate,		
currently 6.501%, maturing June 2013	58,800	58,800
Obligation due to Jackson Purchase Electric Cooperative Corporation	2,983	2,983
Obligation under purchased power contract (see note 8)	25,700	27,500
Other borrowings	_	21
Total long-term liabilities	1,457,932	1,209,432
Less current maturities	9,344	1,183,732
	\$1,448,588	25,700

As discussed in note 2, Big Rivers defaulted on loans from REA and on FFB loans guaranteed by REA. Pursuant to the loan agreements, all outstanding principal and accrued interest became payable. The loan agreements relating to the County of Ohio, Kentucky promissory notes contain provisions whereby the Trustee has the option to call the notes in the event of any loan defaults. Due to the loan default condition, such principal amounts relating to the aforementioned obligations were reflected as current maturities for year ending December 31, 1986. Big Rivers and its creditors agreed to a debt restructuring plan which was rejected by the KPSC. On August 28, 1987, Big Rivers and its creditors agreed in principle to accept a modified debt restructuring plan incorporating certain recommendations of the KPSC. The modified debt restructuring plan includes a specific minimum modifed REA/FFB debt service payment schedule through the year 2012. Effective September 1, 1987, the KPSC approved the modified debt restructuring plan and ordered increased rates. As a result of the KPSC's approval of the modified debt restructuring plan as negotiated by Big Rivers and its creditors, the foreclosure suit was withdrawn without prejudice. Accordingly, Big Rivers is accounting for its debt in accordance with the terms of the modified debt restructuring plan and it is current on all debt service payments.

Government arrearage represents matured debt and interest which is classified as long-term debt in accordance with the modified debt restructuring plan.

On September 29, 1987, Louisville Bank for Cooperatives (LBC) loaned Big Rivers \$250.8 million to prepay an equal principal amount of FFB loans. Big Rivers issued three notes in an aggregate amount equal to the LBC loan, each guaranteed by REA, to three separate trusts. Each trust has issued to LBC certificates representing the entire beneficial interest in such trusts.

In January 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2.9 million from the Jackson Purchase Electric Coop-

erative Corporation. Pending REA approval, Big Rivers intends to assume the loan with REA pertaining to these assets.

In June 1983, the County of Ohio, Kentucky issued \$58.8 million of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. The weekly interest rate was initially set at 62.5 percent of the coupon equivalent rate for 13-week U.S. Treasury Bills. To meet the changes in the tax-free municipal bond market the interest rate changed periodically and on December 31, 1987 was at 110.0 percent of the coupon equivalent rate for 13-week U.S. Treasury Bills. The bonds are supported by an Irving Trust irrevocable standby letter of credit due to expire July 15, 1991.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Poliution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio issued Pollution Control Refunding Bonds, Series 1985, the proceeds of which were used to refinance the Interim Bonds. The Refunding Bonds bear interest at a variable rate which is the lesser of (a) 13 percent per annum or (b) a rate determined by the remarketing agent and approved by Big Rivers as being the rate necessary to remarket the bonds in a secondary market transaction at par, plus accrued interest, but not more than 110 percent of a variable rate index based on weekly sales of 91-day U.S. Treasury Bills. The bonds are supported by a Manufacturers Hanover irrevocable transferable standby letter of credit due to expire July 15, 1991. The bonds are payable on demand, or subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof, and will mature in any event on October 1, 2015.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

The maturities of long-term habilities for the years 1989 through 1992 are \$10.8, \$13.3, \$15.4 and \$15.8 million, respectively.

Big Rivers arricipates the currentmation of the modified debt restructuring plan in early 1988, which will significantly change the principal necturities shown above.

#### (6) Matured Debt and Interest

As discussed in note 2, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due the FFB for REA guaranteed loans in November and December 1984, and during 1985 and 1986. The amount of the default plus interest is shown as matured debt and interest. REA, under its guarantee agreement with FFB, paid the amounts due FFB that were due from Big Rivers, but were not paid by Big Rivers. This amount, plus interest, is recorded by REA as due from Big Rivers. The interest is computed at the same rate or rates as on the related FFB advance or advances. During 1987, 1986 and

1985, matured debt and interest increased by \$101.6, \$117.1 and \$116.4 million, respectively, resulting from defaults and accrued interest and was reduced by payments of \$34.4, \$42.3 and \$22.3 million, respectively.

As discussed in note 5, Big Rivers has entered into an agreement in principle to restructure its debt. All matured debt and interest has been paid or has been reclassified to the Government Arrearage account as stipulated in the modified debt restructuring plan.

#### (7) Income Taxes

Prior to 1983, Big Rivers was tax exempt under Section 501(c)(12) of the Internal Revenue Code which requires that at least 85% or more of income consist of amounts collected from members for the sole purpose of meeting losses and expenses. Nonmember gross income for the years 1983 through 1986 have exceeded the 15% allowable, therefore, Big Rivers has been a taxable cooperative for those years. In determining taxable income, the deduction for patronage allocations has resulted in a net operating loss for both financial statement and income tax purposes. Accordingly, no provision for income taxes has been required. The following analysis summarizes the net operating loss and investment tax credit carryforwards for income tax purposes:

Year of origination	Net operating loss carryforward	Investment tax credit carryforward
1983	\$ 9,460,000	\$ 270,000
1984	87,500,000	56,300,000
1985	160,180,000	1,170,000
1986	154,790,000	_

These carryforwards may be utilized to offset taxable income for the period of 15 years from the year of origination. The actual amount of the 1987 net tax operating loss has not yet been determined. The original amounts of investment tax credit carryover have been reduced by 35% to account for the reduction required pursuant to Section 49(c) of the Internal Revenue Code of 1986.

#### (8) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 86% which is expected to decrease to 85% by 1990. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the

principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1987, 1986 and 1985 was approximately \$34.1, \$32.4 and \$34.4 million, respectively. Such costs are accounted for as power purchased and interchange d, net.

#### (9) Pension and Deferred Compensation Plans

Big Rivers has defined benefit pension plans rovering substantially all employees who meet minimum age and service requirements. The plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. Big Rivers' policy is to fund such plans in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

In 1987, Big Rivers changed its method of accounting for its

defined benefit pension plans by adopting the provisions of Statement of Financial Accounting Standards No. 87 (SFAS 87), Employers' Accounting for Pensions.

The table on the following page sets forth the funded status of the plans and amount recognized in the balance short at December 31, 1987:

Actuarial present value of accumulated benefit obligation, including vested benefits of \$5,281	\$5,403	
Projected benefit obligation for services rendered to date	\$7.304	
Plan assets at fair value, primarily listed stocks and U.S. Treasury Bonds	9,696	
Plan assets in excess of projected benefit obligation	(2,392)	
Unrecognized net transition assets Unrecognized net loss (gain)	0,8 E)	
Unfunded accrued pension cost	\$ 311	
Net Pension costs for 1987 included the following (income)/expense components:		
Service cost-benefits earned during the year Interest cost on projected benefit obligation Actual return on plan assets Amortization of transition asset Amortization and deferral of net loss (gain)	\$ 850 451 (493) (220) (214)	
Net períodic pension costs	\$ 374	

Total expense related to the pension and deferred compensation plans was \$1,069, \$730 and \$350 thousand in 1987, 1986 and 1985, respectively.

The difference between the net periodic pension costs computed under SFAS 87 and that computed under previous accounting methods was not significant. Provisions of SFAS 87 were adopted prospectively and the net margins (loss) for 1986 and 1985 have not been restated. The assumptions used to develop the projected benefit obligation included a discount rate of 7.5% and an expected rate of increase in compensation levels

of 4%. The expected long-term rate of return on assets was 7.5%.

During 1985, Big Rivers changed from the entry age normal actuarial cost method to the unit credit method for determination of pension expense and funding. This change resulted in a better matching of funding to accumulated benefits by taking into consideration the excess of pension fund assets over accumulated henefits. The effect of this change was to decrease total 1985 pension cost expensed and capitalized by approximately \$748 thousand. In 1986, pension costs were \$488. The expected long-term rate of return on assets was 6% in 1986 and 1985.

Operating revenues were as follows:			
•	1987	1.986	1985
		(In thousands)	
Members:			
Green River Electric Corporation	\$124,931	107,305	112,932
Henderson-Union Rural Electric			
Cooperative Corporation	75.156	60,406	74,983
Jackson Purchase Electric			
Cooperative Corporation.	14,722	13,275	12,914
Meade County Rural Electric			
Cooperative Corporation	8,1.68	7,298	7,468
Nonmembers	77,107	68,962	72,312
	300,084	257,246	280,609
Revenues credited to construction	<del></del>	(29,582)	(44,585)
	\$300,084	227,664	236,024

Revenues resulting from Wilson 1 during the construction period have been credited to construction in progress.

Big Rivers agrees to indemnify its Member Cooperatives by accepting as full payment for power supplied to any of its members and sold by the member to an industrial customer, only such payment therefor as the member shall receive from its customer.

National-Southwire Aluminum Company and Alcan Aluminum

Corporation (formerly Atlantic Richfield Company) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

Year	Green River	Henderson-Union	Combined
		(In thousands)	
1987	\$92,026	60,102	152,128
1986	\$77,122	46,683	123,805
1985	\$82,654	60,908	143,562

#### (11) Write-off of Wilson 2 Costs

Big Rivers elected to carry the costs relating to Wilson 2, which had been cancelled in 1984, as a deferred charge in the 1985 financial statements. It had been management's intention to recover these costs in future rates and through sales of excess

power. During 1986, management decided that the recoverability of certain costs was doubtful and these costs, amounting to \$27,680,597 were charged to operations in 1986.

#### (12) Litigation

As discussed in note 2, a suit was filed against Big Rivers alleging that Big Rivers had defaulted on its notes and sought judgment in the amount of \$1,047,990,623 in principal and \$25,856,352 accrued interest. The complaint also sought a foreclosure and sale of the collateral, which is essentially all of the assets. As a result of the agreement in principle of the modified debt restructuring plan and the rate increase approved by the

KPSC, the foreclosure suit was dismissed on a joint motion by the United States of America and Big Rivers.

There are a number of pending legal actions involving Big Rivers either as defendant or plaintiff, Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

#### (13) Subsequent Event

On February 25, 1988 Big Rivers refinanced \$319.4 million of FFB debt with a 9.4601% interest rate loan from LBC. Big Rivers issued three notes in an aggregate amount equal to the LBC loan, each guaranteed by REA, to three separate trusts.

Each trust has issued to LBC certificates representing the entire beneficial interest in such trusts. The principal amortization of the private loan is substantially equal to that of the FFB loans.

# COMPARATIVE STATISTICAL ANALYSIS -

	1987	1986	1985	1984
Operating Revenues	\$ 300,084,362	227,664,219	236,023,720	258,019,579
Expenses:				
Operation and Maintenance Purchased Power and	169,931,331	130,991,511	133,779,910	143,358,327
Interchanged, Net	39,146,440	38,214,277	39,792,228	47,494,014
Depreciation and Amortization	53,555,259	18,798,750	17,788,717	18,533,365
Taxes	3,817,850	2,515,787	2,353,021	2,269,30
Interest	124,351,304	51,520,808	39,645,856	39,747,34
Other	597,798	235,101	195,269	150,83
Total	391,399,982	242,276,234	233,555,001	251,553,18
Operating Margins (Loss)	(91,315,620)	(14,612,015)	2,468,719	6,466,39
Nonoperating Margins (Loss)	2,684,774	(26,613,024)	1,050,605	(1,726,87
Net Margins (Loss)	\$ (88,630,846)	(41,225,039)	3,519,324	4,739,51
Utility Plant at Cost	\$1,448,581,890	1,452,144,009	539,998,444	533,597,06
Construction Work in Progress	1,448,505	2,080,925	833,505,325	745,589,26
Total Electric Plant	1,450,030,395	1,454,224,934	1,373,503,769	1,279,186,33
Less Accumulated Depreciation	196,710,029	143,479,823	124,841,130	106,923,76
Utility Plant Net	\$1,253,320,366	1,310,745,111	1,248,662,639	1,172,262,57
Total Assets	\$1,421,349,400	1,438,564,861	1,409,490,616	1,332,830,42
Member Maximum				
Demand — MW	990	993	1,042	1,02
Installed Steam Generating			-,012	1,02
Capacity — Net MW	1,394	1,383	974	97
Purchased Steam Generating Capacity		-,		
HMP&L Station Two - Net MW	270	271	271	26
Peaking and Standby Capacity				
Reid Combustion Turbine - MW	65	65	65	6
Purchased Peaking — MW	178	178	178	19
Purchased Standby — MW	0	O	0	
KWh — Millions —				
Sales to Members	6,271.32	6,211.79	6,908.67	7,390.7
Sales to Non-Members	3,993.08	3,303.68	3,290.11	2,075.9
Generated	8,321.80	6,609.70	6,447.45	6,876.3
Purchased	* ^ 00 0 **	سده د هاما د		
HMP&:L Station Two	1,932.61	1,631.87	1,779.65	1,882.2
Other	284.69	336.38	291.98	666.7
System Load Factor — %	75.5	74.1	78.1	84.
Employees at Year-End	856	863	827	83
Average Cost of Coal Used	0= 10			2 5 3
Price Per Ton	27.48	27.83	30.25	29.9
¢/MM BTU	124.3¢	127.6¢	137.7¢	135.6

# TEN YEAR SUMMARY

1978	1979	1980	1981	1982	1983
117,873,0	124,677,992	179,429,591	240,476,418	232,716,033	258,276,967
52,753,0	53,217,700	91,232,809	120,266,830	124,675,180	136,539,322
49,559,0	52,238,507	52,947,305	58,848,412	46,342,616	55,494,464
5,111,2	5,976,160	11,516,775	17,073,065	17,548,448	17,782,446
			1,817,332	1,970,317	2,202,576
712,9	780,799	1,441,297			38,198,269
3,808,9 $25,9$	$\substack{4,988,213\\23,017}$	18,528,992 $56,197$	37,092,495 92,954	40,467,426 149,400	136,778
111,971,2	117,224,396	175,723,375	235,191,088	231,153,387	250,353,855
	2.050.500	0.700.010	T 005 000	1 500 040	7 092 119
5,901,8	6,853,596	3,706,216	5,285,330	1,562,646	7,923,112
620,9	1,219,271	1,080,410	1,677,561	1,968,247	994,948
6,522,8	8,072,867	4,786,626	6,962,891	3,530,893	8,918,060
100 000 0	909 901 046	313,289,264	483,371,934	495,105,598	531,772,691
130,333,9 157,127,0	283,281,046 $125,427,944$	186,458,271	173,576,481	451,265,803	653,519,304
	400 DOS (100	400 7 47 525	656,948,415	946,371,401	,185,291,995
287,460,9	408,708,990	499,747,535			91,374,775
28,361,9 	32,900,415	42,843,216	58,643,004	74,720,991	91,074,770
259,098,9	375,808,575	456,904,319	598,305,411	871,650,410	,093,917,220
374,646,2	480,817,488	560,828,507	708,233,625	1,029,256,522	,225,799,340
3	910	943	956	947	952
Đ	751	751	974	974	974
2	255	256	253	253	270
	65	65	65	65	65
	40	40	40	40	40
1	100	100	100	100	100
		# FIEL ALA	77 10N 70	6,420.88	6,719.42
6,526.	7,029.28	7,529,34	7,482.78	1,106.37	2,098.82
70.	58.50	475.36	1,455.27		
3,673.	3,911.05	5,187.78	6,164.23	5,848.11	6,47.4.14
1,805.	1,931.09	1,989.04	1,822.87	1,127.18	1,7.24.84
1,253.	1,387.12	966.38	1,097.02	681.21	790.65
1,400. Bi	85.3	88,1	87.1	74.8	78.4
4	55.5 555	622	567	680	794
	20.84	26.14	28.26	30.68	30.33
	( 1 T × /I	20,14	60.20	( · )	
21. 95.	95.2¢	123.5¢	132.9¢	143.3¢	1.38.4c

## CORPORATE DIRECTORY

OFFICERS

Morton Henshaw

President

Edward F. Johnson

Vice President

William B. Briscoe

Secretary-Treasurer

William E. Seaton

Assistant Secretary-Treasurer

GENERAL MANAGER

W. H. Thorpe

ASSISTANT GENERAL MANAGER

Paul A. Schmitz

DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation

Marion Cecil

Edward F. Johnson

Sandra Wood

Henderson-Union Rural Electric

Cooperative Corporation

William Briscoe

Morton Henshaw

C. G. Truitt

Jackson Purchase Electric

Cooperative Corporation

Paul Buchanan

Bill Doom

Edwin Reid

Meade County Rural Electric

Cooperative Corporation

John C. Burnett

J. D. Cooper

William Seaton

VICE GENERAL MANAGERS

J. E. Dolezal

Energy Supply

Ronald W. Johnson

Corporate Services

and Labor Relations

Earl A. Millspaugh

Production and Construction

B. Scott Reed

Engineering and Transmission

Paul A. Schmitz

Finance

W. Hayden Timmons

Environmental and Public Affairs

MANAGERS

Don E. Augenstein

Corporate Services

Gregory F. Black

Environmental Affairs

C. William Blackburn

General Accounting

Joe L. Craig

Fuels

James V. Haner

Taxes, Insurance & Budgets

Travis D. Housley

Engineering

Don C. Mann

Purchasing

Tom Millay

Personnel

James H. McIllwain

Construction

Benjamin Urbanek

Energy Control

Phil Waggoner

Electronic Data Processing

Financial Services

SUPERINTENDENTS

Richard Greenwell

Power Production

Barry Wood

Reid/Green Plants

Virgil Mitchell

Transmission

Steve Moss

Wilson Plant

Bruce Shelton

Coleman Plant

CORPORATE ATTORNEY

Morton Holbrook General Counsel

Holbrook, Wible,

Sullivan & Helmers P.S.C.

Owensboro, Kentucky

CORPORATE AUDITORS

Peat Marwick Main & Co. Louisville, Kentucky

John West

	=	
Big Rivers Electric Corporation, 201	Third Street, Post Office Box 24, H	enderson, Kentucky 42420
	Telephone 502-827-2561	

# 



1985 ANNUAL REPORT

# FINANCIAL HIGHLIGHTS

(dollars in thousands)

			(	
	1986	1985	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	227,664	236,024	(8,360)	(3.5)
Operating Expenses	190,520	193,714	(3,194)	(1.6)
Net Margins (Loss)	(41,225)	3,519	(44,744)	
Construction Expenditures Energy Sales (Megawatt Hours)	81,391	94,607	(13,216)	(14.0)
A. To Members	6,211,794	6,908,671	(696,877)	(10.1)
B. Intersystem	3,303,675	3,290,106	13,569	.4
System Peak Demand in				
Megawatts	993	1,042	(49)	(4.7)
Cost of Fuel Used in		,	,	,
Generation	87,203	94,699	(7,496)	(7.9)
Assets	1,438,565	1,409,491	29,074	2.1
Accumulated Margins and Equity	5,282	46,507	(41,225)	(88.6)
Employees Full Time	863	827	36	4.4
Revenue Per kWh Sold (Mills)	27.54	28.57	(1.03)	(3.6)

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# PRESIDENT'S AND GENERAL MANAGER'S REPORT

fter months of intense negotiations with the Rural Electrification Administration (REA), Manufacturers Hanover and Irving Trust—our creditors—we agreed in early August to a workout plan which was expected to begin putting Big Rivers back on a firm financial footing. An essential component of that workout formula was an increase in our rates.

On August 7, Big Rivers filed for a \$7.5 million annual increase in revenues over and above revenues based on the 1985 test year. The application was made to the Kentucky Public Service Commission (PSC) and asked for a 3.58 percent increase in total revenues. It would have been Big Rivers' first rate increase since 1981.

The PSC held hearings commencing on December 2 and ending on December 18. On March 17, 1987, it denied the requested rate increase. Although Big Rivers did not seek PSC approval of its workout plan with its creditors, the PSC asserted jurisdiction over and rejected the workout plan. It then initiated a new case, PSC 9885, to establish a revised workout plan and revised rates. It set for hearing on July 28, 1987, the revised workout plan, and revised rates. It ordered Big Rivers to negotiate such a revised workout plan with its creditors, and to negotiate flexible electric rates with the aluminum smelter customers, warning that if this is not done by that date, the PSC would establish rates for Big Rivers.

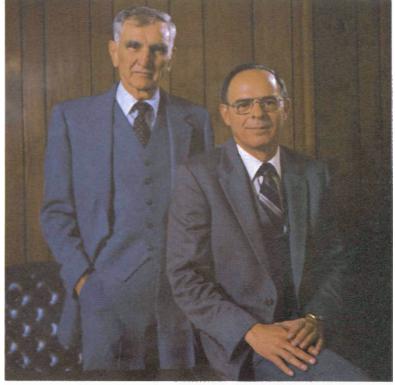
The Commission further stated:

"In this Order the Commission has asserted its statutory right to review and approve a revised workout plan. The overall goal of the revised workout plan should be to stabilize the Big Rivers service area and provide for economic growth to diversify Big Rivers' load. The plan must offer an equitable balance among all interests. Any acceptable revised workout plan must seriously consider the following guidelines.

1. It is the opinion of the Commission that a good starting point for negotiation is the Sunflower Electric Cooperative Debt Restructure Plan. Recognizing the disturbing lack of load diversity and Big Rivers' dependence upon a sluggish aluminum industry, provisions similar to the Sunflower Plan which are not contingent upon an immediate rate increase and guaranteed full repayment of debt are desirable.

- 2. The immediate and primary source for debt service is off-system sales. Therefore, an agreement on off-system sales should be used in calculating any schedule of debt repayment. Big Rivers' ratepayers should not have unlimited responsibility for the payment of Big Rivers' debt. Furthermore, they should not be required to provide all the revenues required to offset shortfalls arising from insufficient off-system sales.
- 3. The interests of all affected parties must be considered: rural consumers, industrial customers and creditors. Big Rivers should meet with the creditors to negotiate a revised workout plan. Big Rivers and the aluminum companies should negotiate a flexible rate plan that recognizes the cyclical nature of the industry and the revenue requirements of the utility. Big Rivers, the Attorney General, and other interested parties should meet to discuss the negotiation and determine how the interests of customers other than NSA and Alcan can best be protected.
- 4. While the Commission expects and the public interest requires that all participants negotiate expeditiously and in good faith, the Commission will make the ultimate decision as to a reasonable long-term solution and no participant will have a veto. The Commission wishes to see the results of negotiations within the time frame established herein.

- 5. The payment of Big Rivers' obligations to its creditors should take into consideration longer terms, reduced interest rates, deferral of principal and interest payments, preferred stock options, payments tied to off-system sales, and reduction of principal.
- 6. Consideration should be given to sale or disposal of Wilson to another entity or through establishment of a generating subsidiary as a possible long-term solution.
- 7. The plan should include well documented projections of system and off-system sales and cash flow over both the short and long term. Documentation should include a thorough explanation of all assumptions, reasonable specificity of targets, and detailed work papers supporting the long and short run cash flow projections.
- 8. A revised workout plan must contain much more affirmative support by REA of Big Rivers' efforts to achieve off-system sales. The current workout plan states only that 'the REA will not unreasonably withhold its consent to power sales agreements proposed by BREC (Big Rivers) or to "non-disturbance" provisions with power purchasers in appropriate cases.'
- Priority of disbursements with regard to principal and interest should be clearly established.



Morton Henshaw

William H. Thorpe

10. Big Rivers is currently involved in litigation with REA and the Justice Department, Alcan, and NSA. The revised workout plan should include a settlement of all outstanding litigation."

Though so much of our effort this year was tied to the preparation and presentation of our rate case, we also concentrated in other areas.

The D.B. Wilson generating plant, a 409-megawatt (MW), net capacity, coal-fired unit was placed in commercial operation on November 1, 1986.

We are committed to the economic well-being of western Kentucky. Big Rivers was formed in 1961 not only to provide a reliable and dependable source of electricity but to be a catalyst for regional economic development. In recent years we have seen thousands of western Kentucky jobs lost due to recessions in the coal and steel markets, decline in some manufacturing plants, a devastatingly unstable farm economy and layoffs in many industries, including aluminum. In December Big Rivers hired

an Economic Development Representative to assist the 22 counties served by Big Rivers' distribution cooperatives in attracting and retaining business and industry. Bill Johnson came to Big Rivers with the experience, commitment and contacts necessary to provide that help,

To meet the demands of corporate and departmental growth, and to increase efficiency, the functions of our Accounting Department have been placed under a Manager of General Accounting, a Manager of Taxes, Insurance and Budgets, and a Manager of Financial Services.

Big Rivers also welcomed a new board member — Paul Buchanan — representing Jackson Purchase Electric Cooperative Corporation. He replaced Stanley Jones, whom we thank for his dedicated service.

We are grateful to our employees who continued to work efficiently and resolutely despite the uncertainty of our financial future. Our selaried employees in 1986, as in 1985, worked without a general wage increase, and we commend them for their personal sacrifices.

We also recognize our Board of Directors' important contributions and thank them for their support and guidance. Each of the four distribution cooperatives selects three members who serve on our board. These individuals work diligently to protect the concerns of more than 75,000 member-consumers in western Kentucky. Those co-ops and their representatives on our board are identified on the corporate directory page of this report.

Morton Henshaw

Morton Henshaw President, Board of Directors

William H. Thorns

William H. Thorpe General Manager

## **FINANCE**

uring 1986, our distribution members bought 6.2 billion kilowatthours (kWh) of power, a .7 billion decrease from the previous year. This change resulted from the shut down of a second potline by Alcan Aluminum at Sebree. The smelter removed one potline during 1985 due to the depressed aluminum prices, and the second potline was closed during 1986 because of economic conditions. Neither of these potlines was returned to service at year end.

Our total kWh sales were 9.5 billion, compared to 10.2 billion in 1985. Total revenues from sales decreased \$23.4 million to \$257 million. This loss of revenues reflects: the loss of sales to Alcan; savings in lower fuel costs which are passed directly to the consumer in lower energy costs; and the lower sale price of power to interconnected utilities caused by availability of competing excess energy.

Big Rivers incurred a \$41.2 million loss in 1986 compared to a \$3.5 million net margin in 1985. The November 1 commercialization of the Wilson Plant required discontinuing the capitalization of its associated costs of interest, start up

and testing operations, and began the financial recognition of its operating costs, including interest and depreciation, in the statements of operation. This brought about a \$14.6 million loss. Construction costs of \$27.7 million associated with Wilson Unit No. 2 which was cancelled in 1984 and carried in a deferred debit account were charged off during the year in accordance with FASB 90.

At year end we were in arrears on our original debt service schedule by \$198 million, and our equity had decreased to approximately \$5 million.

We filed an application with REA to authorize the refinancing of approximately \$578 million of loan advances from the Federal Financing Bank which are guaranteed by REA as provided by legislation which amended the Rural Electrification Act of 1936 and in accordance with provisions of Title 7, Code of Federal Regulations. Determination of our eligibility and approval of such refinancing are anticipated in 1987.

As reported last year, a financial workout plan had been submitted to our creditors which included debt restructuring, additional financing, increased rates to the non-smelter load, and time to make additional intersystem sales. During the year, a "Proposed Debt Restructuring Plan" was negotiated which included each of these concepts, although the degree of contribution of each item changed substantially. 'The executed "Proposed Debt Restructuring Plan" primarily included provisions regarding:

- 1. the filing of a rate case to include increased capacity charges to \$7.50 per month per kW with a ratchet on peak demand.
- 2. Big Rivers' agreement not to exceed a specified level of capital expenditures without prior creditor approval.
- 3. specific interim financial operating procedures until the PSC decision becomes final including an escape provision in the event the PSC did not approve big Rivers' proposed rates.
- 4. An additional bank loan of \$24 million at 8% to be used to pay higher cost government debt.
- 5, the financing of government arrearge debt at an 3% interest rate.

- 6. the shortfall debt accrued until Big Rivers' cash flow is sufficient to meet its operating costs and service its debt. That shortfall debt bears an interest rate matching the rates of the REA guaranteed debt of Big Rivers which would have otherwise been payable.
- 7. REA's withdrawal of the foreclosure proceeding against Big Rivers and Big Rivers withdrawal of its suit against the U.S., in each case without prejudice.

On August 7, a rate case was filed with the PSC which incorporated the \$7.50 monthly kW demand charge on the highest 30-minute metered demand during the month, the preceding 11 months or the contract demand for all delivery points except those which by contract cannot be exceeded by more than two percent without Big Rivers' prior permission. The filing also included an energy charge of \$0.018884 including a Fuel Adjustment Clause (FAC) base of \$0.01460. Based on the 1985 test year, the proposed increase would result in a \$7.5 million annual increase in revenues, or 3.58%. By design the total revenue increase would not materially affect the aluminum smelters, but would increase the member distribution cooperatives' average residential rates by approximately 13%.

The PSC on March 17, 1987, denied our rate request based on the Commission's opinion and finding that:

- "1. The workout plan has a direct and immediate impact on Big Rivers' financial stability, thus rendering the workout plan subject to the jurisdiction of the Commission.
- The workout plan will not provide for a workable, long-term solution

- to Big Rivers' financial problems and the workout plan should be denied.
- The rates proposed by Big Rivers pursuant to the workout plan are unfair, unjust, and unreasonable and should be denied.
- 4. Big Rivers' expenditure of funds to complete Wilson was within management's discretion and that aspect of NSA's complaint should be denied. The issue of allocation of off-system sales remains before the Commission in its investigation of Big Rivers' rates.
- 5. The Commission's 1980 Order in Case No. 7557 granting Big Rivers a certificate of convenience and necessity to construct the D.B. Wilson Generation Station does not stop the Commission, in a rate-making proceeding, from reviewing all issues surrounding Big Rivers' prudency in planning and constructing Wilson and deciding if Wilson should be included in rate base.
- The evidence of record is insufficient to support any findings that Big Rivers was clearly imprudent in its decision to build Wilson and complete it in 1984.
- 7. Big Rivers should negotiate a revised workout plan with its creditors and negotiate flexible power rate schedules with NSA and Alcan in accordance with the guidelines set forth in this Order. Big Rivers should discuss with the Attorney General and other interested parties how the interests of customers other than NSA and Alcan can best be protected.
- 8. A further proceeding should be initiated immediately to review the reasonableness of Big Rivers wholesale power rates and the results of Big Rivers'

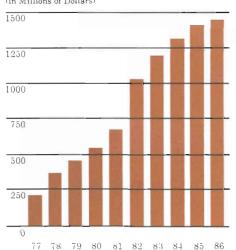
negotiations with its creditors and with NSA and Alcan. All issues not finally decided herein will be before the Commission in the further proceeding; the evidence of record herein should be incorporated by reference in the further proceeding; and all parties herein should be designated as parties in the further proceeding."

The PSC also stated:

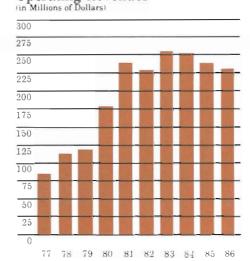
"In this case we are ordering Big Rivers to conduct over the next four months a series of negotiations aimed at reaching an acceptable solution to this problem. First, Big Rivers will seek to negotiate a revised workout plan with its creditors similar to the one approved by REA in the Sunflower Electric Cooperative case. Next, Big Rivers will begin meeting with the aluminum companies to negotiate a flexible rate plan that recognizes both the cyclical nature of the aluminum industry and the needs of the utility. The commission is interested in the results of these negotiations even if agreement can be reached with only one aluminum company. Finally, Big Rivers is to meet with the Attorney General and other interested parties to explain the negotiations and discuss how the interests of the non-aluminum customers are being protected."

Management cannot reasonably predict the ultimate resolution to its financial difficulties. Big Rivers anticipates that it will incur an operating loss of approximately \$8 million a month, and that the arrearage on its debt service will continue to grow until an acceptable solution is implemented.

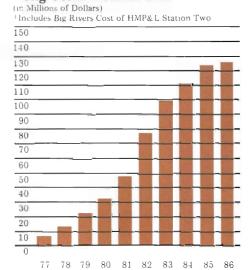
# Total Assets



## **Operating Revenues**



#### Long-Term Interest Cost\*



## PRODUCTION AND CONSTRUCTION

he Production/Construction Department has continued to operate normally and to upgrade plant facilities despite the austerity program. Improved efforts in our maintenance management and performance monitoring programs stressed efficient management of our power plants.

Major inspections and overhauls were performed on several units. During the overhaul of our oldest unit, Reid No. 1, we replaced turbine blades and closed clearances to increase unit efficiency. Our newest, Wilson No. 1, also had a major inspection for warranty purposes. Engineering advancements were performed by the vendor to increase reliability. The unit was commercialized November 1. Coleman No. 2 had a major turbine inspection and overhaul and clearances adjusted to increase efficiency. Normal maintenance schedules were completed on the other units.



The staff engineering group designed and supervised construction of a new waste treatment pond at the Wilson Plant to meet environmental restrictions. They also designed and monitored the construction of a new sludge haul roadway at the Reid/Green complex to eliminate water runoff to the river, and two major changes have been made in our ponding areas at Reid/Green to prevent excursions of non-compliance.

With the guidance of our safety department, the year's heavy maintenance schedule was completed with one of the best ever safety records in all plants.

M. W. Kellogg completed the fourth module on the scrubber at Wilson. The construction work on the module had minimal effect on the running of the unit. The scrubber has demonstrated the required 90% sulfur removal at full boiler load.

## **ENERGY SUPPLY**

uring 1986, efforts to market short-term power sales to other utilities were very successful. The main source for the short-term power sales was the Tennessee Valley Authority (TVA).

While efforts to market power on a longer term basis were disappointing, we are continuing to establish contacts and pursue potential sources for long-term power sales.

Intersystem power sales for both capacity and energy totaled \$68.9 million for 1986, compared to \$72.3 million the year before.

Big Rivers recorded a system coincident peak of 993 megawatts on January 27. At the time of the system coincident peak, Alcan Aluminum was operating with one potline out of service which accounted for a load reduction of approximately 100 megawatts.

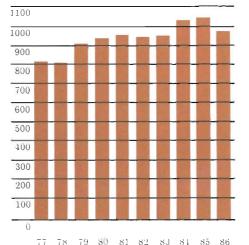
Both 1986 rural (all classes of consumers except large industrial) energy usage and the non-coincident peak demands increased above 1985. Energy delivered to the rural loads increased by 3.85 percent while the non-coincident peak increased by 4.75 percent.

Total heating and cooling degree days occurring in 1986 were 5,898 which compares to 6,230 for 1985.

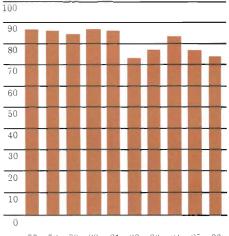
During the year, Energy Supply's communications section completed the radio control switch system, installed and checked out the communications equipment associated with TVA's/Shawnee 161-kV tie (this is to be completed in early 1987).

Several phone-cost-reduction projects completed this year will save the corporation approximately \$33,000 annually.

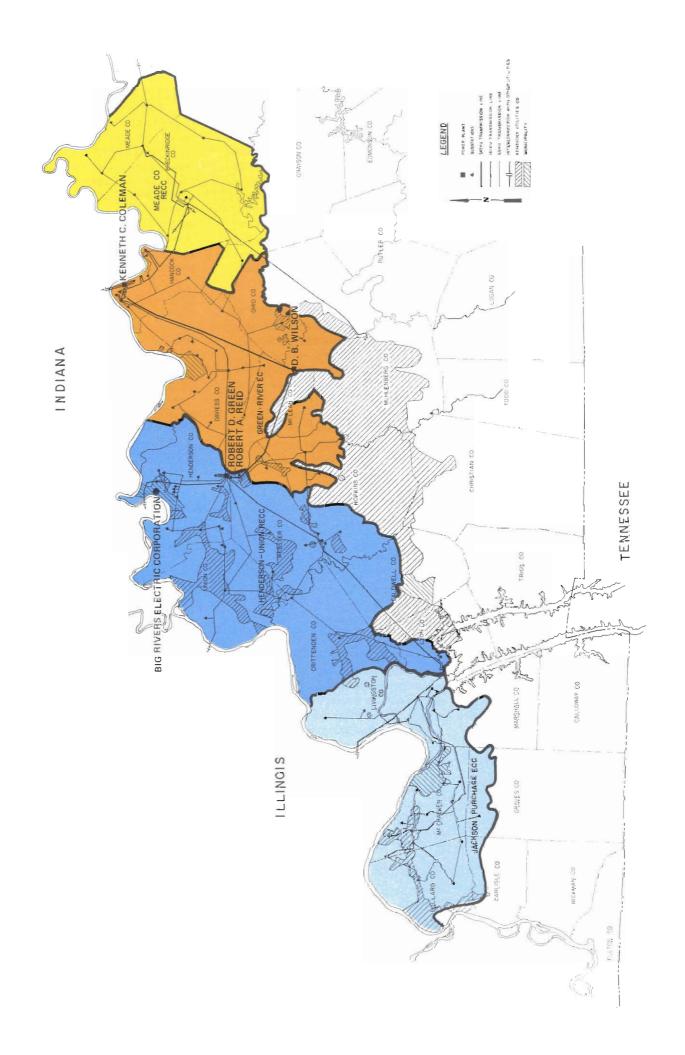
#### Demand-Megawatts



#### System Load Factor - Percent



 $77 \quad 78 \quad 79 \quad 80 \quad 81 \quad 82 \quad 83 \quad 84 \quad 85 \quad 86$ 



## FUELS

ost of coal was greatly reduced during the year. The average cost of coal used in generating electricity in the commercialized generating units was \$27.83 per ton, 127.6 cents per million BTU, compared to \$30.25 per ton, 137.7 cents per million BTU in 1985. The lower cost resulted in savings passed directly to the consumer-owners of Big Rivers' four member cooperatives through the Fuel Adjustment Clause (FAC). Our coal costs are among the lowest in Kentucky.

Big Rivers' savings were due largely to:

- a. Termination of Big Rivers' highest cost coal contract in November 1985 and replacement with a new contract with E & M Coal, Inc., at a savings of over \$11 per ton.
- b. Expiration of Big Rivers' next highest cost contract and another relatively high cost contract in February 1986 and replacement of these two contracts with a new contract with E & M Coal, Inc., with savings of over \$10 per ton for one contract and over \$7 per ton for the other.

c. De-escalation of coal contract prices, resulting from favorable changes in the governmentally published indexes on which the price revisions are based, primarily those relating to diesel fuel prices and to coal mining labor productivity.

The Alcan Aluminum smelter at Sebree, which normally accounts for about one-third of Big Rivers' system load, had one of its three potlines out of service during all of 1986, and a second potline out of service from June 1986 through the rest of the year. Although much of the surplus energy was sold outside Big Rivers' system, the quantity of coal burned in generating electricity was limited to the extent that the coal requirements were supplied almost entirely by the minimum quantities required to be received under the long-term and medium-term coal contracts, with less than 2% of the coal receipts purchased on the spot market.

Big Rivers' commercialized generating units burned 3.93 million tons of coal in generating electricity in 1986, approximately the same as in 1985.

The largest coal purchases, 1.05 million tons, came from MAPCO's Retiki Mine near Henderson. This high-sulfur coal is burned in the Robert D. Green Plant, which is equipped with flue gas desulfurization scrubbers. Other coal came largely from western Kentucky and southern Indiana, with minor quantities from eastern Kentucky and Ohio,

The D. B. Wilson Plant was commercialized on November 1, 1986 and only the coal used at that plant after that date is included in the above coal cost and consumption figures for commercialized units. Coal burned at the Wilson Plant from January 1 through October 31, 1986, 0.56 million tons at an average cost of \$29.02 per ton, 129.9 cents per million BTU, was charged to a start-up and testing account. This plant also is equipped with flue gas desulfurization scrubbers and burns western Kentucky high-sulfur coal.

## ENGINEERING AND TRANSMISSION

ig Rivers' growth rates for "rural" electric power demand over the past two years have exceeded previously expected levels, increasing at a healthy compound rate of 7.6% per year. This "rural" segment includes residential, farm, commercial and small industrial loads. 'The "large industrial" sector experienced a negative growth rate of 14.5% per year, due primarily to economic recession in the aluminum industry. One of the large aluminum smelter facilities on Big Rivers' system has reduced operating levels to 33% of capacity. If the smelter had been operating at normal capacity, the total electric power demand including both rural and large industrial consumers would have grown at 2.3% per year. Big Rivers has retained a consultant to conduct a long-range forecast for electric power demand and energy for its system. This study is expected to be completed in early 1987.

Several construction projects were completed in the Jackson Purchase ECC service area to improve reliability of service. Four 69-kilovolt (kV) transmission line sections totaling about 20 miles of construction were placed in service in late May. In conjunction with this construction, transmission line switching equipment was added at 13 locations in the 69-kV system. A 161-kV transmission line approximately 3.3 miles in length was completed in September providing an interconnection with the Tennessee Valley Authority in western McCracken County to deliver peaking power from the Southeastern Power Administration. The McCracken County substation was expanded for the termination of this tie line.

Two construction projects were completed in the Henderson-Union RECC service area to serve new coal mining consumers. These projects required the construction of approximately 5.1 miles of 69-kV transmission line and the addition of metering facilities at each delivery point.

Construction of an additional \$9-kV tap structure and metering were completed in October to accommodate the expansion of Green River Electric Corporation's Thruston substation.

To upgrade our 161-kV transmission system from a 120° F maximum design operating temperature to a 212° F maximum, we modified five 161-kV transmission structures, changed out 14 line traps and reset protective relaying. This upgrade will allow us to transmit greater quantities of power over existing lines.

Transmission personnel replaced over 150 poles damaged by woodpeckers or internal decay. Vegetation on 750 acres of line rights of way was treated or hand-cut to prevent line outages.

## LABOR RELATIONS AND CORPORATE AFFAIRS

orale remained extremely positive despite a two and one-half year austerity program, which among other severe measures postponed any general salary increases for nonbargaining employees.

While no one doubted their dedication and loyalty, those characteristics were clearly evident as our employees prepared for our December rate hearing. Many men and women worked 12 to 18-hour days, seven days a week gathering information for and preparing pre-filed testimony, interrogatories, depositions and other documents Big Rivers provided to the Kentucky Public Service Commission and intervenors. Though frustrated by the longevity of our financial crisis and worn out from the long and tiring hours, our employees were nothing less than professional.

Reflecting their true spirit, our employees remained sensitive to the needs of others. They set a corporate record with their contributions to the United Way and participated in the fifth annual blood drive. Employees continued taking leading roles in civic and community organizations and churches.

Big Rivers' employees made a solid commitment during 1986 to work safely. The result was another recordbreaking year for safety. The severity rate (number of lost-time days per 1 million employee hours worked) plunged from 723 to 103! The incident rate (number of injuries reported per 200,000 employee hours worked) decreased from 21 to 11, and the frequency rate (number of lost-time injuries per 1 million employee hours worked) fell from 23 to 13.

The Employee Assistance Program (EAP), in its fourth year, shows convincing proof of being an effective intervention program. For those who encounter problems — on or off the job, either in personal or family life — EAP offers the professional counseling often needed to help people cope with life's challenges. Big Rivers was one of the first companies in our area to offer such a program as part of our standard benefit package. We're delighted that it's well received and that it works.

Forty-five employees took advantage of the Educational Assistance Program by enrolling in college classes or pursuing home study courses during the year.

Preparations for the April 1987 contract negotiations were under way as 1986 came to an end.

Employment for year end 1986 was 863. Despite the uncertainty of the future, the turnover rate dropped from .40% in 1985 to .24% in 1986. The national median turnover rate for January through June 1986, in companies com-

parable in employment to Big Rivers was 1.0%. With the active recruitment of women and minorities, the Affirmative Action Program continued to produce positive results.

## ENVIRONMENTAL AND PUBLIC AFFAIRS

n addition to the normal compliance efforts involving monitoring and reporting, the department was involved in several specific areas.

The department continued its efforts to repermit several facilities, and final permits are expected early in 1987. We believe that the new permits will address many of the problem areas that resulted in non-compliance incidents under the old permits and will minimize such incidents in the future.

The corporation followed through on its commitment to remove and dispose of electrical equipment containing high concentrations of polychlorinated biphenyls (PCB's). Twelve transformers were removed from the precipitators at the City of Henderson Station Two, which is operated by Big Rivers, and disposed of in accordance with applicable regulations.

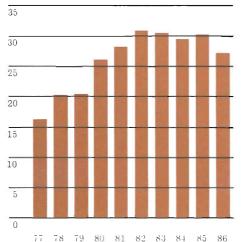
Modeling efforts regarding the removal of reheat at the Wilson stack continued throughout the year. It is expected that a formal request will be made to the regulatory agencies shortly after the first of the year. This request, if approved, may result in an annual savings of approximately \$1 million.

Construction and integration of the additional module of the Wilson Plant flue gas scrubber were completed in September. Performance testing is being done to verify compliance, and a modification to the operating permits will be requested.

The department initiated a major new program of auditing continuous monitoring equipment in response to more regulatory pressure. This will increase the accuracy and availability of data from these systems.

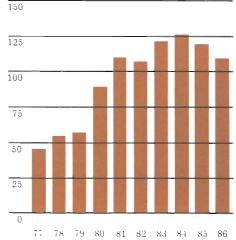
Department personnel are especially recognized for shouldering these added responsibilities without any increase in staff.

## Average Cost Per Ton of Coal Used



#### Cost of Fuel Used\*

(in Millions of Dollars)
Includes Big Rivers Cost of HMP&L Station Two



## **AUDITORS' REPORT**

Peat, Marwick, Mitchell & Co. Certified Public Accountants

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1986 and 1985 and the related statements of revenues and expenses, equities and changes in financial position for each of the years in the three-year period ended December 31, 1986. Our examinations were 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.

As discussed more fully in note 2, Big Rivers Electric Corporation (Big Rivers) began in 1980 the construction of the D. B. Wilson Generating Station which consisted of two generating units (Wilson 1 and Wilson 2). However, due to the anticipated surplus power of Wilson 1, Wilson 2 was cancelled. On November 1, 1986, Wilson 1, with a cost of \$855 million, was commercialized. In April 1984, a rate increase request was filed with the Kentucky Public Service Commission (KPSC) which included partial recovery of the fixed costs of Wilson 1. However, due to the adverse economic impact on two major industrial customers of its member cooperatives, the rate increase request was withdrawn. In November 1984, a second rate increase request was filed with the KPSC which did not include costs of Wilson 1. On May 6, 1985, the KPSC denied that request concluding that the rate filing would not have been necessary but for the presence of Wilson 1 and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition. In November 1984, the Rural Electrification Administration (REA) notified Big Rivers that it would not make any further advances under the loan commitment relating to the construction costs of Wilson 1. Subsequently, Big Rivers defaulted on REA loans and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. At December 31, 1986, this suit was pending. REA also proposed a merger study with another cooperative but a resulting merger proposal was rejected by REA. During 1985 and 1986 a committee, including Big Rivers and representatives of parties involved, developed a mutually acceptable workout plan to resolve Big Rivers' financial difficulties. On August 7, 1986, Big Rivers filed for a rate increase which incorporated the workout plan. The KPSC on March 17, 1987 denied Big Rivers' rate request and ordered that a new case, including a revised

workout plan, be heard on July 28, 1987. Big Rivers' ability to recover the costs of Wilson 1 and meet its future debt obligations is dependent upon obtaining necessary rate increases, obtaining power sales contracts for the surplus power and restructuring debt obligations and securing additional financing. If the aforementioned is not accomplished, Big Rivers will be unable to continue in existence. The accompanying financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary should Big Rivers be unable to recover the costs of Wilson 1 or should Big Rivers be unable to continue in existence,

In 1985 and 1984, Big Rivers elected to carry approximately \$27 million of costs relating to Wilson 2, which has been cancelled, as a deferred charge. Management's intention was to recover these costs in future rates and through sales of excess power; however, generally accepted accounting principles required that such costs be charged to operations if recoverability is not probable. In 1986, Management concluded that recoverability of these costs was no longer feasible and, accordingly, these costs were charged to operations.

In our opinion, except for the write off in 1986 of the deferred charge referred to in the preceding paragraph which should have been written off in 1984, and, subject to the effect on the financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classification of liabilities referred to in the second preceding paragraph been known, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1986 and 1985 and the results of its operations and the changes in its financial position for each of the years in the three-year period ended December 31, 1986, in conformity with generally accepted accounting principles applied on a consistent basis except for the change in 1985, with which we concur, in the actuarial method of determining pension costs as described in note 9 to the financial statements.

Peat, Marwick, Mitchell & Co.

Louisville, Kentucky February 6, 1987, except as to note 2, which is as of March 17, 1987

## STATEMENTS OF REVENUES AND EXPENSES

(In thousands)

	Years ended December 31,		r 31,
	1986	1985	1984
Operating revenues (note 10)	\$227,664	236,024	258,020
Operating expenses:			
Operations:			
Fuel for electric generation	87,203	94,699	100,820
Power purchased and interchanged, net	38,214	39,792	47,494
Other	28,597	25,054	28,047
Maintenance	15,192	14,027	14,492
Depreciation and amortization	18,799	17,789	18,533
Taxes	2,516	2,353	2,269
Total operating expenses	190,521	193,714	211,655
Electric operating margins	37,143	42,310	46,365
Interest and other deductions:			
Interest	124,873	122,612	110,650
Allowance for borrowed funds used during construction (note 3)	(73,353)	(82,966)	(70,902)
Other deductions	235	195	15 <b>1</b>
Total interest and other deductions	51,755	39,841	39,899
Operating margins (loss)	(14,612)	2,469	6,466
Nonoperating margins: (loss)	• • • •		
Interest earned	1,067	1,154	2,524
Interest earned credited to construction		(113)	(1,148)
Write-off of leverage lease costs (note 11)	_	_	(3,125)
Write-off of Wilson 2 costs (note 12)	(27,681)	_	_
	(26,614)	1,041	(1,749)
Other capital credits and patronage allocations	1	9	22
Net margins (loss)	\$(41,225)	3,519	4,739

## STATEMENTS OF EQUITIES

(In thousands)

		Years ended Dece	mber 31, 1986,	1985 and 1984	
			, , , , , , , , , , , , , , , , , , , ,		er equities
	Total equities	Transfer nonoperating loss to operating margin	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1983	\$37,749	_	33,804	753	3,192
Margins for 1984:					
Operating	6,466	(1,749)	4,717	_	
Nonoperating (loss)	(1,749)	1,749	_	_	-
Other capital credits and patronage allocation	s 22	-	22	-	_
Capital surcharge	461	_		10	451
Balance at December 31, 1984	42,949	_	38,543	763	3,643
Margins for 1985:					
Operating	2,469	_	2,469	_	_
Nonoperating	1,041	MP MOTOR TO	1,041	-	_
Other capital credits and patronage allocation	s 9	-	9	_	
Capital surcharge	39		_	1	38
Balance at December 31, 1985	46,507	_	42,062	764	3,681
Margins for 1986:					
Operating (loss)	(14,612)	_	(14,612)	-	-
Nonoperating (loss)	(26,614)	_	(26,614)		_
Other capital credits and patronage allocation	s 1		1	-	_
Balance at December 31, 1986	\$ 5,282	_	837	764	3,681

Assets	Decem 1986	nber 31, 1985	
Utility plant, net (notes 2 and 3)	\$1,310,745	1,248,663	
Productive capacity under purchased	Ψ1,010,140	1,210,000	
power contract (note 8)	27,500	29,300	
Other deposits and investments, at cost	3,651	3,497	
Current assets:			
Operating funds	10,329	12,336	
Receivables	29,434	26,304	
Fuel for electric generation	28,430	32,838	
Material and supplies	14,794	13,365	
Total current assets	82,987	84,843	
Deferred charges (note 4)	13,682	43,188	
	\$1,438,565	1,409,491	
Capitalization: Equities Long-term liabilities, net of current	\$ 5,282 25,700	46,50	
maturities (note 5)	20,700	27,521	
maturities (note 5)  Total capitalization	30,982	74,028	
Total capitalization			
Total capitalization  Current liabilities:			
Total capitalization  Current liabilities: Current maturities of long-term	30,982	74,028	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5)	30,982 1,183,732	74,028	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6)	30,982 1,183,732 195,711	74,028 1,189,090 120,918	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5)	30,982 1,183,732	74,028 1,189,096 120,913 19,228	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable	30,982 1,183,732 195,711 19,957	74,028 1,189,096 120,913 19,228 5,378	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable Accrued expenses  Total current liabilities  Deferred credits	30,982 1,183,732 195,711 19,957 7,135	74,028 1,189,096 120,913 19,228 5,378 1,334,613	
Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable Accrued expenses  Total current liabilities	30,982 1,183,732 195,711 19,957 7,135 1,406,535		

## STATEMENTS OF CHANGES IN FINANCIAL POSITION

(In thousands)

	Years ended December 31,		31.
	1986	1985	1984
Sources of working capital:			
Net margins (loss)	\$(41,225)	3,519	4,739
Items which do not use working capital:			
Depreciation of utility plant	19,309	18,206	17,936
Amortization of deferred charges	2,497	3,013	7,902
Write-off of Wilson 2 costs	27,681	_	1 200
Other amortization			137
Working capital provided			
by operations	8,262	24,738	30,714
Long-term borrowings		_	121,869
Other	197	35	628
Decrease in working capital	73,779	71,622	1,178,879
	\$ 82,238	96,395	1,332,090
Uses of working capital:	0.01.001	04.005	100.050
Additions to utility plant, net	\$ 81,391	94,607	122,950
Reclassification of long-term debt			1 100 JEO
due to default (note 5)	- 51	21	1,186,450
Reduction of long-term debt Increase in deferred charges	21 672		5,274
Increase in other deposits	012	1,475	16,832
and investments	154	292	584
	\$ 82,238	96,395	1,332,090
	Ψ 02,200		1,002,000
Increase (decrease) in working capital:			
Operating funds	\$ (2,007)	5,777	5,175
Construction funds	-	(1,818)	(25,005)
Receivables	3,130	2,284	(156)
Fuel for electric generation	(4,408)	(4,675)	10,865
Material and supplies	1,429	1,738	3,324
Matured debt and interest	(74,798)	(94,159)	(26,754)
Current maturities of long-term		•	
liabilities (note 5)	5,364	4,162	(1,185,425)
Accounts payable	(729)	14,862	19,208
Accrued expenses	(1,760)	207	19,889
		(71,622)	(1,178,879)

#### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis, presently excluding costs relating to the Wilson Generating Station, and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

Big Rivers utilizes the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers, as the primary source of borrowed funds.

The rate structure approved by KPSC provides for a base rate consisting of a demand charge and an energy charge. The rate structure also contains a fuel adjustment clause under which the energy charge is to be increased or decreased in each billing period to the extent that actual fuel costs and certain purchased power costs together, are greater or less than the base period costs included in the base rates. The application of the fuel adjustment clause is subject to semi-annual review by KPSC.

#### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Revenue Recognition

Revenues are based on month-end meter readings.

#### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred,

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings, Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Rates used to compute depreciation are as follows:

Production plant 3%-3.50% 2.75% Transmission plant Station equipment 2.75% 2%-20% General plant Unclassified plant

in service 2.75%-3.50%

The sinking fund depreciation method has been adopted for the Wilson plant, the 345 kv transmission lines and related substations which were commercialized in November 1986. This method equates depreciation expense to payments of principal on long-term debt. This method was adopted to more closely equate operations to the statutory rate-making process which provides for a revenue requirements method for determining Big Rivers' rates. Big Rivers use of this method is pending REA approval. In addition, the use of sinking fund depreciation for financial statement purposes may not be acceptable under proposed accounting literature currently under consideration by the Financial Accounting Standards Board.

#### (e) Operating Funds

Operating funds consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

#### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at weighted average cost.

#### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

#### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (2) D. B. Wilson Generating Station

As a result of Power Requirements Studies (load forecasts) made in 1977 and supplemented by studies completed in 1979 and 1980, Big Rivers began in 1980 the construction of the D. B. Wilson Generating Station (Wilson Station) consisting of two 395 megawatt (net capacity) generating units (Wilson 1 and Wilson 2) at an estimated cost of \$1.1 billion to be financed by long-term debt borrowings guaranteed by the REA. Another Power Requirement Study was completed in 1981 which produced a significantly lower load forecast than the previous studies. Based on the new forecast, it became apparent that the Wilson 2 unit would not be needed as previously planned and construction activity was delayed. At the same time, the status of Wilson 1 was reviewed and it was determined that the amount of money invested by that time and the added cost that would result in a delay made it more economic to continue construction. Due to the surplus capacity of Big Rivers upon completion of Wilson 1, construction of Wilson 2 was subsequently cancelled. On November 1, 1986, Wilson 1 was commercialized and during 1986 costs associated with Wilson 2 were written off (see note

In April 1984, a \$57.6 million rate increase request, including partial recovery of the fixed costs of Wilson 1, was filed with the KPSC. At the same time, the aluminum industry, which accounts for a significant portion of Big Rivers' sales, experienced another sharp decline in primary aluminum prices. As a result, inclusion of Wilson Station costs in Big Rivers' rates would yield noncompetitive rates to the aluminum smelters (identified in note 10), jeopardizing their continued operation. In October 1984, Big Rivers withdrew its rate increase request. In November 1984, a \$16.7 million rate increase was filed which did not include the production and fixed costs associated with Wilson 1. In May 1985, the KPSC denied that request concluding that the rate filing would not have been necessary but for the presence of the Wilson Station and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition.

In November 1984, REA notified Big Rivers that further advances of funds under the loan commitments from REA would not be forthcoming unless and until evidence, satisfactory to REA, of the economic feasibility of Big Rivers was submitted. Big Rivers has filed suit requesting the United States District Court to order REA to approve the release of \$27.6 million previously requested by Big Rivers. Failing to receive these loan funds, Big Rivers used internally generated funds to pay the amounts due contractors for Wilson Station and other construction projects. As a result, Big Rivers was unable to pay principal and interest payments due in November and December 1984 to

REA and the Federal Financing Bank (FFB). REA, by letter dated January 3, 1985, citing continuing default and, pursuant to the loan agreement, demanded payment in full before January 17, 1985, of all outstanding debt and accrued interest (see note 5). The amount could not be paid and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. Big Rivers has filed an answer to this suit (see note 13).

REA stated that the suit filed January 18, 1985 gave Big Rivers more time to study a merger with East Kentucky Power Cooperative (East Kentucky) proposed by REA in November 1984 as the resolution to Big Rivers' financial problems. Big Rivers and East Kentucky approved a consultant to conduct a study of the feasibility of merger and to study other organizational alternatives. Big Rivers' Board of Directors in their April 12, 1985 meeting approved consolidation, as permitted by Kentucky Statutes, with East Kentucky. In June 1985, REA rejected the merger proposal jointly submitted by Big Rivers' and East Kentucky's Boards of Directors. No further action has been taken regarding merger.

In 1985, a working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover and Irving Trust (the banks providing letters of credit on the pollution control bonds) was formed to find a mutually acceptable way of resolving the financial situation. In early August 1986, Big Rivers achieved a workout plan with its creditors which would enable it to add the D. B. Wilson plant to its system without causing "rate shock" to consumers, and would resolve the litigation between Big Rivers and the Federal government.

On August 7, 1986, Big Rivers filed for an overall 3.58% increase, an increase of \$1.25 per KW in its demand rates and to modify billing demand to provide for a peak demand ratchet. Under Big Rivers' proposed rate increase — the first since January 1981 — residential rates would rise an average of 13% at retail but no net increase to the aluminum smelters over 1985 levels would result because of their high load factors and because of Big Rivers' efficient management of coal purchases.

The Kentucky Public Service Commission on March 17, 1987 denied Big Rivers' rate request and ordered that a new case be heard on July 28, 1987.

Big Rivers' ability to recover costs and meet its debt obligations is dependent upon the success of Big Rivers' ongoing efforts which include selling a substantial portion of the capacity and energy available, restructuring its debts, obtaining additional financing and rate action. If Big Rivers' efforts as outlined herein are not successful it will be difficult for Big Rivers to continue in existence.

(3) Utility Plant The following summarizes utility plant:		(In thousands
	1986	1985
Classified plant in service:		
Production plant	\$1,276,497	441,931
Transmission plant	41,771	40,710
Station equipment	65,549	44,229
General plant	12,757	11,449
Intangible	190	190
Unclassified plant in service	55,380	1,490
	1,452,144	539,999
Less accumulated depreciation	143,480	124,841
	1,308,664	415,158
Construction in progress	2,081	833,505
	\$1,310,745	1,248,663

Construction in progress at December 31, 1986 is comprised of several small projects. Construction in progress at December 31, 1985 includes \$830.9 million associated with construction of the Wilson 1 generating unit and Wilson 1 and 2 related common area and transmission facilities. As discussed in note 2, Big Rivers commercialized Wilson 1 on November 1, 1986 and ceased

capitalization of interest, construction costs and operating costs on that date. In addition, sales resulting from Wilson 1 through October 31, 1986 were credited to construction in progress. The average rates used for the capitalization of interest during construction in 1986, 1985 and 1984 were 10.5%, 10.8% and 10.5% respectively.

#### (4) Deferred Charges

Deferred charges consisted of the following:

87 E	(Iı	n thousands)
	1986	1985
Premium on FFB debt	\$ 4,032	4,175
Unamortized debt expense	355	822
Cravat coal contract amendment	8,068	9,731
Construction costs of discontinued plant (see note 12)	_	27,819
Wilson railroad costs	441	
Other	786	641
	\$13,682	\$43,188

In November 1982, Big Rivers elected to refinance \$90 million of FFB short-term mortgage notes with long-term notes at a lower interest rate. As a result of this election, a premium of \$4.6 million was required. The premium is being amortized over the term of the long-term mortgage notes.

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12.5 million was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

A summary of long-term liabilities follows:		(In thousand
	1986	1985
Rural Electrification Administration (REA) - 2% and 5% mortgage notes		
payable, maturing from April 1998 through April 2014	\$ 87,346	91,122
Federal Financing Bank (FFB) - 7.370% to 11.50% mortgage notes payable,		
maturing from March 1987 through December 2018	949,482	951,070
County of Ohio, Kentucky, promissory note, with variable		
interest rate, currently 6.42%, maturing October 2015	83,300	83,300
County of Ohio, Kentucky, promissory note, with variable interest rate,		
currently 4.85%, maturing June 2013	58,800	58,800
Obligation due to Jackson Purchase Electric Cooperative Corporation	2,983	2,983
Obligation under purchased power contract (see note 8)	27,500	29,300
Other borrowings	21	42
Total long-term liabilities	1,209,432	1,216,617
Less current maturities	1,183,732	1,189,096
	\$ 25,700	27,521

As discussed in note 2, Big Rivers has defaulted on loans from REA and on loans guaranteed by REA. Pursuant to the loan agreements, all outstanding principal and accrued interest is now payable. The loan agreements relating to the County of Ohio, Kentucky promissory notes contain provisions whereby the Trustee has the option to call the notes in the event of any loan defaults. Due to the loan default condition, such principal amounts relating to the aforementioned obligations are reflected as current maturities.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio issued Pollution Control Refunding Bonds, Series 1985, the proceeds of which were used to refinance the Interim Bonds. The Refunding Bonds bear interest at a variable rate which is the lesser of (a) 13 percent per annum or (b) a rate determined by the remarketing agent and approved by Big Rivers as being the rate necessary to remarket the bonds in a secondary market transaction at par, plus accrued interest,

but not more than 110 percent of a variable rate index based on weekly sales of 91-day U.S. Treasury Bills. The bonds are supported by a Manufacturers Hanover irrevocable transferable standby letter of credit due to expire October 1987. The bonds are payable on demand, or subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof, and will mature in any event on October 1, 2015.

In June 1983, the County of Ohio, Kentucky issued \$58.8 million of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. The weekly interest rate was initially set at 62.5 percent of the coupon equivalent rate for 13-week U. S. Treasury Bills. To meet the changes in the tax-free municipal bond market the interest rate changed periodically and on December 31, 1986 was at 83.0 percent of the coupon equivalent rate for 13-week U.S. Treasury Bills. The bonds are supported by an Irving Trust irrevocable standby letter of credit due to expire October 1987.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

In January 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2.9 million from the Jackson Purchase Electric

Cooperative Corporation. Pending REA approval, Big Rivers intends to assume the loan with REA pertaining to these assets.

#### (6) Matured Debt and Interest

As discussed in note 2, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due the FFB for REA guaranteed loans in November and December 1984 and during 1985 and 1986. The amount of the default plus interest is shown as matured debt and interest. REA, under its guarantee agreement with FFB, paid the amounts due FFB that were due from Big Rivers, but were not paid by Big Rivers. This

amount, plus interest, is recorded by REA as due from Big Rivers. The interest is computed at the same rate or rates as on the related FFB advance or advances. During 1986 and 1985, matured debt and interest increased by \$120.7 and \$116.4 million, respectively, resulting from defaults and accrued interest and was reduced by payments of \$45.9 and \$22.3 million, respectively.

#### (7) Income Taxes

Prior to 1983 Big Rivers was tax exempt under Section 501(c)(12) of the Internal Revenue Code which requires that at least 85% or more of income consist of amounts collected from members for the sole purpose of meeting losses and expenses. Nonmember gross income for the years 1983 through 1986 have exceeded the 15% allowable, therefore, Big Rivers has been a taxable cooperative for those years. In determining taxable income, the deduction for patronage allocations has resulted in a net operating loss for both financial statement and income tax purposes. Accordingly, no provision for income taxes has been required. The following analysis summarizes the net operating loss and investment tax credit carryforwards for income tax purposes:

Year of origination	Net operating loss carryforward	Investment tax credit carryforward
1983	\$ 9,460,000	\$ 270,000
1984	87,500,000	56,300,000
1985	160,180,000	1,170,000

These carryforwards may be utilized to offset taxable income for the period of 15 years from the year of origination. The actual amount of the 1986 net operating loss has not yet been determined. The original amounts of investment tax credit carryover have been reduced by 35% to account for the reduction required pursuant to Section 49(c) of the Internal Revenue Code of 1986.

#### (8) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 86% which is expected to decrease to 84% by 1989. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the

principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1986, 1985 and 1984 was approximately \$32.4, \$34.4 and \$35.5 million, respectively. Such costs are accounted for as power purchased and interchanged, net.

#### (9) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$730, \$350 and \$1,069 thousand in 1986, 1985 and 1984, respectively. The accumulated pension plan benefits and

net assets as of the most recent actuarial valuation date available are as follows:

	Janu	ary 1
	1986	1985
Actuarial present value of accumulated plan benefits:		
Vested	\$4,370	3,440
Nonvested	237	216
	4,607	3,656
Net assets available for benefits, at approximate market value	\$8,189	6,933

The assumed rate of return used in determining the actuarial present value of accumulated pension plan benefits was 6% in 1986 and 1985.

During 1985, Big Rivers changed from the entry age normal actuarial cost method to the unit credit method for determination of pension expense and funding. This change will result in a better matching of funding to accumulated benefits by taking

into consideration the excess of pension fund assets over accumulated benefits. The effect of this change was to decrease total 1985 pension cost expensed and capitalized by approximately \$748 thousand.

Operating revenues were as follows:			(In thousands)			
	1986	1985	1984			
Members:						
Green River Electric Corporation	\$107,305	112,932	112,063			
Henderson-Union Rural Electric						
Cooperative Corporation	60,406	74,983	84,933			
Jackson Purchase Electric						
Cooperative Corporation	13,275	12,914	12,399			
Meade County Rural Electric						
Cooperative Corporation	7,298	7,468	7,040			
Nonmembers	68,962	72,312	48,269			
	257,246	280,609	264,704			
Sales credited to construction	(29,582)	(44,585)	(6,684)			
	\$227,664	236,024	258,020			

Sales resulting from Wilson 1 during the construction period have been credited to construction in progress.

National-Southwire Aluminum Company and Alcan Aluminum Corporation (formerly Atlantic Richfield Company) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

(In thousan				
Year	Green River	Henderson-Union	Combined	
1986	\$77,122	46,683	123,805	
1985	\$82,654	60,908	143,562	
1984	\$83,252	71,081	<b>1</b> 54,333	

#### (11) Write-off of Leverage Lease Costs

In 1984, Big Rivers aborted a leverage lease financing proposal of the Wilson 1 unit due to the difficulties described in note 2. The costs incurred with regard to the abandoned leverage lease transaction were charged to margins in 1984.

#### (12) Write-off of Wilson 2 Costs

In 1985 and 1984, Big Rivers elected to carry the costs relating to Wilson 2, which had been cancelled, as a deferred charge. It had been management's intention to recover these costs in future rates and through sales of excess power. During 1986, management decided that the recoverability of certain costs was doubtful and these costs, amounting to \$27,680,597 were charged to operations in 1986.

#### (13) Litigation

As discussed in note 2, REA has filed suit against Big Rivers alleging that Big Rivers has defaulted on its notes and seeks judgment in the amount of \$1,047,990,623 in principal and \$25,856,352 accrued interest. The complaint also seeks a foreclosure and sale of the collateral, which is essentially all of the assets. An answer to this suit has been filed alleging that conduct on the part of the government caused Big Rivers' inability to make the note payments. Legal counsel is unable to evaluate

the likelihood of an unfavorable outcome or to estimate the amount or range of potential loss,

In addition to the aforementioned, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

# COMPARATIVE STATISTICAL ANALYSIS -

	1986	1985	1984	1983
Operating Revenues	\$ 227,664,219	236,023,720	258,019,579	258,276,967
Expenses:				* 00 * 00 000
Operation and Maintenance	130,991,511	133,779,910	143,358,327	136,539,322
Purchased Power and	20 01 4 077	20 700 200	47 404 014	55 101 1C1
Interchanged, Net	38,214,277	39,792,228	47,494,014	55,494,464 17,782,446
Depreciation and Amortization		17,788,717 $2,353,021$	18,533,362 2,269,307	2,202,576
Taxes Interest	2,515,787 51,520,808	39,645,856	39,747,343	38,198,269
Other	235,101	195,269	150,834	136,778
Other	200,101		100,004	
Total	242,276,234	233,555,001	251,553,187	250,353,855
Operating Margin (Loss)	(14,612,015)	2,468,719	6,466,392	7,923,112
Nonoperating Margin (Loss)	(26,613,024)	1,050,605	(1,726,877)	994,948
Tronopolating margin (2000)	(20,010,021)	1,000,000	(2,120,011)	
Net Margin (Loss)	\$ (41,225,039)	3,519,324	4,739,515	8,918,060
Illilita Dlant at Cost	\$1,452,144,009	£20,000,444	533,597,067	531,772,691
Utility Plant at Cost Construction Work in Progress	2,080,925	539,998,444 833,505,325	745,589,266	653,519,304
Constituction work in Frogress	2,000,020		140,000,200	
Total Electric Plant	1,454,224,934	1,373,503,769	1,279,186,333	1,185,291,995
Less Accumulated Depreciation	143,479,823	124,841,130	106,923,761	91,374,775
Utility Plant Net	\$1,310,745,111	1,248,662,639	1,172,262,572	1,093,917,220
Total Assets	\$1,438,564,861	1,409,490,616	1,332,830,420	1,225,799,340
Member Maximum				
Demand — MW	993	1,042	1,027	952
Installed Steam Generating				
Capacity — Net MW	1,383	974	974	974
Purchased Steam Generating Capac		0.51	0.00	270
HMP&L Station Two — Net My	W 271	271	268	270
Peaking and Standby Capacity	777	25	4.5	25
Reid Combustion Turbine — M		65	65	65
Purchased Peaking — MW	178	178	190	4.0
Purchased Standby — MW	0	0	0	100
KWh — Millions —	0.011.70	0.000.00	7 000 75	0.710.40
Sales to Members Sales to Non-Members	6,211.79	6,908.67	7,390.75	6,719.42
	3,303.68	3,290.11	2,075.96	2,098.82
Generated Purchased	6,609.70	6,447.45	6,876.37	6,474.14
HMP&L Station Two	1 691 97	1 770 65	1 000 00	1 794 04
Other	1,631.87 336.38	1,779.65	1,882.22	1,724.84
System Load Factor — %	74.1	291.98 78.1	666.72 $84.1$	790.65
Employees at Year-End	863	827	835	78.4 794
Employees at Teat-Ella	000	041	ರಾವರ	194

# TEN YEAR SUMMARY

1977	1978	1979	1980	1981	1982
87,745,28	117,873,040	124,077,992	179,429,591	240,476,418	232,716,033
43,278,42	52,753,054	53,217,700	91,232,809	120,266,830	124,675,180
32,249,40	49,559,041	52,238,507	59 047 205	58,848,412	46,342,616
4,444,81	5,111,273	5,976,160	52,947,305 11,516,775	17,073,065	17,548,448
631,55	712,919	780,799	1,441,297	1,817,332	1,970,317
3,206,17	3,808,979	4,988,213	18,528,992	37,092,495	40,467,426
5,29	25,940	23,017	56,197	92,954	149,400
83,815,66	111,971,206	117,224,396	175,723,375	235,191,088	231,153,387
3,929,61	5,901,834	6,853,596	3,706,216	5,285,330	1,562,646
144,72	620,969	1,219,271	1,080,410	1,677,561	1,968,247
4,074,33	6,522,803	8,072,867	4,786,626	6,962,891	3,530,893
124,665,25	130,333,952	283,281,046	313,289,264	483,371,934	495,105,598
57,229,12	157,127,012	125,427,944	186,458,271	173,576,481	451,265,803
181,894,37	287,460,964	408,708,990	499,747,535	656,948,415	946,371,401
24,534,44	28,361,983	32,900,415	42,843,216	58,643,004	74,720,991
157,359,92	259,098,981	375,808,575	456,904,319	598,305,411	871,650,410
226,712,74	374,646,226	480,817,488	560,828,507	708,233,625	1,029,256,522
82	819	910	943	956	947
					054
52	520	751	751	974	974
26	262	255	256	253	253
6	65	65	.65	65	65
4	4.0	40	40	40	40
10	100	100	100	100	100
6,189.3	6,526.85	7,029.28	7,529.34	7,482.78	6,420.88
59.5	79.39	58.50	475.36	1,455.27	1,106.37
3,711.1	3,678.16	3,911.05	5,187.78	6,164.23	5,848.11
1,855.8	1,805.31	1,931.09	1,989.04	1,822,87	1,127.18
814.8	1,253.09	1,387.12	966.38	1,097.02	681.21
87.	87.5	85.3	88.1	87.1	74.8
		555	622	667	680

## CORPORATE DIRECTORY

OFFICERS

Morton Henshaw

President

Edward F. Johnson

Vice President

William B. Briscoe

Secretary-Treasurer

William E. Seaton

Assistant Secretary-Treasurer

GENERAL MANAGER

W. H. Thorpe

DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation

Marion Cecil

Edward F. Johnson

Sandra Wood

Henderson-Union Rural Electric

Cooperative Corporation

William Briscoe

Morton Henshaw

C. G. Truitt

Jackson Purchase Electric

Cooperative Corporation

Paul Buchanan

Bill Doom

Edwin Reid

Meade County Rural Electric

Cooperative Corporation

John C. Burnett

J. D. Cooper

William Seaton

VICE GENERAL MANAGERS

J. E. Dolezal Energy Supply

Ronald W. Johnson

Corporate Services

and Labor Relations

Earl A. Millspaugh

Production and Construction

B. Scott Reed

Engineering and Transmission

Paul A. Schmitz

Finance

W. Hayden Timmons

Environmental and Public Affairs

MANAGERS

Don E. Augenstein

Corporate Services

Gregory F. Black

Environmental Affairs

Bill Blackburn

General Accounting

Joe L. Craig

Fuels

James V. Haner

Taxes, Insurance & Budgets

Don C. Mann

Purchasing

Tom Millay

Personnel

James H. McIliwain

Construction

David E. Schultz

System Planning and

Design Engineering

Benjamin Urbanek

Energy Control

Phil Waggoner

Electronic Data Processing

John West

Financial Services

SUPERINTENDENTS

Richard Greenwell Power Production

Wendell Greer

Reid/Green Plants

Virgil Mitchell Transmission

Steve Moss

Wilson Plant

Barry Wood

Coleman Plant

CORPORATE ATTORNEY

Morton Holbrook

General Counsel

Holbrook, Gary,

Wible & Sullivan, P.S.C. Owensboro, Kentucky

CORPORATE AUDITORS

Peat, Marwick, Mitchell & Co.

Louisville, Kentucky

BIG RIVERS ELECTRIC CORPORATION

Post Office Box 24 201 Third Street Henderson, Kentucky 42420 (502) 827-2561

# BIG RIVERS ELECTRIC CORPORATION



# FINANCIAL HIGHLIGHTS

(dollars in thousands)

	1985	1984	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	236,024	258,020	(21,996)	(8.5)
Operating Expenses Net Margins	193,714 3,519	$211,655 \\ 4,739$	(17,941) (1,220)	(8.5) $(25.7)$
Construction Expenditures Energy Sales (Megawatt Hours)	94,607	122,950	(28,343)	(23.1)
A. To Members	6,908,671	7,390,752	(482,081)	(6.5)
B. Intersystem	3,290,106	2,075,956	1,214,150	58.5
System Peak Demand in				
Megawatts	1,042	1,027	15	1.5
Cost of Fuel Used in	ŕ	,		
Generation	94,699	100,820	(6,121)	(6.1)
Assets	1,409,491	1,332,830	76,661	5.8
Accumulated Margins and Equity	46,507	42,949	3,558	8.3
Employees Full Time	827	835	(8)	(1.0)
Revenue Per kWh Sold (Mills)	28.57	27.98	.59	2.1

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# PRESIDENT'S AND GENERAL MANAGER'S REPORT

rustration best characterizes a year of repeated attempts to solve Big Rivers Electric Corporation's financial crisis. What was the source of this frustration? Several factors.

We began the year with a pending rate case, being delinquent on our debt service, being sued by the federal government to foreclose on our mortgage and requesting the assets of this corporation be sold at the courthouse steps, being threatened with closing of our large-load aluminum smelting plants, being pressured by the Rural Electrification Administration (REA) to merge with another Kentucky generating cooperative, having the loan funds to complete the D. B. Wilson Plant and other construction projects withheld, being publicly accused of imprudent management, having low employee morale and being faced with bankruptcy which would have a devastating impact on the entire west Kentucky economy.

Big Rivers was catapulted into these troubles when, upon nearing completion in 1984 of the D. B. Wilson Plant, the forecasted demand for electricity did not materialize and the price of aluminum sank to the lowest level ever in real dollars. Two aluminum smelters use about 70 percent of all power Big Rivers generates for members.

Late in 1984 REA refused to release approved loan funds because of our financial situation. Big Rivers chose to use existing operating funds to pay contractors finishing our Wilson Plant. Consequently, we were unable to make our November and December 1984 loan payments to REA. The federal government's response was the foreclosure suit.

That \$1.1 billion foreclosure suit and a Big Rivers' suit against the federal government for withholding the loan money are pending in U.S. District Court with the next pretrial conference scheduled for April 30, 1986. During the interim, a working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover Trust Company and Irving Trust Company continue to meet in efforts to find a mutually acceptable way of resolving our precarious situation.

In February, Kentucky's 1st District Congressman requested the Government Accounting Office (GAO) and later the Inspector General's Office (IG) of the U.S. Department of Agriculture to audit Big Rivers' management. Several months later each agency notified us that the audits found neither mismanagement nor fault with our decision-making process in building the Wilson Plant.

In June, REA rejected the merger proposal which Big Rivers and East Kentucky Power Cooperative, Inc. (EKPC) boards of directors jointly submitted earlier in the year. REA had strongly recommended that both Kentucky generation and transmission cooperatives (G&Ts) consider merger.

The Wilson facility, a 409-megawatt (MW) (net capacity) coal-fired generating plant, was not commercialized during 1985. We did sell test power from the unit.

While at many times during the year our endurance and patience were pushed to near limits, the latter part of the year saw some stability return to the corporation. Two of the contributing factors were the intervention of U.S. Senator Mitch McConnell and our initial success in selling long-term power from the Wilson Plant, highlighted in the Energy Supply Department report.

On November 11, Senator McConnell conducted an Agriculture Committee field hearing in Henderson "to set some fires under the negotiators in this mess." Representatives from local government, lending institutions, aluminum smelters and Big Rivers and concerned citizens spoke at the hearing. At the conclusion of that public forum, the Senator said the federal government should drop its suit against Big Rivers and help work out the financial problems. The federal agencies continue to participate in the negotiations of the working committee mentioned earlier in this report.

In our continuing efforts to minimize costs, we were successful in revising coal contracts which will save our 75,000 consumers nearly \$19 million on electric bills over the next few years. We've been working on reducing coal costs for more than two years, and these are some of the last contracts to be renegotiated. More detailed information can be found in the Fuels Department report.

The Big Rivers' Board of Directors welcomed two new members, Bill Doom (Jackson Purchase Electric Cooperative Corporation) and Marion Cecil (Green River Electric Corporation), replacing Harvey Sanders (JPECC) and Edward Delker (GREC). We thank our entire board for their special dedication and resolve in searching for a workable solution to our serious problems. Big Rivers employees also deserve recognition for conducting "business as usual" and for not letting the longevity of the Wilson situation permanently keep them down.

We dare not predict what 1986 will bring. But we can and we will hope that the year holds a mutually acceptable solution, one that will bring normalcy to this cooperative.

Motor Genshow

Morton Henshaw President, Board of Directors

W. H. Hoyse
William H. Thorpe
General Manager

### **FINANCE**

he year began with enormous uncertainties. And even though large strides have been taken, at year-end Big Rivers had not resolved its financial crisis.

As the year closed, Big Rivers was still unable to meet its debt service requirements and was delinquent \$120.9 million. Big Rivers is also continuing to capitalize interest during construction and other operating costs net of revenues on the Wilson Plant. The already high installed cost of that generating facility is continuing to grow. The revenue required to pay the increased carrying costs of this facility will become even more prohibitive unless a solution is found and implemented soon.

By the end of the year, Big Rivers had presented to the creditors a workout plan which, in time, would solve our financial dilemma. This plan will be modified as it progresses through the various stages of consideration and as other parties have input.

Big Rivers' financial crisis can be solved through some form of debt restructuring, additional financing, increased rates to the non-smelter load, and additional sales of excess capacity to other utilities. The degree to which each of these items contributes to the financial solution will be determined during 1986 as the final workout plan is negotiated and developed by the involved parties.

During March, Alcan Aluminum Corporation shut down one of its three potlines at its Sebree smelter resulting in a layoff of approximately 250 employees and a reduction of about 100 MW of energy per hour required from Big Rivers.

On May 6, the Kentucky Public Service Commission (PSC) denied our request for a 7.1 percent rate increase. This application, which would have increased annual revenues by \$16.7 million, excluded the debt service and other expenses on the Wilson Plant from Big Rivers' revenue needs. This utility has not had an increase since January 1981.

On November 1, Big Rivers was able to pay the bondholders of maturing \$82.5 million 7.25% Ohio County pollution control bonds through an \$83.3 million refinancing issue secured by Manufacturers Hanover Trust Company's letter of credit. The new bonds have a variable floating rate and initially sold at 5.75%.

National Southwire Aluminum (NSA) at Hawesville filed a petition with the

PSC to rehear Big Rivers' rate case on the basis that our rates were established to pay the debt service requirements of our system without the D. B. Wilson Plant. Big Rivers had not been making full payments on the debt service due REA since November 1984. NSA's position was that Big Rivers' rates should be reduced to eliminate the debt service that Big Rivers was collecting through its rates. In July, Big Rivers was able to begin making partial payments on the debt service. The PSC subsequently denied NSA's petition for rehearing.

In November, NSA petitioned the PSC to reduce NSA's cost of power to 22 mills per kilowatt-hour (kWh). The PSC has scheduled a June 4, 1986 public hearing in this matter.

During 1985, Big Rivers had 6.9 billion kWh sales to its members and \$208.3 million revenues. Big Rivers' total kWh sales in 1985 were 10.2 billion and had a total revenue of \$280.6 million. Net margins for the year were \$3.5 million compared to \$4.7 million in 1984.

# PRODUCTION AND CONSTRUCTION

otal production from the existing system (excluding the Wilson Plant) was 8.23 billion kWh in 1985, compared with 8.76 billion kWh in 1984. This change was primarily due to Alcan removing a potline from service. Operating cost per kWh generated was 25.40 mills in 1985, compared with 24.66 mills in 1984.

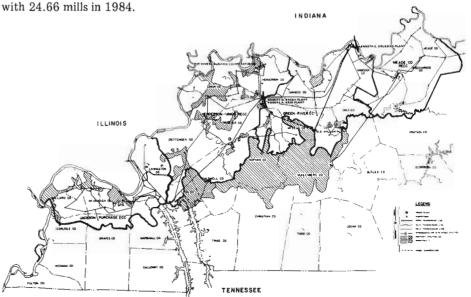
Though the Wilson Plant has not been commercialized due to flue gas scrubber problems, it produced power for intersystem sales in 1985. Initial testing of equipment was successful. The 409 MW net capacity unit operated at 454 MW on January 1, 1986. However, the unit will operate at approximately 325 MW until a fourth scrubber module is installed.

Kellogg Corporation, honoring its contract to provide a scrubber system removing at least 90% of the sulfur from the coal burned prior to the gasses being emitted into the environment, will install at Kellogg's expense a fourth module to meet Environmental Protection Agency standards for this plant. Completion date is projected for September 1986.

Steam generator problems will be solved during the 1986 spring outage. And during the summer of 1986, results of measures to eliminate cooling tower difficulties will be tested.

High unit availability is a key factor in selling blocks of power. And securing power sales is one way we're attempting to solve our financial crisis. Our units' availability is 89.76% and is a result of the corporation's emphasis on the Maintenance Management and the Performance Monitoring programs.

The men and women at the Kenneth C. Coleman Plant are to be congratulated for working an entire 12 months without a lost-time accident.



### ENERGY SUPPLY

hroughout 1985 a three-pronged approach emphasized Big Rivers' aggressive action in selling generating reserves and excess capacity:

1) Long-term firm and unit capacity sales were handled jointly by Big Rivers' management and an outside marketing firm; 2) our Energy Supply Department's managers conducted the near and short-term energy and capacity sales; and 3) when possible, the system supervisor made daily and hourly sales on an around-the-clock basis.

REA in August approved our contract with the Municipal Energy Agency of Mississippi for the sale of 54 MW for 10 years. At year end we were finalizing and seeking approval of a 15-year contract for the sale of power to the Alabama Municipal Electric Authority. According to the contract, purchased power would escalate to 109 MW in 1988.

During the year total intersystem sales, including Wilson capacity and energy sales, plus power purchased for resale, reached \$72.3 million. The previous year's sales were \$48.3 million.

At 10 a.m. on January 21, Big Rivers recorded a new record system coincident peak of 1042 MW. The previous high system peak of 1027 MW occurred in July 1984.

A decline of 6.1 percent in kilowatthour sales to Big Rivers' members reflects the reduced industrial sales primarily due to Alcan removing one of its three potlines from service.

Rural energy usage for 1985 increased 4.2 percent over 1984. Weather was a contributing factor; there were 162 more heating degree and 80 more cooling degree days in 1985 than in 1984.

During the year, the Energy Supply's communications section began installing the new radio switch control system. Completion of this new capability in early 1986 will enable the System Supervisor to have operating control over forty-eight 69 kV sectionalizing switches.

Projects completed during 1985 were: the installation and checkout of the communication portion of the Hopkins County 161/69 kV substation, and the installation and checkout of the Webster and St. John two-way radio base stations which completed the new two-way radio system started in 1983.

During the year, communications' engineering implemented several in-depth studies of major system operating disturbances that occurred during the year. The objective was to determine the main contributing factors leading to the disturbances and to what extent equip-

ment facilities and human input contributed.

The studies resulted in pinpointing areas where improvements and changes were required, and with the implementation of such changes, an improvement is expected in future operating reliability.

### **FUELS**

ig Rivers' generating units, excluding the Wilson Plant, burned 3.93 million tons of coal in producing electricity this year, compared with 4.22 million tons in 1984. Approximately 88 percent of coal received was purchased under long-term contracts of five years or more. The largest receipts came from MAPCO's mines in western Kentucky, including 927,570 tons from the Retiki Mine and 93,795 tons from the Dotiki Mine. The Robert D. Green Plant, equipped with flue gas desulfurization scrubbers, burns the Retiki highsulfur coal, and the Robert A. Reid Plant and Henderson Municipal Power and Light Station Two burn the lower-sulfur coal from Dotiki. Other supplies came from Kentucky and Indiana.

The average cost of coal used in generating electricity was \$30.25 per ton, 137.7 cents per million BTU, compared to \$29.91 per ton, 135.6 cents per million BTU in 1984.

Revisions were made to long-term contracts during the last months of the vear which will substantially reduce coal costs over the next few years. Our highest cost coal contract was terminated and replaced with a new contract with E & M Coal, Inc., Lynnville, Indiana, at a savings of over \$11 per ton. This change, along with others to existing contracts, will result in savings totalling approximately \$19 million over the next few years. Further, a second new contract with E & M Coal, Inc. will replace two contracts expiring in early 1986 at greatly lower cost for that tonnage. All of these savings will pass directly to the consumers through the Fuel Adjustment Clause.

This was the first full year receiving coal at the Wilson Plant. This plant is equipped with flue gas desulfurization scrubbers and burns local high-sulfur coal. During the year Wilson burned 945,800 tons of coal in generating electricity, at an average cost of \$27.18 per ton, 123.4 cents per million BTU. Because the unit was not commercialized, this coal was charged to a start-up and testing account and is not included in

the total figures for Big Rivers' system fuel consumption.

# ENGINEERING AND TRANSMISSION

new 50,000 KVA, 161/69 kV substation was placed in service on June 12 in Hopkins County, which has improved voltage and power supply reliability and reduced service restoration time during unplanned outages for consumers in Henderson-Union's service area. Big Rivers' employees designed and installed most of the substation facilities.

Design work was completed, and construction began on about 20 miles of 69 kV transmission line in the Jackson Purchase service area to provide two-way feed for distribution substations. The addition of these lines and associated radio-controlled switches, scheduled for completion in 1986, will greatly improve service reliability to the Jackson Purchase cooperative during both routine maintenance and emergency outage conditions.

The installation of solid-state electronic revenue meters at all power delivery points was completed during 1985, and automated meter-tape reading and billing equipment is scheduled for delivery in early 1986. Operation of the new metering and billing system will improve billing accuracy and reduce the amount of manual processing required to prepare monthly billing statements.

Our oil-testing facilities became fully operational this year. About 50 tests made on power transformer oil resulted in the discovery of internal faults in two power plant transformers. One unit was near the point of electrical failure and was returned to the manufacturer for rewinding. The other unit was repaired in the field by Big Rivers' employees. Our employees also field-repaired one of the two main power transformers at Livingston County Substation which, even though it was less than two years old, had experienced an internal failure of a surge-suppressor device.

During the year the Engineering and Transmission Department stepped up efforts in relay testing, pole testing repair and replacement, and rights-of-way maintenance to minimize service interruptions to our members.

### LABOR RELATIONS AND CORPORATE AFFAIRS

o many employees 1985 was a perplexing year wherein the corporation's highly publicized excess power dilemma brought rumors of layoffs, merger or possible takeover.

Big Rivers issued a notice to all employees announcing the immediate implementation of significant cost-cutting measures to maintain its cash flow in meeting day-to-day operating expenses and paying for critical projects. Salary increases for the nonbargaining unit employees were postponed. Construction projects were deferred and inventory levels were reduced. The corporation also stopped making charitable contributions, travel was reduced and employee attendance at conferences and seminars was discontinued.

Despite these changes, the vast majority of the over 800 employees chose to remain at Big Rivers in the belief that a solution would be found which would not endanger jobs.

This firm commitment to "ride it out" carried over into other employee relations:

- Employee turnover was lower than in 1984 and was significantly lower than the national average for industries of comparable size.
- The Bargaining Unit and Management commitments to improving labor relations continued to be successful, as management received the lowest number of contract dispute grievances (25) ever filed in any previous contract year.
- The Safety Program continued to attain excellent results by keeping pace with the 1984 record-breaking safety record. In fact, Kenneth C. Coleman Plant employees completed a year with no losttime accidents on December 7.

These achievements are significant in view of the uncertainty prevalent throughout most of the year.

The Safety Program coordinators implemented a new and extensive asbestos testing and protection program to comply with Occupational Safety and Health Administration standards.

The Employee Assistance Program, in its third year, continued to gain acceptance among the employees. A program on the effects and problems of drug and alcohol abuse was presented to all employees during the year, and the corporate-sponsored meeting has brought about a new awareness of the concern Big Rivers has for its employees.

The Personnel Manager presented a training program to all levels of supervision and management re-emphasizing Big Rivers' commitment to the equal employment and advancement for qualified women, minorities, veterans and the handicapped.

Total employment of 827 at year end was made up of 306 salaried and 521 bargaining unit employees.

# ENVIRONMENTAL AND PUBLIC AFFAIRS

n addition to the normal compliance efforts of monitoring and reporting, inspections, audits and studies, the department was concerned with several special areas:

The department continued efforts in the area of repermitting several facilities. Additionally, performance tests were completed at the Wilson Plant and an operation permit application filed. We expect to receive a final permit in early 1986. In order to assure firm, reliable operation of the Wilson Plant and to meet contractual guarantees, a fourth module is being added to the flue gas scrubber. Applicable construction permits were sought for this work and approval received early in '86.

During the year Big Rivers disposed of 17 precipitator transformers from the Coleman Plant as well as electrical equipment containing polychlorinated biphenyls (PCBs) from other parts of the system. Additionally, the corporation removed and disposed of insulation containing asbestos from several generating units.

A coal supplier began hauling scrubber sludge from Green for disposal in the supplier's strip mine, saving considerably on landfill costs.

After extensive air quality modeling which showed no adverse impact on the environment, a request was made to the state regulatory agency to remove the reheat requirement from the Green Plant stacks. This request was approved with a potential annual savings of \$1.2 million. The department is considering a similar request for the Wilson Plant.

There were several areas where legislative and regulatory changes may have an impact on Big Rivers or on our distribution cooperative member-consumers. These involve such items as good engineering practice (GEP) stack height, Resource Conservation and Recovery Act (RCRA) requirements on small quantity generators, underground storage tanks, and waste oils. Also, the department kept a close watch on proposed legislation dealing with acid rain control.

The efforts of the Public Affairs area were directed primarily toward providing factual information about the corporation's status to employees, the public and the media throughout the year. Since the Big Rivers situation was unprecedented in the rural electric cooperative program, the department handled media inquiries from coast to coast.

# **AUDITORS' REPORT**

Peat, Marwick, Mitchell & Co. Certified Public Accountants The Fifth Avenue Building 444 South Fifth Street Louisville, Kentucky 40202

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1985 and 1984 and the related statements of revenues and expenses, equities and changes in financial position for each of the years in the three year period ended December 31, 1985. Our examinations were 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.

As discussed more fully in note 2, Big Rivers Electric Corporation (Big Rivers) has \$830.4 million invested in two generating units at the D. B. Wilson Generating Station (\$802.6 million in Wilson 1 and \$27.8 million in Wilson 2) which represents approximately 59% of total assets. At December 31, 1985, Big Rivers was in the process of commercializing Wilson 1 which will generate surplus power. Due to the anticipated surplus power of Wilson 1, further construction of Wilson 2 was cancelled. In April 1984, a rate increase request was filed with the Kentucky Public Service Commission (KPSC) which included partial recovery of the fixed costs of Wilson 1. However, due to the adverse economic impact on two major industrial customers of its member cooperatives, the rate increase request was withdrawn. In November 1984, a second rate increase request was filed with the KPSC. That request did not include costs of Wilson 1. On May 6, 1985, the KPSC denied that request concluding that the rate filing would not have been necessary but for the presence of Wilson and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition. In November 1984, the Rural Electrification Administration (REA) notified Big Rivers that it would not make any further advances under the loan commitment relating to the construction costs of Wilson. Subsequently, Big Rivers defaulted on REA loans and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. At December 31, 1985, this suit was pending. REA also proposed a merger study with another cooperative but a resulting merger proposal was rejected by REA. A committee has been established, including Big Rivers and representatives of parties

involved, to develop a mutually acceptable workout plan to resolve the financial situation. Big Rivers' ability to recover the costs of Wilson and meet its future debt obligations is dependent upon obtaining power sales contracts for the surplus power, restructuring debt obligations and securing additional financing, and obtaining necessary rate increases. If the aforementioned is not accomplished, it will be difficult for Big Rivers to continue in existence. The accompanying financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary should Big Rivers be unable to recover the costs of Wilson or should Big Rivers be unable to continue in existence.

Big Rivers has elected to carry the \$27.8 million of costs relating to Wilson 2, which has been cancelled, as a deferred charge. Management's position is that it is the intention to recover these costs in future rates and through sales of excess power; however, generally accepted accounting principles require that such costs be charged to operations if recoverability is not probable.

In our opinion, except for the \$27.8 million of cost relating to Wilson 2, which should be written off, and subject to the effect on the financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classification of liabilities referred to in the second preceding paragraph been known, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1985 and 1984 and the results of its operations and the changes in its financial position for each of the years in the three year period ended December 31, 1985, in conformity with generally accepted accounting principles applied on a consistent basis except for the change, with which we concur, in the actuarial method of determining pension costs as described in note 8 to the financial statements.

Peat, Marwick, Mitchell & Co.

February 7, 1986

## STATEMENTS OF REVENUES AND EXPENSES

(In thousands)

	(======================================		
	Years ended December 31,		
	1985	1984	1983
Operating revenues (note 9)	\$236,024	258,020	258,277
Operating expenses:			
Operations:			
Fuel for electric generation	94,699	100,820	98,375
Power purchased and interchanged, net	39,792	47,494	55,494
Other	25,054	28,047	25,241
Maintenance	14,027	14,492	12,924
Depreciation and amortization	17,789	18,533	17,782
Taxes	2,353	2,269	2,203
Total operating expenses	193,714	211,655	212,019
Electric operating margins	42,310	46,365	46,258
Interest and other deductions:			
Interest	122,612	110,650	98,075
Allowance for borrowed funds used during construction (note 3)	(82,966)	(70,902)	(59,877)
Other deductions	195	151	137
Total interest and other deductions	39,841	39,899	38,335
Operating margins	2,469	6,466	7,923
Nonoperating margins:			
Interest earned	1,154	2,524	4,007
Interest earned credited to construction	(113)	(1,148)	(3,057)
Write-off of leverage lease costs (note 10)		(3,125)	_
	1,041	(1,749)	950
Other capital credits and patronage allocations	9	22	45
Net margins	\$ 3,519	4,739	8,918

# STATEMENTS OF EQUITIES

(In thousands)

		Years ended Decei	mber 31, 1985,	1984 and 1983	
				Oth	er equities
	Total equities	Transfer nonoperating loss to operating margin	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1982	\$28,338	_	24,886	707	2,745
Margins for 1983:					
Operating	7,923	_	7,923	_	_
Nonoperating	950	_	950	_	_
Other capital credits and patronage allocation	s 45	_	45	_	_
Capital surcharge	493			46	447
Balance at December 31, 1983	37,749		33,804	753	3,192
Margins for 1984:					
Operating	6,466	(1,749)	4,717	_	_
Nonoperating (loss)	(1,749)	1,749	_	_	_
Other capital credits and patronage allocation	s 22	_	22	-	_
Capital surcharge	461			10	451
Balance at December 31, 1984	42,949	_	38,543	763	3,643
Margins for 1985:					
Operating	2,469	_	2,469	_	
Nonoperating	1,041	_	1,041	_	_
Other capital credits and patronage allocation	s 9	_	9	_	_
Capital surcharge	_39			1	38
Balance at December 31, 1985	\$46,507		42,062	764	3,681

(In thousands)

Assets	Decen 1985	nber 31, 1984	
Utility plant, net (note 3)	\$1,248,663	1,172,262	
Productive capacity under purchased			
power contract (note 7)	29,300	31,100	
Other deposits and investments, at cost	3,497	3,205	
Current assets:			
Operating funds	12,336	6,559	
Construction funds	-	1,818	
Receivables	26,304	24,020	
Fuel for electric generation	32,838	37,513	
Material and supplies	13,365	11,627	
Total current assets	84,843	81,537	
Deferred charges (note 4)	43,188	44,726	
	\$1,409,491	1,332,830	
Equities and Liabilities			
Capitalization: Equities	\$ 46,507	42,949	
Capitalization:	\$ 46,507 27,521	42,949 29,342	
Capitalization: Equities Long-term liabilities, net of current			
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities:	27,521	29,342	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term	27,521 74,028	29,342 72,291	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5)	27,521 74,028 1,189,096	29,342 72,291 1,193,258	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6)	27,521 74,028 1,189,096 120,913	29,342 72,291 1,193,258 26,754	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable	27,521 74,028 1,189,096 120,913 19,228	29,342 72,291 1,193,258 26,754 34,090	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6)	27,521 74,028 1,189,096 120,913	29,342 72,291 1,193,258 26,754	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable	27,521 74,028 1,189,096 120,913 19,228	29,342 72,291 1,193,258 26,754 34,090	
Capitalization: Equities Long-term liabilities, net of current maturities (note 5)  Total capitalization  Current liabilities: Current maturities of long-term liabilities (note 5) Matured debt and interest (note 6) Accounts payable Accrued expenses	27,521 74,028 1,189,096 120,913 19,228 5,375	29,342 72,291 1,193,258 26,754 34,090 5,582	

# STATEMENTS OF CHANGES IN FINANCIAL POSITION

(In thousands)

		Years e 85	nded Decembe 1984	r 31, 1983
Sources of working capital:  Net margins  Items which do not use working capital:	\$	3,519	4,739	8,918
Depreciation of utility plant Amortization of deferred charges Other amortization		3,206 3,013 —	17,936 7,902 137	17,076 2,727 138
Working capital provided by operations	2	4,738	30,714	28,859
Long-term borrowings Other Decrease in working capital	7:	— 35 1,622	121,869 628 1,178,879	179,610 652 38,030
		3,395	1,332,090	247,151
Uses of working capital: Additions to utility plant, net Reclassification of long-term debt due to default (note 5)	9.	4,607	122,950 1,186,450	239,342
Reduction of long-term debt Increase in deferred charges Increase in other deposits and investments	:	21 1,475 292	5,274 16,832 584	6,355 1,454 —
	\$ 90	3,395	1,332,090	247,151
Increase (decrease) in working capital: Operating funds Construction funds Receivables Fuel for electric generation Material and supplies Matured debt and interest (note 6) Current maturities of long-term liabilities (note 5) Accounts payable Accrued expenses	(1 2 (4 3 (94	5,777 ,818) 2,284 ,675) 1,738 ,159) 4,162 4,862 207	5,175 (25,005) (156) 10,865 3,324 (26,754) (1,185,425) 19,208 19,889	(3,272) $(20,823)$ $2,765$ $(1,948)$ $465$ $ (1,100)$ $6,734$ $(20,851)$
Decrease in working capital	\$(71	622)	(1,178,879)	(38,030)

### (1) Summary of Significant Accounting Policies

### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis, presently excluding costs relating to the Wilson Generating Station, and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

Big Rivers utilizes the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers, as the primary source of borrowed funds.

The rate structure approved by KPSC provides for a base rate consisting of a demand charge and an energy charge. The rate structure also contains a fuel adjustment clause under which the energy charge is to be increased or decreased in each billing period to the extent that actual fuel costs and certain purchased power costs together, are greater or less than the base period costs included in the base rates. The application of the fuel adjustment clause is subject to semi-annual review by KPSC.

### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

### (c) Revenue Recognition

Revenues are based on month-end meter readings.

### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Rates used to compute depreciation are as follows:

Production plant	3%-3.50%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-20%
Unclassified plant	
in service	2.75% - 3.50%

### (e) Operating and Construction Funds

Operating and construction funds consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at weighted average cost.

### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

### (i) Income Taxes

Prior to 1983, Big Rivers was tax exempt under Section 501(c)(12) of the Internal Revenue Code which requires that at least 85% of gross income be from members. Nonmember income in 1983 exceeded the 15% allowable, therefore Big Rivers became a taxable cooperative. Big Rivers continued to be taxable in 1985 and 1984. No provision for income taxes has been recorded because of significant net operating loss carryforwards of \$87.5 and \$9.5 million and investment tax credit carryforwards of \$87.0 and \$.4 million for income tax reporting in 1984 and 1983, respectively.

### (2) D. B. Wilson Generating Station

As a result of Power Requirements Studies (load forecasts) made in 1977 and supplemented by studies completed in 1979 and 1980, Big Rivers began in 1980 the construction of the D. B. Wilson Generating Station (Wilson Station) consisting of two 395 megawatt (net capacity) generating units (Wilson 1 and Wilson 2) at an estimated cost of \$1.1 billion to be financed by long-term debt borrowings guaranteed by the REA. Another Power Requirement Study was completed in 1981 which produced a significantly lower load forecast than the previous studies. Based on the new forecast, it became apparent that the Wilson 2 unit would not be needed as previously planned and construction activity was delayed. At the same time, the status of Wilson 1 was reviewed and it was determined that the amount of money invested by that time and the added cost that would result in a delay made it more economic to continue construction. Due to the surplus capacity of Big Rivers upon completion of Wilson 1, construction of Wilson 2 was subsequently cancelled. Costs incurred of \$27.8 million relating to Wilson 2 have been classified as a deferred charge. Due to boiler, scrubber, and cooling tower deficiencies for which corrective measures are being undertaken, Big Rivers has not commercialized Wilson 1 and continues to capitalize interest and other costs net of earnings on Wilson 1. Management anticipates commercialization no later than the fourth quarter of 1986.

In April 1984, a \$57.6 million rate increase request, including partial recovery of the fixed costs of Wilson 1, was filed with the KPSC. At the same time, the aluminum industry, which accounts for a significant portion of Big Rivers' sales, experienced another sharp decline in primary aluminum prices. As a result, inclusion of Wilson Station costs in Big Rivers' rates would yield noncompetitive rates to the aluminum smelters (identified in note 9), jeopardizing their continued operation. In October 1984, Big Rivers withdrew its rate increase request. In November 1984, a \$16.7 million rate increase was filed which did not include the production and fixed costs associated with Wilson 1. In May 1985, the PSC denied that request concluding that the rate filing would not have been necessary but for the presence of the Wilson Station and that any revenue award made in the case would be immaterial to Big Rivers' current financial condition.

In November 1984, REA notified Big Rivers that further advances of funds under the loan commitments from REA would not be forthcoming unless and until evidence, satisfactory to REA, of the economic feasibility of Big Rivers was submitted. Big Rivers has filed suit requesting the United States District

Court to order REA to approve the release of \$27.6 million previously requested by Big Rivers. Failing to receive these loan funds, Big Rivers used internally generated funds to pay the amounts due contractors for Wilson Station and other construction projects. As a result, Big Rivers was unable to pay principal and interest payments due in November and December 1984 to REA and the Federal Financing Bank (FFB). REA, by letter dated January 3, 1985, citing continuing default and, pursuant to the loan agreement, demanded payment in full before January 17, 1985, of all outstanding debt and accrued interest (see note 5). The amount could not be paid and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. Big Rivers has filed an answer to this suit (see note 11). A pretrial conference relating to these suits is scheduled for April 30, 1986.

REA stated that the suit filed January 18, 1985 gave Big Rivers more time to study a merger with East Kentucky Power Cooperative (East Kentucky) proposed by REA in November 1984 as the resolution to Big Rivers' financial problems. Big Rivers and East Kentucky approved a consultant to conduct a study of the feasibility of merger and to study other organizational alternatives. Big Rivers' Board of Directors in their April 12, 1985 meeting approved consolidation, as permitted by Kentucky Statutes, with East Kentucky. In June 1985, REA rejected the merger proposal jointly submitted by Big Rivers' and East Kentucky's Boards of Directors. No further action has been taken regarding merger.

In 1985, a working committee of representatives from Big Rivers, the Justice Department, REA, Manufacturers Hanover and Irving Trust (the banks providing letters of credit on the pollution control bonds) was formed and continues to meet to find a mutually acceptable way of resolving the financial situation. A workout plan has been prepared, is under review, and is subject to modification as it progresses through the various stages of consideration.

Big Rivers' ability to recover Wilson 1 and 2 costs and meet its debt obligations is dependent upon the success of Big Rivers' ongoing efforts which include selling a substantial portion of the capacity and energy available, restructuring its debts, obtaining additional financing and rate action. If Big Rivers' efforts as outlined herein are not successful it will be difficult for Big Rivers to continue in existence. Big Rivers has consummated a contract for the sale of approximately 54 megawatts of capacity and associated energy from Wilson 1, and is actively pursuing additional power sales.

(3) Utility Plant The following summarizes utility plant:		(In thousands
	1985	1984
Classified plant in service:		
Production plant	\$ 441,931	439,974
Transmission plant	40,710	39,686
Station equipment	44,229	42,296
General plant	11,449	11,431
Intangible	190	190
Unclassified plant in service	1,490	20
	539,999	533,597
Less accumulated depreciation	124,841	106,924
	415,158	426,673
Construction in progress	833,505	745,589
	\$1,248,663	1,172,262

Construction in progress at December 31, 1985 includes \$830.9 million associated with construction of the Wilson 1 generating unit and Wilson 1 and 2 related common area and transmission facilities. As discussed in note 2, Big Rivers has not commercialized Wilson 1 and continues to capitalize interest,

construction costs and operating costs. In addition, sales resulting from Wilson 1 have been credited to construction in progress. The average rates used for the capitalization of interest during construction in 1985, 1984 and 1983 were 10.8%, 10.5% and 10.9%, respectively.

#### (4) Deferred Charges

Deferred charges consisted of the following:

	()	(n thousands)
	1985	1984
Premium on FFB debt	\$ 4,175	4,318
Panama Mine closing	_	88
Unamortized debt expense	822	862
Cravat coal contract amendment	9,731	11,415
Construction costs of discontinued		
plant (Wilson 2)	27,819	27,834
Other	641	209
	\$43,188	44,726

In November 1982, Big Rivers elected to refinance \$90 million of FFB short-term mortgage notes with long-term notes at a lower interest rate. As a result of this election, a premium of

\$4.6 million was required. The premium is being amortized over the term of the long-term mortgage notes.

Panama mine closing costs were recovered through an energy surcharge granted by the KPSC. The costs were amortized based on collection of the surcharge and were fully recovered in 1985.

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12.5 million was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

As discussed in note 2, construction of the Wilson 2 unit has been cancelled. These costs have been classified as a deferred charge. Recovery of these costs depends on the favorable outcome of Big Rivers' efforts, as discussed in note 2, to resolve its financial problems.

### (5) Long-term Liabilities

A summary of long-term liabilities follows:		(In thousands)
	1985	1984
Rural Electrification Administration (REA) - 2% and 5% mortgage notes		
payable, maturing from April 1998 through April 2014	\$ 91,122	94,893
Federal Financing Bank (FFB) - 7.51% to 13.20% mortgage notes payable,		
maturing from March 1986 through December 2018	951,070	951,996
County of Ohio, Kentucky, promissory note, with variable	•	,
interest rate, currently 7.96%, maturing October 2015	83,300	
County of Ohio, Kentucky, 7.25%, \$82.5 million promissory note	•	
(less unamortized discount), matured November 1985	_	82,385
County of Ohio, Kentucky, promissory note, with variable interest rate,		,
currently 7.78%, maturing June 2013	58,800	58,800
Obligation due to Jackson Purchase Electric Cooperative Corporation	2,983	2,983
Louisville Bank for Cooperatives (LBC) — mortgage note with variable interest	,	,
rate, matured February 1985	_	380
Obligation under purchased power contract (see note 7)	29,300	31,100
Other borrowings	42	63
Total long-term liabilities	1,216,617	1,222,600
Less current maturities	1,189,096	1,193,258
	\$ 27,521	29,342

As discussed in note 2, Big Rivers has defaulted on loans from REA and on loans guaranteed by REA. Pursuant to the loan agreements, all outstanding principal and accrued interest is now payable. The loan agreements relating to the County of Ohio, Kentucky promissory notes contain provisions whereby the Trustee has the option to call the notes in the event of any loan defaults. Due to the loan default condition, such principal amounts relating to the aforementioned obligations are reflected as current maturities.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. On October 31, 1985, the County of Ohio issued Pollution Control Refunding Bonds, Series 1985, the proceeds of which were used to refinance the Interim Bonds. The Refunding Bonds bear interest at a variable rate which is the lesser of (a) 13 percent per annum or (b) a rate determined by the remarketing agent and approved by Big Rivers as being the rate necessary to remarket the bonds

in a secondary market transaction at par, plus accrued interest, but not more than 110 percent of a variable rate index based on weekly sales of 91-day U.S. Treasury Bills. The bonds are supported by a Manufacturers Hanover irrevocable transferable standby letter of credit due to expire October 1987. The bonds are payable on demand, or subject to mandatory redemption upon expiration of the supporting letter of credit and any renewal thereof, and will mature in any event on October 1, 2015.

In June 1983, the County of Ohio, Kentucky issued \$58.8 million of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. The weekly interest rate was set at 62.5 percent of the coupon equivalent rate for 13-week U. S. Treasury Bills. The bonds are supported by an Irving Trust irrevocable standby letter of credit due to expire October 1987. In 1985, the bondholders exercised their option

to put the bonds on three separate occasions: \$58.8 million in January, remarketed in January; \$50.0 million in August, remarketed in August; and \$8.8 million in December, remarketed in January 1986. To meet the changes in the tax-free municipal bond market and to provide the remarketing agent the flexibility necessary to remarket the bonds, the weekly interest rate was set at December 31, 1985, at 107 percent of the coupon equivalent rate for 13-week U.S. Treasury Bills.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

In January 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2.9 million from the Jackson Purchase Electric Cooperative Corporation. Pending REA approval, Big Rivers intends to assume the loan with REA pertaining to these assets.

### (6) Matured Debt and Interest

As discussed in note 2, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due the FFB for REA guaranteed loans in November and December 1984 and during 1985. The amount of the default plus interest is shown as matured debt and interest. REA, under its guarantee agreement with FFB, paid the amounts due FFB that were due

from Big Rivers, but were not paid by Big Rivers. This amount, plus interest, is recorded by REA as due from Big Rivers. The interest is computed at the same rate or rates as on the related FFB advance or advances. During 1985, matured debt and interest increased by \$116.4 million resulting from defaults and accrued interest and was reduced by payments of \$22.3 million.

### (7) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 86% which is expected to decrease to 84% by 1989. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the

principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1985, 1984 and 1983 was approximately \$34.4, \$35.5 and \$34.8 million, respectively. Such costs are accounted for as power purchased and interchanged, net.

### (8) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$350, \$1,069 and \$880 thousand in 1985, 1984 and 1983, respectively. The accumulated pension plan benefits and

net assets as of the most recent actuarial valuation date available are as follows:

(In thousands)

	Janu	ary 1
	1985	1984
Actuarial present value of accumulated plan benefits:		
Vested	\$3,440	2,810
Nonvested	216	140
	\$3,656	2,950
Net assets available for benefits, at approximate market value	\$6,933	5,304

The assumed rate of return used in determining the actuarial present value of accumulated pension plan benefits was 6% in 1985 and 1984.

During 1985, Big Rivers changed from the entry age normal actuarial cost method to the unit credit method for determination of pension expense and funding. This change will result in a better matching of funding to accumulated benefits by taking

into consideration the excess of pension fund assets over accumulated benefits. The effect of this change was to decrease total 1985 pension cost expensed and capitalized by approximately \$748 thousand.

Operating revenues were as follows:			(In thousand
	1985	1984	1983
Members:			
Green River Electric Corporation	\$112,932	112,063	111,265
Henderson-Union Rural Electric			
Cooperative Corporation	74,983	84,933	77,219
Jackson Purchase Electric			
Cooperative Corporation	12,914	12,399	14,292
Meade County Rural Electric			
Cooperative Corporation	7,468	7,040	7,164
Nonmembers	72,312	48,269	48,337
	280,609	264,704	258,277
Sales credited to construction	(44,585)	(6,684)	_
	\$236,024	258,020	258,277

Sales resulting from Wilson 1 during the construction period have been credited to construction in progress.

National-Southwire Aluminum Company and Alcan Aluminum Corporation (formerly Atlantic Richfield Company) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Company and Henderson-Union Rural Electric Cooperative Corporation for Alcan Aluminum Corporation) were as follows:

(In thousands)

	Green River	Henderson-Union	Combined
1985	\$82,654	60,908	143,562
1984	\$83,252	71,081	154,333
1983	\$82,352	63,436	145,788

### (10) Write-off of Leverage Lease Costs

In 1984, Big Rivers aborted a leverage lease financing proposal of the Wilson 1 unit due to the difficulties described in

note 2. The costs incurred with regard to the abandoned leverage lease transaction were charged to margins in 1984.

### (11) Litigation

As discussed in note 2, REA has filed suit against Big Rivers alleging that Big Rivers has defaulted on its notes and seeks judgment in the amount of \$1,047,990,623 in principal and \$25,856,352 accrued interest. The complaint also seeks a foreclosure and sale of the collateral, which is essentially all of the assets. An answer to this suit has been filed alleging that conduct on the part of the government caused Big Rivers' inability to make the note payments. Legal counsel is unable to evaluate

the likelihood of an unfavorable outcome or to estimate the amount or range of potential loss. A pretrial conference relating to these suits is scheduled for April 30, 1986.

In addition to the aforementioned, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

# COMPARATIVE STATISTICAL ANALYSIS -

		1985	1984		1983	1982	
Operating Revenues	\$ 23	36,023,720	258,019,5	79 2	58,276,967	232,716,0	033
Expenses:							
Operation and Maintenance	13	33,779,910	143,358,3	27 1	36,539,322	124,675,1	180
Purchased Power and		00 700 000	45 40 4 0	1.4	FF 404 404	40.040.4	010
Interchanged, Net		39,792,228	47,494,0		55,494,464	46,342,6	
Depreciation and Amortization Taxes		17,788,717	18,533,30 2,269,30		17,782,446 2,202,576	17,548,4	
Interest		2,353,021 39,645,856	39,747,3		38,198,269	1,970,3 40,467,4	
Other	•	195,269	150,8		136,778	149,4	
Total	23	33,555,001	251,553,18	87 2	50,353,855	231,153,3	387
Operating Margin (Loss)		2,468,719	6,466,39	92	7,923,112	1,562,6	646
Nonoperating Margin (Loss)		1,050,605	(1,726,87		994,948	1,968,2	
Net Margin (Loss)	\$	3,519,324	4,739,5	15	8,918,060	3,530,8	893
Hillita Plant at Cost	Ф 5	20 008 444	522 507 0		21 772 601	405 105 6	=
Utility Plant at Cost Construction Work in Progress		39,998,444 33,505,325	533,597,00 745,589,20		31,772,691 53,519,304	495,105,8 451,265,8	
Total Electric Plant	1,3'	73,503,769	1,279,186,3	33 1,1	85,291,995	946,371,4	401
Less Accumulated Depreciation	12	24,841,130	106,923,76	61	91,374,775	74,720,9	991
Utility Plant Net	\$1,24	48,662,639	1,172,262,5	72 1,0	93,917,220	871,650,4	410
Total Assets	\$1,40	09,490,616	1,332,830,42	20 1,2	25,799,340	1,029,256,5	522
M. I. W. I			_				
Member Maximum Demand — MW		1 049	1.00	7.7	050		0.47
Installed Steam Generating		1,042	1,02	21	952		947
Capacity — Net MW		974	9′	7.4	974	C	974
Purchased Steam Generating Capacit	v	0,1			0.4	•	<i>7</i> • • •
HMP&L Station Two — Net MW		271	26	38	270	2	253
Peaking and Standby Capacity							
Reid Combustion Turbine — MW	7	65	(	35	65		65
Purchased Peaking — MW		178	19	90	40		40
Purchased Standby — MW		0		0	100	1	100
KWh — Millions —							
Sales to Members		6,908.67	7,390.7		6,719.42	6,420	
Sales to Non-Members		3,290.11	2,075.9		2,098.82	1,106	
Generated Purchased		6,447.45	6,876.3	57	6,474.14	5,848	.11
HMP&L Station Two		1,779.65	1,882.2	00	1,724.84	1,127	10
Other		291.98	1,882.2		790.65	681	
System Load Factor — %		78.1	84		78.4		4.8
Employees at Year-End		827	83		794		680
		-			·	·	

# TEN YEAR SUMMARY

1981	1980	1979	1978	1977	1976
240,476,418	179,429,591	124,077,992	117,873,040	87,745,285	60,926,026
120,266,830	91,232,809	53,217,700	52,753,054	43,278,427	33,055,570
58,848,412	52,947,305	52,238,507	49,559,041	32,249,409	29,012,642
17,073,065	11,516,775	5,976,160	5,111,273	4,444,813	3,274,979
1,817,332	1,441,297	780,799	712,919	631,557	565,273
37,092,495	18,528,992	4,988,213	3,808,979	3,206,173	2,611,967
92,954	56,197	23,017	25,940	5,290	31,733
235,191,088	175,723,375	117,224,396	111,971,206	83,815,669	68,552,164
5,285,330	3,706,216	6,853,596	5,901,834	3,929,616	(7,626,138)
1,677,561	1,080,410	1,219,271	620,969	144,720	(171,552)
6,962,891	4,786,626	8,072,867	6,522,803	4,074,336	(7,797,690)
483,371,934	313,289,264	283,281,046	130,333,952	124,665,252	122,471,149
173,576,481	186,458,271	125,427,944	157,127,012	57,229,121	12,343,345
656,948,415	499,747,535	408,708,990	287,460,964	181,894,373	134,814,494
58,643,004	42,843,216	32,900,415	28,361,983	24,534,449	21,008,189
598,305,411	456,904,319	375,808,575	259,098,981	157,359,924	113,806,305
708,233,625	560,828,507	480,817,488	374,646,226	226,712,745	174,716,621
956	943	910	819	820	790
974	751	751	520	520	520
253	256	255	262	262	267
65	65	65	65	65	65
40	40	40	40	40	40
100	100	100	100	100	100
7,482.78	7,529.34	7,029.28	6,526.85	6,189.32	5,920.81
1,455.27	475.36	58.50	79.39	59.54	3.87
6,164.23	5,187.78	3,911.05	3,678.16	3,711.16	3,215.64
1,822.87	1,989.04	1,931.09	1,805.31	1,855.88	1,736.04
1,097.02	966.38	1,387.12	1,253.09	814.89	1,092.25
87.1	88.1	85.3	87.5	87.7	87.3
667	622	555	488	401	346

Total Equity
(In Millions of Dollars)

50

45

40

35

30

25

20

15

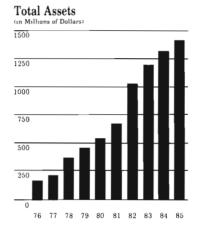
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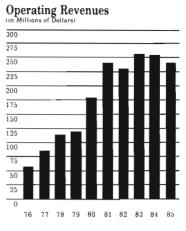
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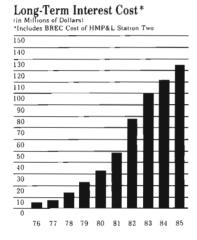
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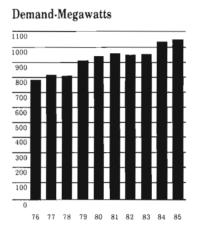
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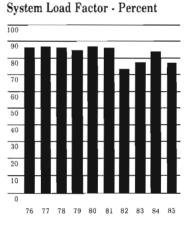
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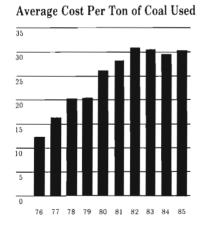


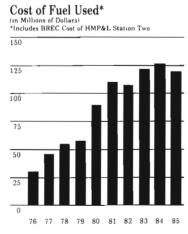












# CORPORATE DIRECTORY

**OFFICERS** 

Morton Henshaw President

Edward F. Johnson Vice President

William B. Briscoe Secretary-Treasurer

William E. Seaton Assistant Secretary-Treasurer

GENERAL MANAGER W. H. Thorpe

DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation Marion Cecil Edward F. Johnson Sandra Wood

Henderson-Union Rural Electric Cooperative Corporation William Briscoe Morton Henshaw C. G. Truitt

Jackson Purchase Electric Cooperative Corporation Bill Doom Stanley Jones Edwin Reid

Meade County Rural Electric Cooperative Corporation John C. Burnett J. D. Cooper William Seaton

VICE GENERAL MANAGERS

J. E. Dolezal Energy Supply

Ronald W. Johnson Corporate Services and Labor Relations

Earl A. Millspaugh Production

B. Scott Reed Engineering and Transmission

Paul A. Schmitz Finance

W. Hayden Timmons Environmental & Public Affairs **MANAGERS** 

Don E. Augenstein Corporate Services

Gregory F. Black Environmental Affairs

Joe L. Craig Fuels

James V. Haner Accounting

Don C. Mann Purchasing

Tom Millay Personnel

James H. McIllwain Construction

David E. Schultz System Planning and Design Engineering

Benjamin Urbanek Energy Control

Phil Waggoner Electronic Data Processing

**SUPERINTENDENTS** 

Richard Greenwell Power Production

Wendell Greer Reid/Green Plants

Virgil Mitchell Transmission

Steve Moss Wilson Plant

Barry Wood Coleman Plant

CORPORATE ATTORNEY

Morton Holbrook General Counsel Holbrook, Gary, Wible & Sullivan, P.S.C. Owensboro, Kentucky

CORPORATE AUDITORS

Peat, Marwick, Mitchell & Co. Louisville, Kentucky

BIG RIVERS ELECTRIC CORPORATION

Post Office Box 24 201 Third Street Henderson, Kentucky 42420 (502) 827-2561 1984 ANNUAL REPORT

ELECTRIC CORPORATION

# FINANCIAL HIGHLIGHTS

About the cover:

THE 600-FOOT STACK of the D.B. Wilson Plant towers over the 2,200-acre site of Big Rivers Electric Corporation's latest coal-fired generating facility, which was synchronized in late 1984.

## FINANCIAL HIGHLIGHTS

(dollars in thousands)

	1984	1983	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	258,020	258,277	(257)	(.1)
Operating Expenses	211,655	212,019	(364)	(.2)
Net Margins	4,739	8,918	(4,179)	(46.9)
Construction Expenditures	122,950	239,342	(116,392)	(48.6)
Energy Sales (Megawatt Hours) A. To Members	7,390,752	6,719,419	671,333	10.0
B. Intersystem	2,075,956	2,098,823	(22,867)	(1.1)
System Peak Demand in Megawatts	1,027	952	75	7.9
Cost of Fuel Used in Generation	101,509	99,585	1,924	1.9
Assets	1,332,830	1,225,799	107,031	8.7
Accumulated Margins and Equity	42,949	37,749	5,200	13.8
Employees Full Time	835	794	41	5.2
Revenue Per kWh Sold (Mills)	27.98	29.28	(1.30)	(4.4)

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### PRESIDENT'S AND GENERAL MANAGER'S REPORT

# **BIG RIVERS**

his year, like the one Charles
Dickens wrote about in A Tale
of Two Cities, was both the
worst and the best of times. Net income
from operations reflected one of our
best years. But when it comes to solving
the financial predicament associated
with the construction of our latest
generating plant, that's another story.

Let's deal first with the troubles accompanying completion of the D. B. Wilson Plant, a 395-megawatt (MW) (net capacity) coal-fired generating facility. Our story is not unique. About eight years ago we researched and planned for a two-unit plant. At that time, demand and growth were increasing at 10 percent annually. And we knew we must add more capacity to continue meeting our distribution cooperatives' member-owners electrical needs reliably and cost efficiently. As the national economy suddenly plummeted, we revised our load forecasts, delayed and ultimately cancelled the second unit. The need for Unit No. 1 was still there, however. As completion neared on that unit, the aluminum market took a drastic and unpredicted nosedive. And that serious drop had a profound effect on Big Rivers. Two aluminum smelters - National-Southwire Aluminum (NSA). Hawesville, and ARCO Metals (now Alcan), Sebree — consume 70 percent of our power. In the spring of the year, we at Big Rivers were in the midst of finalizing a leveraged lease with General Electric Credit Corporation, Consummation of that deal and a 19 percent wholesale rate increase (our first in four years) were the means we had worked out to bring Wilson Unit No.1 on line while avoiding a prohibitively high rate increase. During the many months we were negotiating this leveraged lease, the aluminum companies were kept up to date. They expressed gratitude for and approval of our innovation and determination. That is, until aluminum prices fell. Survival instincts took over and NSA mounted an intense and effective campaign

against our proposed rate increase, citing a plant shutdown because they'd go broke. Obviously, if they were forced to close, there would have been a ripple effect on the entire West Kentucky economy. We were forced to take another look at the rate situation since economic conditions beyond our control had altered both residential and industrial need for more electricity. Unfortunately, the delay killed our leveraged lease.

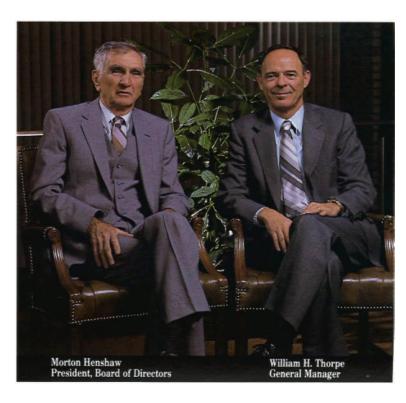
We looked to the Rural Electrification Administration (REA) for assistance. They put us in touch with two other generation and transmission (G&T) cooperatives who needed power. We approached Wabash Valley Power Association, Inc. and later Oglethorpe Power Corporation about buying all or part of the Wilson Plant. We weren't able to work anything out.

We knew that once commercialization of the Wilson Plant became a reality, there was another reality — that of making our first quarterly payment to REA against the Wilson construction loan. Without revenue from the Wilson Plant, there would be no way to make that payment. The worst of times doesn't begin to describe our situation here. For a while we had two choices, filing for reorganization under

Chapter 11 of the U.S. Bankruptcy Act, or a takeover by REA. Big Rivers wanted neither.

Not sitting idly by, we continued seeking prospective buyers for the plant and buyers for long-term power. At year's end we were expecting REA to approve our contract with Municipal Energy Agency of Mississippi for 54 MW of power. We are hoping that we can nail down other contracts that we're negotiating.

On November 28, Big Rivers filed suit in U.S. District Court against REA for withholding \$27.6 million in loan money previously promised for construction projects, including the Wilson Plant. The money withheld does not affect the ongoing operation of this Corporation but was designated to pay vendors already completing major projects or in the process of finishing them. After refusing to distribute October and November disbursements, REA said they would release the funds when we consolidated with East Kentucky Power Cooperative (EKPC). In mid-December our board of directors and the board at East Kentucky, Winchester, approved Bechtel Energy Corporation to conduct an "organizational alternatives study." The study will include a gamut of



# PRESIDENT'S AND GENERAL MANAGER'S REPORT(CONT.)

# **BIG RIVERS**

possibilities. East Kentucky is an 18member G&T providing electricity to 280,000 member-owners in Eastern and Central Kentucky. Their load is 95 percent residential. Results of this study are not expected before June 1985. It is REA's contention that combining the two utilities will help solve our financial situation stemming from commercializing the Wilson Plant, and the imbalance between industrial and residential loads. Because it was forced to use current revenues to replace impounded loan funds in paying contractors finishing the Wilson Plant, Big Rivers did not make its November and December 1984 loan payments to REA, which declared all of Big Rivers' loans payable. The U.S. Department of Justice then sued Big Rivers to foreclose the REA mortgage. This suit and Big Rivers' suit against REA Administrator Harold Hunter are pending.

Earlier we mentioned that despite all the troubles surrounding the Wilson Plant, we otherwise had a good year. On January 3, we successfully completed the cutover of Jackson Purchase Electric Cooperative Corporation's load from an investor-owned utility to Big Rivers. We finished construction of new transmission substations and lines, including our first 345-kilovolt (kV). We ended the year with margins of \$4.7 million.

Big Rivers' results from operations were good: sales to members increased 671,333,496 kilowatt-hours (kWh); we set a record net generation of 6,876,367,100 kWh; our system coincidental peak of 1027 was up 75 MW above the 1983 peak; and we operated

successfully and soundly for the fourth consecutive year without a wholesale rate increase. In the following report, you will learn in more detail about these and other significant events of 1984

Even though a professional engineering consultant reviewed our load forecasts and we were experiencing unprecedented growth, a faltering American economy abruptly stunted that growth in West Kentucky. For the present, Wilson Unit No. 1 just isn't needed, and we at Big Rivers have been paying a painful price. But we're doing everything humanly possible to lessen the effect on our consumers.

THE WILSON PLANT, at present, is not needed by Big Rivers' distribution cooperatives' consumer-members. Big Rivers is seeking to solve the dilemma without burdening the consumers. The Rural Electrification Administration (REA) has recommended Big Rivers merge with East Kentucky Power Cooperative in Winchester. Big Rivers and East Kentucky at year's end hired a consultant to study merger.



# **BIG RIVERS**

We were not able to predict the severe and dramatic changes in the national economy. We hope to solve these problems and keep the plant. If not, it won't be long before we'll once again be facing insufficient capacity and the cost of building will only increase.

Emotionally, it's been a roller-coaster year. During the months of trying to work something out following the plunge in aluminum prices, one week we'd be optimistic, then that door would slam shut, and down we'd go again. That's how it was time and time again. Imagine employee morale around here when almost daily for months you could not pick up a paper or listen to a broadcast without being reminded that Big Rivers was teetering on the brink of a financial disaster.

This is the time to emphasize just how decent, patient and committed our employees have been. While people throughout this Corporation were rightfully concerned, there was no panic, and our personnel continued efficient day-to-day operation of Big Rivers. That's a real tribute to our employees.

On November 16, we filed a minimal wholesale rate increase to cover operating costs. The Wilson Plant was not included. Details of the rate change are discussed in the Finance Department report.

On April 12, 1985, Big Rivers' board of directors agreed to merge with EKPC as outlined in Bechtel Energy Corporation's preliminary report which showed the merger to be economically feasible. If East Kentucky's board favors consolidation, both utilities would ask their respec-

tive distribution cooperatives' boards to approve the merger plan. State statute requires the approval of a majority of these cooperatives. If the co-ops agree to merger, REA and the Kentucky PSC would then have to approve the plan after public hearings.

In closing we convey our gratitude to the directors for their tireless efforts to solve the crucial problems we encountered this year. We are grateful for each director's experience, concern and relentless pursuit of a solution mutually beneficial and acceptable to everyone involved.

Sadly we note the December 7 death of board vice president Texal D. Brooks (see page 24). We shall miss his knowledge, his warmth and humor. Sandra Wood was chosen to fill the vacancy. She is the first woman to serve on our board. We deeply regret the circumstances necessitating the election of a new board member, but we welcome her ideas and enthusiasm as our board and management strive to resolve the Wilson dilemma.

Motor Henshow

W. H. Thoyse

Morton Henshaw President, Board of Directors

William H. Thorpe General Manager

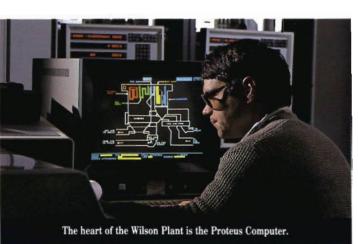
# FINANCE

# **BIG RIVERS**



arly in 1984 the Accounting Department began preparing an application to the Kentucky PSC for an increase in rates needed to pay for the new Wilson Plant. Big Rivers recognized that the cost of the new plant, using the normal accounting method for establishing rates, would result in at least a 40 percent increase to its members.

We attempted to sell the Wilson Plant to a taxable corporation with plans to lease back the plant from the buyer. Since Big Rivers is a non-profit corporation, the sale of the plant to a taxable profit-making corporation would have enabled the buyer to reduce its federal tax liability and pass some of these savings to Big Rivers. This would have resulted in lease payments lower than the debt payments without the sale/leaseback arrangement. The buyer would have expected Big Rivers to increase revenues sufficiently to make the annual lease pay-



ments. We estimated this transaction would have saved Big Rivers' distribution cooperatives' consumer-members at least \$700 million over the life of the Wilson Plant.

However, by the time Big Rivers filed its wholesale rate increase request in April, the aluminum industry had experienced another sharp decline in primary aluminum prices. The competitive position of the aluminum firms operating in our area is vital to Big Rivers because of the significant

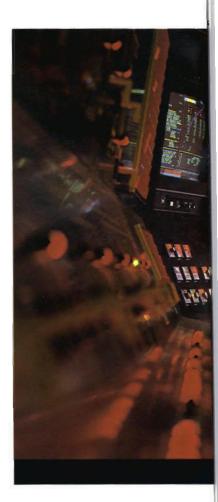
proportion of power they purchase from the system. Because of this most recent decline, and further industry projections of possible deeper declines in 1986, the major aluminum producers in the service area believed that the new rates proposed by Big Rivers would result in such high economic losses to them that they would be unable to keep their smelters operating. Due to those circumstances and REA's failure to guarantee lease payments, Big Rivers was unable to complete the sale/leaseback of the Wilson Plant, and on October 8 Big Rivers notified the PSC that it would withdraw the pending rate increase.

On November 16 we filed a new rate case before the PSC, requesting a wholesale rate increase of \$16.7 million to cover increased operating and capital costs. This rate increase, about six percent to our distribution cooperatives' member-consumers, does not include the D. B. Wilson Plant. It does, however, include the \$47.8 million cost of the transmission system tying Wilson to Big Rivers' other generating facilities and transmission system.

Our board and management, diligently seeking an alternative after the aluminum market floundered, opted to seek just enough financial relief to meet rising operating costs and finance other needed capital construction projects. If granted, this will be our first wholesale rate increase since January 19, 1981. What we are asking is substantially less than inflation has been during the past four years. The PSC began hearing our rate case on March 14, 1985.

Current year's results from operations were good. Sales to members increased 671,333,496 kWhs (10.0%). Revenue from these sales increased \$6.5 million (3.1%) with no increase in rates. The total margins for the year were \$4,739,515.48 and accumulated equity of the Corporation was \$42,949,201.80 at year-end.

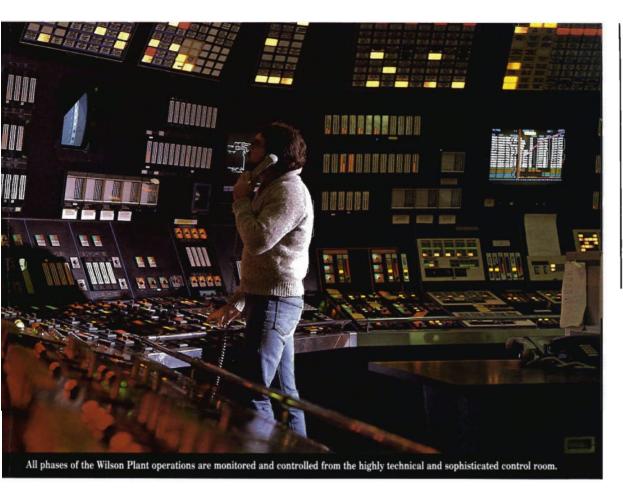
The year proved to be a very busy one for our Electronic Data Processing Department which installed four computer systems at the Wilson Plant, completed conversion of an IBM Sys-



tem 38 computer in our commercial and financial area and installed personal computers in the Accounting and Engineering departments. These systems provide the operating personnel with tools to effectively manage and control corporation resources.

Our Purchasing Department contributed bottom line cost savings of over \$200,000 through sourcing, vendor analysis and other purchasing techniques. The conversion to the System 38 has been accomplished. Refined ordering techniques for inventory items are being tested with the Accounting/Inventory departments to insure the maximum inventory efficiency.

# ENERGY SUPPLY





ig Rivers aggressively attempts to sell its generating reserves and excess capacity. This persistence resulted in \$48.2 million revenue in 1984, which was the major factor in Big Rivers maintaining the same rate structure established in 1981. In 1983 Big Rivers had \$48.3 million of intersystem sales. This year's intersystem sales exceeded 2 billion kWhs for the second year.

The D. B. Wilson Plant was synchronized on September 27, providing additional excess capacity available for intersystem sales. We were successful in selling the unit's test energy on an as, if, and when basis through yearend. A team approach to sales of long-term capacity sold 54 megawatts for

10 years with revenues approximating \$15 million a year.

Big Rivers continues to have excess generating capacity available for intersystem sales and is attempting to market this capacity on a short-term and a long-term basis, up to 15 years.

On July 25, at 6 p.m., we reached a new record system coincidental peak of 1027 megawatts. Our previous system peak demand of 956 megawatts was in 1981.

During the year, the Energy Supply Department accomplished the following tasks: coordinated communications during the Jackson Purchase cutover; completed installation and checkout of the Wilson to Coleman 345 kV communication systems for protective relaying; completed modifications to the communication systems for the

Coleman 161-kV line, Hancock and Ft. Pitt Substations; and completed installation and checkout of all communication SCADA and telemetry equipment for the Skillman Substation.

The Communications Department maintains its equipment and parts inventory on the IBM System 38. A preventive maintenance program was implemented for all Big Rivers' communication systems.

## PRODUCTION AND CONSTRUCTION

# **BIG RIVERS**



he Production Department completed another outstanding year by surpassing the record 1983 net generation. More than 8.76 billion kWh's were generated (excluding Wilson Plant), 6.8 percent more than the previous year's record.

Operating costs continued to decline. The average cost per kWh generated was 24.66 mills which was down 3.8 percent from the 1983 cost of 25.63 mills.

We continued the Maintenance Management and Performance Monitoring Programs. Our excellent unit availability, low maintenance costs and improved heat rates are results of these programs.

The performance engineers concentrated in key areas, including auxiliary power usage. The units' auxiliary power usage (power used to run the units) has been reduced. The consumption for 1984, compared to 1982 is:

Complete unit heat rate tests, turbine generator performance and boiler feed pump tests are now conducted at regular intervals.

The Central Machine Shop and Central Laboratory expanded services provided to all operating departments. The machine shop now produces many spare parts more economically and of better quality than many parts purchased outside the Corporation, according to cost studies. An added bonus, the parts are available when needed. The central laboratory expanded into gas and ion chromatography, and all coal testing except ultimate analysis.

Big Rivers requested the State of Kentucky to exempt us from reheating the flue gases emitted from the Green Plant. Studies indicate these two units will still meet environmental regulations without reheat. Approval of our request will save at least \$1.2 million per year.

In other developments at Green, a coal vendor received regulatory approval to remove all scrubber sludge from that plant. In early 1985 we will begin hauling sludge back to strip mines in the trucks that bring coal into the plant. We can greatly reduce the size of our above ground landfill and save substantial waste handling cost.

At the Coleman Plant, several changes to update the facility were made. A new reverse osmosis water treatment plant replaced two obsolete and non-repairable water plants which could no longer supply suitable quality water for the boilers. Also, a modern coal handling control system replaced an inadequate system. Installing a new conveyor to bypass the coal pile allows coal to be unloaded from barges directly into the plant.

Modifying the air flow pattern through the units improved the performance of Coleman's precipitators. With this change, we accomplished substantial decreases in emission rates. Instead of large capital expenditures for additional precipitators, we now have extra capacity in our emission control equipment.



The Wilson unit was synchronized to the Big Rivers system on September 27. Start-up testing of the unit proceeded for the remainder of the year. Significant start-up problems encountered were: a contaminated turbine lubricating oil system; piping stress problems in the areas around the boiler feed pumps; and a defective pulverizer motor. These problems have been resolved and the unit is proceeding well. Testing and chemical balance of the scrubber will be performed during early 1985.



Plant	1982	1984
Coleman	6.4%	6.2%
Reid/HMP&L	9.4%	8.3%
Green	11.0%	9.5%

We emphasized correcting problems on individual equipment operating at less than maximum efficiency. Finding and repairing an air heater that had 100 percent excess air leakage was just one example of how this paid off.

### FUELS

# **BIG RIVERS**



ig Rivers' generating plants, excluding the Wilson Plant, burned 4.22 million tons of coal in producing electricity this year. That total is up approximately 5 percent over the 1983 tonnage burned.

Approximately 88 percent of the coal received this year was purchased under long-term contracts, five years or more. Our largest receipts came from MAPCO's mines in western Kentucky, including 1,083,218 tons from MAPCO's Retiki Mine and 148,462 tons from the Dotiki Mine. The Green Plant, equipped with flue gas desulfurization scrubbers, burns the Retiki high-sulfur coal. The Reid Plant and HMP&L Station Two burn the lower-sulfur coal from Dotiki. Remaining supplies come from Kentucky, Indiana and Ohio.

We started receiving coal at the Wilson Plant from Green River Coal Company, Inc. in March and from Diamond

J. Coal Company in July. These two companies' western Kentucky mines are our primary sources of high-sulfur coal for the Wilson Plant. During the year Wilson burned 116,119 tons of coal in generating electricity. Because the unit was not commercialized, this coal (along with its average cost of \$28.17 per ton, 129.6¢ per million BTU) was charged to a start-up and testing account and is not included in the total figures for Big Rivers' system fuel consumption.

For the second consecutive year, Big Rivers' cost of coal decreased from that of the previous year. The average cost of coal used in generating electricity was \$29.91 per ton, or 135.6¢ per million BTU, compared to \$30.38 per ton, or 138.4¢ per million BTU in 1983. The lower cost resulted in savings passed directly to consumer-owners of Big Rivers' four member distribution cooperatives through the Fuel Adjustment Clause (FAC).

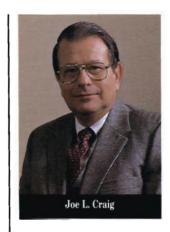
The savings were due in large part to three factors:

First, the state PSC granted us approval to implement an agreement with Cravat Coal Co. to reduce their delivered price of coal by approximately \$11 per ton. It also allowed us to change the source from Ohio and eastern Kentucky to western Kentucky. The agreement with Cravat took effect June 1. We paid Cravat \$12.5 million which is being amortized over the remaining eight-year life of the contract. The PSC approved the inclusion of the amount in the FAC (\$3.8156 per ton) as coal is delivered. We project a net savings to the consumers of \$37 million.

Secondly, we purchased coal at spot market prices. Buying short-term sup-

plemented the quantities of coal we were obligated to purchase under our long-term contracts. Short-term prices increased substantially the first nine months of 1984 as utilities bought heavily in preparing for a possible nationwide strike by the United Mine Workers of America. However, Big Rivers purchased 564,265 tons during the year averaging \$3.11 per ton lower than the average cost under the long-term contracts, saving approximately \$1.75 million.

Lastly, the rate of inflation continued to remain low. This meant a low rate of escalation of long-term coal contract prices.

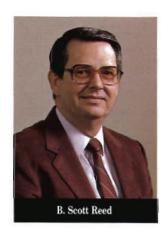






### **ENGINEERING AND TRANSMISSION**

# BIG RIVERS





n January 2 at 10:30 p.m., procedures were started to transfer the load center substations of Jackson Purchase Electric Cooperative (JPEC) over to the Big Rivers' system. Four hours later, the entire transfer was completed as planned, and JPEC's 18,900 consumermembers began using energy produced by Big Rivers. The transfer was the culmination of seven years of effort by Jackson Purchase and Big Rivers personnel.

The latest system load forecast indicates that Big Rivers' rural demand growth will average about 3.7 percent per year, compounded, for the next 15 years. Coupled with a 25 MW decrease in industrial load expected to occur in 1986, the overall system demand is expected to increase at an average of 1.3 percent per year, compounded, over the same 15-year period. The 25 MW decrease in industrial load for 1986 is the result of efficiency improvements planned by National-Southwire Aluminum (NSA), Hawesville, which will enable them to reduce electrical usage while still maintaining previous levels of aluminum production.

We completed construction and energized 39 miles of 345-kV transmission line during the year. We also placed in service the 345/161 kV substation near the Coleman Plant, thereby completing construction of Big Rivers' first 345-kV transmission system.

To reduce loading on the 69-kV transmission system in Daviess and Hancock counties and to improve service to the expanded Willamette Industries paper mills in Hancock County, we constructed a new 161/12.5-kV substation and six miles of 161 kV transmission line near the Western Kraft Plant. Electric service to the plant was transferred from the 69-kV system over to the 161-kV system. With the exception of the design and placement of the concrete foundations, the substation was completely designed and constructed by Big Rivers' own employees at a considerable cost savings from what would have been incurred with the use of outside design and construction services.

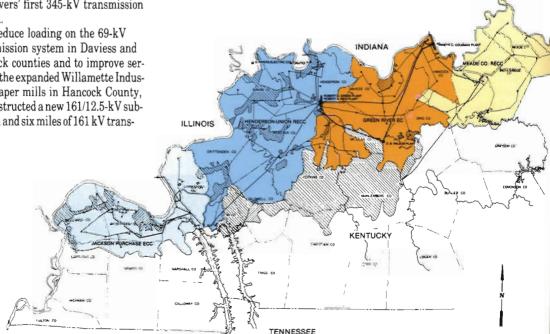
Approximately eight miles of 69-kV line were also completed to serve new load centers at Sacramento, Kentucky, and Retiki Mine, an underground coal mine in Henderson County which supplies coal for the Green Plant.

Because of the increasing age of our transmission and substation facilities. a new phase of equipment maintenance was established in 1984. We initiated a program to overhaul oil circuit breakers to supplement routine breaker maintenance. Each breaker will receive a thorough internal inspection, worn parts will be reconditioned or replaced, necessary adjustments will be made and oil will be reconditioned. In addition, we started a power transformer oil testing program, utilizing sophisticated gas chromatography testing equipment purchased by Big Rivers' Central Laboratory. These tests will assist in evaluating the likelihood of future

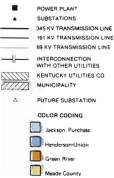
transformer failures through the analysis of gases dissolved in the transformer oil. The formation of certain gases is characteristic of insulation deterioration or low-level electrical arcing inside the transformer and can provide early warning signs of equipment failure.

The electrical failure of a large power transformer at the Green Plant in December 1983 and the mechanical failure of a 161-kV oil circuit breaker at the Reid substation this year prompted these maintenance and testing procedures. Following the transformer failure, oil tests on transformers at the Coleman Plant revealed the presence of gases in two other transformers which indicated possible imminent failure of those units. The two transformers were removed from service and returned to the manufacturer for repairs, avoiding the expense of emergency repairs and costly outages of the generating units.

Creating a year-round program through which every substation and power plant relay will be tested every two years, and repaired or recalibrated if necessary, has given added reliability to our system's protective relays.



### **LEGEND**



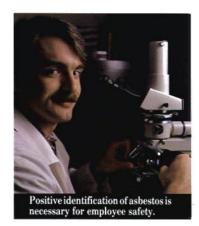
## LABOR RELATIONS AND CORPORATE AFFAIRS

# **BIG RIVERS**

he year began with a heavy emphasis on staffing the new D.B. Wilson Plant near Centertown, Kentucky. At the time of start-up in late summer, Big Rivers' employment reached 840.

Management and the Bargaining Unit's commitment to improved employee relations was evidenced by the new three-year contract effective April 23, 1984. In addition to the economic increase negotiated for each year, the bargaining unit employees are now participants in an attractive new savings plan. Also, at the beginning of the third year, their Retirement Plan will become noncontributory.

Last year's Pre-Retirement Planning Program for all employees 55 years and older was met with such enthusiasm that it was extended to employees age 45 to 54. This two-day seminar, coordinated by Personnel and conducted with the help of area specialists in selected fields, helps employees understand the need to plan for a successful retirement. Similar seminars are scheduled every three years to update employees on changes that will affect their retirement.



The Employee Assistance Program (EAP) moved into its second year. It continues to gain the respect of employees as a confidential way to help them with personal problems. The EAP also is a proven tool when management confronts employees experiencing problems affecting job performance. Related to the Employee Assistance Program was in-house training on drug and alcohol awareness conducted for all supervisory personnel.

"Together we can prevent accidents." This was the slogan that emphasized the Safety Program through another record year in accident prevention. We established a program covering asbestos removal to further insure the safety of employees when working with or around this material. Big Rivers' commitment to the safety of our employees remains a top priority.

Our efforts to improve the safety record in our plants again realized success. This year we had a 58% reduction in lost-time injuries! Plant and safety personnel worked together to achieve this decrease, and every plant reported fewer lost-time injuries than in 1983.

The successful future of Big Rivers is largely dependent upon having employees prepared to deal with the challenges that the utility industry will face in the coming years. To that end we are proud that nearly 100 employees took advantage of the benefits of the Educational Assistance Program.

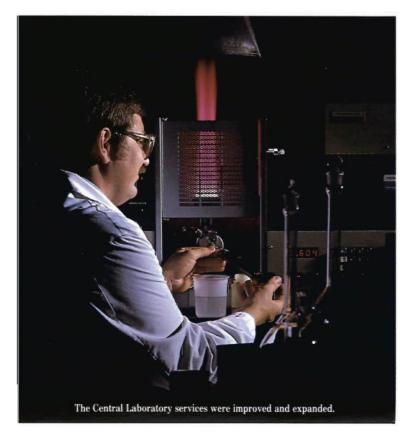
Employee training through seminars, workshops and in-house programs increased significantly throughout the corporation. The plants' Safety and Training Coordinators helped establish formal training programs. Supervisory training continued with 35 supervisors participating in two levels of instruction sponsored by Western Kentucky University. Seventy supervisors and managers attended outside seminars to increase their knowledge and expertise in their respective departments.

Big Rivers commitment to Affirmative Action for employment and advancement of qualified women, minorities, veterans and handicapped was evident. Our annual EEO analysis showed that significant gains have been made toward recognition of protected groups throughout our workforce.



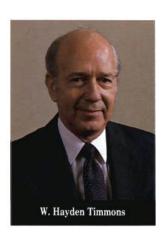




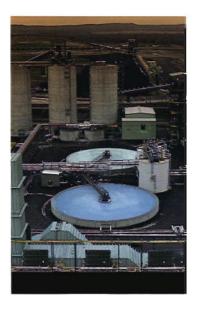


## **ENVIRONMENTAL AND PUBLIC AFFAIRS**

# **BIG RIVERS**



THE THICKENERS are the primary settling chambers for scrubber waste material after chemical reaction with sulfur dioxide. The waste material, after processing by the thickeners, is treated further at the Conversion Systems Inc. (CSI) building.



he Environmental Department's main emphasis throughout much of this year was obtaining solid waste permits for the Wilson Plant. Nearly a year's efforts were required in designing and coordinating the facility's plans with the Kentucky regulatory agencies. Late this year, Big Rivers received these necessary approvals. Additionally, initial testing of equipment at Wilson required the Environmental Department to coordinate with plant operating personnel to make sure we were within permitted limits. We also began planning for various study requirements included in the operating permits. We anticipate these studies will be initiated during 1985.

The department has also been involved in permits and approvals associated with corporate maintenance and construction activities. Maintenance at our generating plants included such items as river dredging of the barge handling areas and placing rip-rap for bank stabilization. We received all necessary approval for constructing new transmission facilities.

Many of the permits under which Big Rivers' plants have operated for many years were up for renewal this year. Some permits already have been completed. Others are still in progress. We anticipate this repermitting will be ongoing through next year. This department has closely monitored legislative and regulatory activities during the year. The Clean Air Act reauthorization and associated acid rain proposals pose particular concern to this corporation considering the financial impact they might have on Big Rivers distribution cooperatives' consumer-members. We have participated with numerous organizations and government agencies through the public notice and comment process to assure the promulgation of adequate and balanced regulations.

Regulatory agencies recently have increasingly stressed compliance. These inspections cover all areas of Big Rivers' operation including our water discharges and air emissions. Inspections are also made of the solid waste landfill operations. Agency personnel checked for compliance with regulatory or permitted limits as well as various monitoring and recordkeeping requirements. Most of these visits are done on a quarterly basis although some are as frequent as monthly. As a result, inspections of generating plants are more frequent. To help assure our plants' compliance, the Environmental Department conducted audits on the different continuous monitoring systems at our operating facilities. Because the Wilson Plant is a "new, new source," we are prepared to manually monitor stack emissions there if necessary, just as the law requires. This department also regularly coordinated with operating personnel to assure continued compliance of all permitted activities.

During the year Big Rivers disposed of 210, 3-gallon capacitors from the Coleman Substation, two transformers from the Green Plant and one drum of faulty capacitors from our transmission yard. All contained Polychlorinated Biphenyls (PCBs). Also, we are evaluating potential disposal of 17, 172-gallon precipitator transformers which have been removed from the Coleman Plant.



# **BIG RIVERS**



 $\label{eq:chemistric} A\ CHEMIST\ in spects\ the\ land fill\ where\ the\ Green\ Plant's\ scrubbers\ solid\ waste\ is\ deposited\ after\ treatment.\ Obviously,\ reclamation\ over\ a\ properly\ operated\ land fill\ works.\ The\ land fill\ provides\ a\ colorful\ foreground\ to\ the\ Reid/Green\ complex.$ 

# FINANCIAL REPORT

# **BIG RIVERS**

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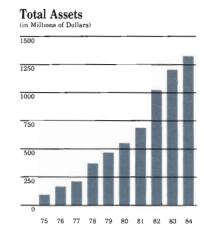
Financial Statements

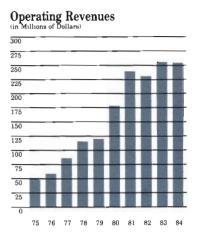
Statements of Revenues and Expenses 13 Statements of Equities 13 Balance Sheets 14 Statements of 15 Changes in Financial Position Notes to

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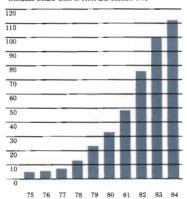
# Total Equity 45 25 15 10

75 76 77 78 79 80 81 82 83 84





# Long-Term Interest Cost\* (in Millions of Dollars) \*Includes BREC Cost of HMP&L Station Two

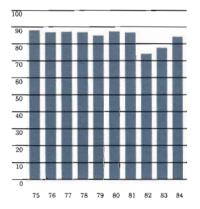


### Demand-Megawatts

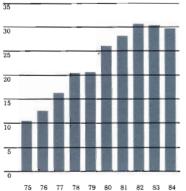
1100 1000 900 800 700 600 500 400 200 100

75 76 77 78 79 80 81 82 83 84

### System Load Factor - Percent

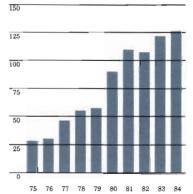


### Average Cost Per Ton of Coal Used



### Cost of Fuel Used\*

(in Millions of Dollars)
\*Includes BREC Cost of HMP&L Station Two





# STATEMENTS OF REVENUES AND EXPENSES

(In thousands)

	Years ended December 31,		er 31,
	1984	1983	1982
Operating revenues (note 9)	\$258,020	258,277	232,716
Operating expenses:			***************************************
Operations:			
Fuel for electric generation	100,820	98,375	89,988
Power purchased and interchanged, net	47,494	55,494	46,343
Other	28,047	25,241	21,766
Maintenance	14,492	12,924	12,922
Depreciation and amortization	18,533	17,782	17,548
Taxes	2,269	2,203	1,970
Total operating expenses	211,655	212,019	190,537
Electric operating margins	46,365	46,258	42,179
Interest and other deductions:			
Interest	110,650	98,075	74,948
Allowance for borrowed funds used during construction	(70,902)	(59,877)	(34,481)
Other deductions	151	137	149
Total interest and other deductions	39,899	38,335	40,616
Operating margins	6,466	7,923	1,563
Nonoperating margins:		•	•
Interest earned	2,524	4,007	2,583
Interest earned credited to construction	(1,148)	(3,057)	(694)
Write-off of leverage lease costs (note 10)	(3,125)	<del>-</del>	<u> </u>
* · · · · · · · · · · · · · · · · · · ·	(1,749)	950	1,889
Other capital credits and patronage allocations	22	45	<sup>′</sup> 79
Net margins	\$ 4,739	8,918	3,531

# STATEMENTS OF EQUITIES

(In thousands)

	Years ended December 31, 1984, 1983 and 1982			nd 1982	
				Other equities	
	Total equities	Transfer nonoperating loss to operating margin	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1981	\$24,284	_	21,355	644	2,285
Margins for 1982:					
Operating	1,563	_	1,563		_
Nonoperating	1,889	_	1,889	_	_
Other capital credits and patronage	allocations 79	_	79	_	_
Capital surcharge	523			63	460
Balance at December 31, 1982	28,338	<del>_</del>	24,886	707	2,745
Margins for 1983:					
Operating	7,923	_	7,923		_
Nonoperating	950	_	950	_	
Other capital credits and patronage	allocations 45	_	45	_	_
Capital surcharge	493	_		46	447
Balance at December 31, 1983	37,749	_	33,804	753	3,192
Margins for 1984:					
Operating	6,466	(1,749)	4,717	_	<del>_</del>
Nonoperating (loss)	(1,749)	1,749		_	_
Other capital credits and patronage		_	22	_	_
Capital surcharge	461	<u> </u>		10	451
Balance at December 31, 1984	\$42,949		38,543	763	3,643

# **BALANCE SHEETS**

(In thousands)

	December 31		
Assets	1984	1983	
Utility plant, net (note 3)	\$1,172,262	1,093,917	
Productive capacity under purchased			
power contract (note 7)	31,100	32,800	
Other deposits and investments, at cost	3,205	2,621	
Current assets:			
Operating funds	6,559	1,384	
Construction funds	1,818	26,823	
Receivables	24,020	24,176	
Fuel for electric generation	37,513	26,648	
Material and supplies	11,627	8,303	
Total current assets	81,537	87,334	
Deferred charges (note 4)	44,726	9,127	
	\$1,332,830	1,225,799	

# Equities and Liabilities

Equives and Elabinies		
Capitalization:		
Equities	\$ 42,949	37,749
Long-term liabilities, net of current		
maturities (note 5)	29,342	1,100,760
Total capitalization	72,291	1,138,509
Current liabilities:		
Current maturities of long-term		
liabilities (note 5)	1,193,258	7,833
Matured debt and interest (note 6)	26,754	_
Accounts payable	34,090	53,298
Accrued expenses	5,582	25,471
Total current liabilities	1,259,684	86,602
Deferred credits	855	688
Commitments and contingencies (notes 2, 3 and 11)		
	\$1,332,830	1,225,799



# ${\bf STATEMENTS\ OF\ CHANGES\ IN\ FINANCIAL\ POSITION\ \ (In\ thousands)}$

	Years ended December		r 31,	
	1984	1983	1982	
Sources of working capital:				
Net margins	\$ 4,739	8,918	3,531	
Items which do not use working capital:	,	,	,	
Depreciation of utility plant	17,936	17,076	16,736	
Amortization of deferred charges	8,196	2,727	1,262	
Other amortization	137	138	23	
Working capital provided				
by operations	31,008	28,859	21,552	
• •	,	•	,	
Long-term borrowings	121,869	179,610	299,781	
Other	628	652	650	
Decrease in working capital	1,178,879	38,030		
	\$ 1,332,384	247,151	321,983	
Uses of working capital:				
Additions to utility plant, net	122,950	239,342	290,082	
Reclassification of long-term debt due to default (note 5)	1,186,450			
Reduction of long-term debt	5,274	6,355	4,753	
Increase in deferred charges	17,126	1,454	6,036	
Increase in other deposits and investments	584		544	
Increase in working capital	_		20,568	
8 1	\$ 1,332,384	247,151	321,983	
	The state of the s			
Increase (decrease) in working capital:		()		
Operating funds	5,175	(3,272)	(4,730)	
Construction funds	(25,005)	(20,823)	47,606	
Receivables	(156)	2,765	(1,142)	
Fuel for electric generation	10,865	(1,948)	1,654	
Material and supplies	3,324	465	571	
Matured debt and interest (note 6)	(26,754)	_	_	
Current maturities of long-term liabilities (note 5)	(1,185,425)	(1,100)	228	
Accounts payable	19,208	6,734	(23,491)	
Accrued expenses	19,889	(20,851)	(128)	
Increase (decrease) in				
working capital	\$(1,178,879)	(38,030)	20,568	



# NOTES TO FINANCIAL STATEMENTS December 31, 1984, 1983 and 1982

#### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers), a nonprofit electric generation and transmission cooperative association, supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis, presently excluding costs relating to the Wilson Generating Station, and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

Big Rivers utilizes the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers, as the primary source of borrowed funds.

The rate structure approved by KPSC provides for a base rate consisting of a demand charge and an energy charge. The rate structure also contains a fuel adjustment clause under which the energy charge is to be increased or decreased in each billing period to the extent that actual fuel costs and certain purchased power costs together, are greater or less than the base period costs included in the base rates. The application of the fuel adjustment clause is subject to semi-annual review by KPSC.

#### (b) System of Accounts

The accrual basis accounting policies follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Revenue Recognition

Revenues are based on month-end meter readings.

#### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for borrowed funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for borrowed funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Rates used to compute depreciation are as follows:

3%-3.30%
2.75%
2.75%
2%-20%
2.75%-3.50%

#### (e) Operating and Construction Funds

Operating and construction funds consist primarily of temporary investments in U.S. Government and Federal agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

#### (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at the lower of weighted average cost or market.

#### (g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

#### (h) Pension and Deferred Compensation Plans

Substantially all employees are covered under trusteed noncontributory and contributory retirement plans. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. All pension and deferred compensation costs accrued are funded annually. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (i) Income Taxes

Prior to 1983, Big Rivers was tax exempt under Section 501(c)(12) of the Internal Revenue Code which requires that at least 85% of gross income be from members. Nonmember income in 1983 exceeded the 15% allowable, therefore Big Rivers became a taxable cooperative. Big Rivers continued to be taxable in 1984. No provision for income taxes was recorded because of significant net operating losses for income tax reporting. In management's opinion, these tax operating losses will be available to offset future net margins for income tax reporting through the period of time that Big Rivers anticipates being a taxable cooperative.

(2) D. B. Wilson Generating Station

As a result of Power Requirements Studies (load forecasts) made in 1977 and supplemented by studies completed in 1979 and 1980, Big Rivers began in 1980 the construction of the D. B. Wilson Generating Station (Wilson Station) consisting of two 395 megawatt (net capacity) generating units (Wilson 1 and Wilson 2) at an estimated cost of \$1.1 billion to be financed by long-term debt borrowings guaranteed by the REA. Another Power Requirement Study was completed in 1981 which produced a significantly lower load forecast than the previous studies. Based on the new forecast, it became apparent that the Wilson 2 unit would not be needed by 1986 as previously planned and construction activity was delayed. At the same time, the status of Wilson 1 was reviewed and it was determined that the amount of money invested by that time and the added cost that would result in a delay made it more economic to continue construction.

At December 31, 1984, the costs incurred to date for Wilson 1, excluding inventories but including Wilson 1 and 2 related common area and transmission facilities, were approximately \$747 million and the estimated additional costs to be incurred prior to expected commercialization in 1985 were \$29 million, of which \$25 million represents additional capitalized interest.

In April 1984, a \$57.6 million rate increase request, including partial recovery of the fixed costs of Wilson 1, was filed with the KPSC. At the same time, the aluminum industry, which accounts for a significant portion of Big Rivers' sales, experienced another sharp decline in primary aluminum prices. As a result, inclusion of Wilson Station costs in Big Rivers' rates would yield non-competitive rates to the aluminum smelters (identified in note 9), jeopardizing their continued operation. In October 1984, Big Rivers withdrew its rate increase request. In November 1984, a \$16.7 million rate increase was filed which did not include the production and fixed costs associated with Wilson 1. Presently, the outcome of this rate increase request is unknown, however a decision is expected on or before May 7, 1985.

In November 1984, REA notified Big Rivers that further advances of funds under the loan commitments from REA would not be forthcoming unless and until evidence, satisfactory to REA, of the economic feasibility of Big Rivers was submitted. Big Rivers has filed suit requesting the United States District Court to order REA to approve the release of \$27.6 million previously requested by Big Rivers. Failing to receive these loan funds, Big Rivers used internally generated funds to pay the amounts due contractors for Wilson

Station and other construction projects. As a result, Big Rivers was unable to pay principal and interest payments due in November and December 1984 to REA and the Federal Financing Bank (FFB). REA, by letter dated January 3, 1985, citing continuing default and, pursuant to the loan agreement, demanded payment in full before January 17, 1985, of all outstanding debt and accrued interest (see note 5). The amount could not be paid and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. Big Rivers has filed an answer to this suit (see note 11). There has been no further court action relating to these suits.

REA has stated that the suit filed January 18, 1985 gives Big Rivers more time to study a merger with East Kentucky Power Cooperative (East Kentucky) proposed by REA in November 1984 as the resolution to Big Rivers' financial problems. Big Rivers and East Kentucky have approved a consultant to conduct a study of the feasibility of merger and to study other organizational alternatives. These studies are expected to be completed in June 1985. Based on preliminary results of these studies, Big Rivers' Board of Directors in their April 12, 1985 meeting approved consolidation, as permitted by Kentucky Statutes, with East Kentucky. If consolidation is approved by East Kentucky and the members of both cooperatives, the proposed consolidation shall be submitted to both the REA and KPSC for their approvals.

Due to the surplus capacity of Big Rivers upon completion of Wilson 1, construction of Wilson 2 has been cancelled. Costs incurred of \$27.8 million relating to Wilson 2, previously reflected as plant held for future use, have been reclassified as deferred charges in the 1984 financial statements.

Big Rivers' ability to recover Wilson 1 and 2 costs and meet its debt obligations is dependent upon the success of Big Rivers' ongoing efforts to sell the Wilson Station or a substantial portion of the capacity and energy available from Wilson 1, and restructure its debts. Big Rivers has consummated a contract for the sale of approximately 54 megawatts of capacity and associated energy from Wilson 1, and is actively pursuing additional power sales and prospective buyers for the plant. Big Rivers has proposed several financing alternatives to REA including a debt restructuring plan. Discussions with REA continue. If Big Rivers' efforts as outlined herein are not successful it will be difficult for Big Rivers to continue in existence.

(3) Utility Plant		
The following summarizes utility plant:		(In thousands
	1984	1983
Classified plant in service:		
Production plant	\$ 439,974	434,278
Transmission plant	39,686	26,118
Station equipment	42,296	33,428
General plant	11,431	10,853
Intangible	190	190
Unclassified plant in service	20	237
	533,597	505,104
Less accumulated depreciation	106,924	91,375
	426,673	413,729
Construction in progress	745,589	653,519
Plant held for future use (see note 4)	<u> </u>	26,669
	\$1,172,262	1,093,917

Construction in progress at December 31, 1984 consists primarily of costs associated with construction of a 395 megawatt (net capacity) generating unit (Wilson 1) and Wilson 1 and 2 related common area and transmission facilities. Wilson 1 and the related common area and transmission facilities are expected to be commercialized in May 1985 and to cost \$776 million.

Commitments with vendors at December 31, 1984 for all approved construction projects total \$3.5 million, primarily in connection with Wilson 1 and

the related common area and transmission facilities. Approximately \$37 million of construction costs are expected to be incurred in 1985, of which \$27 million represents interest to be capitalized.

The average rates used for the capitalization of interest during construction in 1984, 1983 and 1982 were 10.5%, 10.9% and 13.2%, respectively.

#### (4) Deferred Charges

Deferred charges consisted of the following:

(1	(In thousands)
1984	1983
\$ 4,318	4,461
88	1,152
862	1,641
11,415	_
27,834	_
209	1,873
\$44,726	9,127
	1984 \$ 4,318 88 862 11,415 27,834 209

In November 1982, Big Rivers elected to refinance \$90`million of FFB short-term mortgage notes with long-term notes at a lower interest rate. As a result of this election, a premium of \$4.6 million was required. The premium is being amortized over the term of the long-term mortgage notes.

Panama mine closing costs are being recovered through an energy surcharge granted by the KPSC. The costs are being amortized based on collection of the surcharge and will be fully recovered in 1985.

On June 1, 1984, an agreement with Cravat Coal Company, which reduced their delivered price of coal by approximately \$11 per ton, was consummated. Under the terms of the agreement, \$12.5 million was paid to Cravat, which is being amortized based on coal deliveries over the remaining life of the contract and recovered through the fuel adjustment clause as approved by the KPSC.

As discussed in note 2, construction of the Wilson 2 unit has been cancelled. These costs, which were previously reflected as plant held for future use, have been reclassified as a deferred charge. Recovery of these costs depends on the favorable outcome of Big Rivers' efforts, as discussed in note 2, to resolve its financial problems.

#### (5) Long-term Liabilities

A summary of long-term liabilities follows:		(In thousands
	1984	1983
Rural Electrification Administration (REA) - 2% and 5% mortgage notes		
payable, maturing from April 1998 through April 2014	\$ 94,893	98,372
Federal Financing Bank (FFB) - 7.51% to 13.20% mortgage notes payable,		
maturing March 1985 through December 2018	951,996	833,742
County of Ohio, Kentucky, 7.25%, \$82.5 million promissory note, due		,
November 1985 (less unamortized discount)	82,385	82,248
County of Ohio, Kentucky, promissory note, with variable interest rate, currently	,	,
5.01%, maturing June 2013	58,800	58,800
Obligation due to Jackson Purchase Electric Cooperative Corporation	2,983	_
Louisville Bank for Cooperatives (LBC) - mortgage note with variable interest	,	
rate, currently 12.25%, maturing February 1985	380	2,547
Obligation under purchased power contract (see note 7)	31,100	32,800
Other sundry borrowings	63	84
Total long-term liabilities	1,222,600	1,108,593
Less current maturities	1,193,258	7,833
	\$ 29,342	1,100,760

As discussed in note 2, Big Rivers has defaulted on loans from REA and on loans guaranteed by REA, and pursuant to certain loan agreements, all outstanding principal and accrued interest is now payable and such principal amounts are reflected as current maturities.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. In June 1983, the County of Ohio, Kentucky issued \$58.8 million of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. The funds are held by a trustee until required for construction of pollution control equipment. The unused portion of the borrowed funds is reflected in construction funds. The acceleration of debt by REA (see note 2) triggered action by the creditor holding the \$58.8

million of Pollution Control Demand Bonds to exercise its option to put the bonds on January 16, 1985. The trustee as a remarketing agent was able to remarket the bonds on January 17, 1985. The weekly interest rate was set at 75 percent (previously 62.5 percent) of the coupon equivalent rate for 13-week United States Treasury Bills.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

In January 1984, pursuant to an agreement dated October 14, 1977, Big Rivers purchased certain transmission facilities aggregating \$2.9 million from the Jackson Purchase Electric Cooperative Corporation. Pending REA approval, Big Rivers intends to assume the loan with REA pertaining to these assets.

#### (6) Matured Debt and Interest

As discussed in note 2, Big Rivers defaulted on principal and interest payments due REA for REA insured loans and due the FFB for REA guaranteed loans. The amount of the default plus interest is shown as matured debt and interest. REA, under its guarantee agreement with FFB, paid the

amounts due FFB that were due from Big Rivers, but were not paid by Big Rivers. This amount, plus interest, is billed to Big Rivers. The interest is computed at the same rate or rates as on the related FFB advance or advances.

#### (7) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 85% which is expected to decrease to 84% by 1989. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire

the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1984, 1983 and 1982 was approximately \$35.5, \$34.8 and \$27.8 million, respectively. Such costs are treated in the rate-making process as power purchased and interchanged, net.

#### (8) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$1,069, \$880 and \$759 thousand in 1984, 1983 and 1982, respectively. The

accumulated plan benefits and net assets as of the most recent actuarial valuation date available are as follows:

		(In thousands)
	Janu	ary 1
	1984	1983
Actuarial present value of accumulated plan benefits:		
Vested	\$2,810	2,107
Nonvested	140	111
	\$2,950	2,218
Net assets available for benefits, at approximate market value	\$5,304	3,909

The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 6% in 1984 and 1983.

Operating revenues were as follows:			(In thousands
	1984	1983	1982
Members:			
Green River Electric Corporation	\$112,063	111,265	106,689
Henderson-Union Rural Electric	, ,	,	,
Cooperative Corporation	84,933	77,219	78,986
Jackson Purchase Electric	,	,	,
Cooperative Corporation	12,399	14,292	13,162
Meade County Rural Electric	,	, ,	-, -
Cooperative Corporation	7,040	7,164	6,811
Nonmembers	48,269	48,337	27,068
	264,704	258,277	232,716

\$258,020

Sales resulting from power generated from Wilson 1 during the construction period have been credited to construction in progress.

National-Southwire Aluminum Company and Atlantic Richfield Company (formerly Anaconda Aluminum) purchased substantial amounts of electric

energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Corporation and Henderson-Union Rural Electric Cooperative Corporation for Atlantic Richfield Company) were as follows:

258,277

(In thousands)

232,716

			(,=== =================================
	Green River	Henderson-Union	Combined
1984	\$83,252	71,081	154,333
1983	\$82,352	63,436	145,788
1982	\$79,846	65,748	145,594

In 1983, Big Rivers provided the power needs of Jackson Purchase Electric Cooperative Corporation through purchase power sources. In January 1984,

Jackson Purchase became an average system cost member and began using power generated in the Big Rivers' system.

#### (10) Write-off of Leverage Lease Costs

Sales credited to construction

In 1984, Big Rivers aborted a leverage lease financing proposal of the Wilson 1 unit due to the difficulties described in note 2. The costs incurred

with regard to the abandoned leverage lease transaction have been charged to margins in 1984.

#### (11) Litigation

As discussed in note 2, REA has filed suit against Big Rivers alleging that Big Rivers has defaulted on its notes and seeks judgment in the amount of \$1,047,990,623 in principal and \$25,856,352 accrued interest. The complaint also seeks a foreclosure and sale of the collateral, which is essentially all of the assets. An answer to this suit has been filed alleging that conduct on the part of the government caused Big Rivers' inability to make the note payments. Since this matter is in such an early stage of litigation, legal counsel

is unable to evaluate the likelihood of an unfavorable outcome or to estimate the amount or range of potential loss.

In addition to the aforementioned, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of these legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

# ACCOUNTANTS' REPORT

Peat, Marwick, Mitchell & Co. Certified Public Accountants The Fifth Avenue Building 444 South Fifth Street Louisville, Kentucky 40202

The Board of Directors Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1984 and 1983 and the related statements of revenues and expenses, equities and changes in financial position for each of the years in the three year period ended December 31, 1984. Our examinations were 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.

As discussed more fully in note 2, Big Rivers Electric Corporation (Big Rivers) has \$774.8 million invested in two generating units at the D. B. Wilson Generating Station (\$747 million in Wilson 1 and \$27.8 million in Wilson 2). The \$774.8 million represents over 58% of total assets. At December 31, 1984, Big Rivers was in the process of commercializing Wilson 1 which will generate surplus power. Due to the surplus power of Wilson 1, further construction of Wilson 2 has been cancelled. In April 1984, a rate increase request was filed with the Kentucky Public Service Commission which included partial recovery of the fixed costs of Wilson 1. However, due to the adverse economic impact on two major industrial customers of its member cooperatives, the rate increase request was withdrawn. Costs relating to the D. B. Wilson Generating Station are not included in the current request for a rate increase. In November 1984, the Rural Electrification Administration (REA) notified Big Rivers that it would not make any further advances under the loan commitment relating to the construction costs of the D. B. Wilson Generating Station. Subsequently, Big Rivers defaulted on REA loans and on January 18, 1985, REA filed a foreclosure suit against Big Rivers. REA has also proposed a merger with another cooperative and a study to determine the feasibility of such a merger is currently in process. On April 12, 1985, Big Rivers' Board of Directors, based on preliminary results of the study, approved a consolidation. This consolidation is subject to approval of the consolidation partner, as well as approval of member cooperatives, followed

by the approval of REA and the Kentucky Public Service Commission. If a satisfactory consolidation plan is not consummated, Big Rivers' ability to recover the costs of the D. B. Wilson Generating Station and meet its future debt obligations is dependent upon obtaining power sales contracts for the surplus power or selling the D. B. Wilson Generating Station, restructuring debt obligations, and obtaining necessary rate increases. If the aforementioned is not accomplished, it will be difficult for Big Rivers to continue in existence. The accompanying financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary should Big Rivers be unable to continue in existence.

Big Rivers has elected to carry the \$27.8 million of costs relating to Wilson 2, which has been cancelled, as a deferred charge. Management's position is that it is the intention to recover these costs in future rates, through sales of excess power or sale of the D. B. Wilson Generating Station; however, generally accepted accounting principles require that such costs be charged to operations.

In our opinion, except for the \$27.8 million of cost relating to Wilson 2, which should be a current charge to operations, and subject to the effect on the 1984 financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classification of liabilities referred to in the second preceding paragraph been known, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1984 and 1983 and the results of its operations and the changes in its financial position for each of the years in the three year period ended December 31, 1984, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT, MARWICK, MITCHELL & CO.

February 8, 1985, except as to note 2, which is as of April 12, 1985



# COMPARATIVE STATISTICAL ANALYSIS —

	1984	1983	1982	1981
Operating Revenue Expenses:	\$ 258,019,579	258,276,967	232,716,033	240,476,418
Operation and Maintenance Purchased Power and	143,358,327	136,539,322	124,675,180	120,266,830
Interchanged, Net	47,494,014	55,494,464	46,342,616	58,848,412
Depreciation and Amortization	18,533,362	17,782,446	17,548,448	17,073,065
Taxes	2,269,307	2,202,576	1,970,317	1,817,332
Interest	39,747,343	38,198,269	40,467,426	37,092,495
Other	150,834	136,778	149,400	92,954
Total	251,553,187	250,353,855	231,153,387	235,191,088
Operating Margin (Loss)	6,466,392	7,923,112	1,562,646	5,285,330
Nonoperating Margin (Loss)	(1,726,877)	994,948	1,968,247	1,677,561
Net Margin (Loss)	\$ 4,739,515	8,918,060	3,530,893	6,962,891
Utility Plant at Cost	\$ 533,597,067	531,772,691	495,105,598	483,371,934
Construction Work in Progress	745,589,266	653,519,304	451,265,803	173,576,481
Total Electric Plant	1,279,186,333	1,185,291,995	946,371,401	656,948,415
Less Accumulated Depreciation	106,923,761	91,374,775	74,720,991	58,643,004
Utility Plant Net	\$1,172,262,572	1,093,917,220	871,650,410	598,305,411
Total Assets	\$1,332,830,420	1,225,799,340	1,029,256,522	708,233,625
Member Maximum				
Demand — MW	1,027	952	947	956
Installed Generating				
Capacity — Gross	1,153	1,153	1,153	1,153
Purchased Power — HMP&L				
Station Two	268	270	253	253
Purchased Standby Power	190	100	100	100
KWh—Millions—	<b>5</b> 000 55	0.510.40	0.400.00	E 400 E0
Sales to Members	7,390.75	6,719.42	6,420.88	7,482.78
Sales to Non-Members	2,075.96	2,098.82	1,106.37	1,455.27
Generated Purchased	6,876.37	6,474.14	5,848.11	6,164.23
HMP&L Station Two	1 000 00	1 794 04	1 107 10	1 000 07
Other	1,882.22 $666.72$	1,724.84 $790.65$	$\begin{array}{c} 1,127.18 \\ 681.21 \end{array}$	1,822.87
System Load Factor — %	84.1	790.65 78.4	74.8	1,097.02 87.1
Employees at Year-End	835	794	680	667

# TEN YEAR SUMMARY

1980	1979	1978	1977	1976	1975	
179,429,591	124,077,992	117,873,040	87,745,285	60,926,026	51,532,866	
91,232,809	53,217,700	52,753,054	43,278,427	33,055,570	24,107,293	
52,947,305 11,516,775 1,441,297 18,528,992	52,238,507 5,976,160 780,799 4,988,213	49,559,041 5,111,273 712,919 3,808,979	32,249,409 4,444,813 631,557 3,206,173	29,012,642 3,274,979 565,273 2,611,967	22,266,033 3,011,521 564,348 2,188,085	
56,197	23,017	25,940	5,290	31,733	35,950	
$\begin{array}{r} 175,723,375 \\ \hline 3,706,216 \\ 1,080,410 \\ \hline 4,786,626 \end{array}$	117,224,396 6,853,596 1,219,271 8,072,867	111,971,206 5,901,834 620,969 6,522,803	83,815,669 3,929,616 144,720 4,074,336	68,552,164 (7,626,138) (171,552) (7,797,690)	52,173,230 (640,364) (48,483) (688,847)	
313,289,264 186,458,271 499,747,535	283,281,046 125,427,944 408,708,990	130,333,952 157,127,012 287,460,964	124,665,252 57,229,121 181,894,373	122,471,149 12,343,345 134,814,494	112,031,490 10,734,956 122,766,446	
42,843,216 456,904,319	32,900,415 375,808,575	28,361,983 259,098,981	24,534,449 157,359,924	21,008,189 113,806,305	17,766,620 104,999,826	
560,828,507	480,817,488	374,646,226	226,712,745	174,716,621	120,326,021	
943	910	819	820	790	748	
911	911	669	669	669	669	
256 100	255 100	262 100	262 100	267 100	271 100	
7,529.34 475.36 5,187.78	7,029.28 58.50 3,911.05	6,526.85 79.39 3,678.16	6,189.32 59.54 3,711.16	5,920.81 3.87 3,215.64	5,703.45 129.17 3,644.96	
1,989.04 966.38 88.1 622	1,931.09 1,387.12 85.3 555	1,805.31 1,253.09 87.5 488	1,855.88 814.89 87.7 401	1,736.04 1,092.25 87.3 346	1,675.03 614.44 88.9 246	



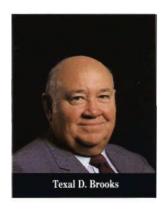
# CORPORATE DIRECTORY

# **BIG RIVERS**

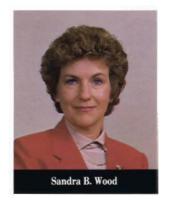
Standing, left to right: W. H. Thorpe; C. G. Truitt; John Burnett; Stanley Jones; Edwin Reid; Edward F. Johnson; Harvey Sanders; Edward Delker; J. D. Cooper; Paul A. Schmitz

Seated, left to right: Morton Henshaw; Texal Brooks; William Briscoe; William Seaton





Texal D. Brooks, Vice President of the Big Rivers Board of Directors, died on December 7 following an apparent heart attack. He served on our board as a representative of Green River Electric Corporation since 1972. For the past nine years, Texal had served as chairman of the Green River Board of which he was a member for 21 years. In addition to the rural electric cooperative program, he contributed his time, energy and talents to the betterment of agriculture, regional planning and economic development, health care and his community.



Sandra B. Wood was elected December 14 to fill Green River Electric Corporation's vacancy on the Big Rivers' Board of Directors created by the death of Texal Brooks. Mrs. Wood, a former school teacher and nutritional consultant, serves as a director on the Kentucky Tobacco Research Board. She is assistant manager of Green Valley Farm Supply in Calhoun. She has been on Green River's board since May 1980.

**OFFICERS** 

Morton Henshaw President

Texal Brooks Vice President

William B. Briscoe Secretary-Treasurer

William E. Seaton Assistant Secretary-Treasurer

GENERAL MANAGER W. H. Thorpe

ASSISTANT GENERAL MANAGER Paul A. Schmitz VICE GENERAL MANAGERS

Robert F. Burkard Energy Supply

Ronald G. Hollander Finance

Ronald W. Johnson Corporate Services and Labor Relations

Floyd L. Mitchell Production/Construction

B. Scott Reed Engineering and Transmission

W. Hayden Timmons Environmental and Public Affairs **MANAGERS** 

Don E. Augenstein Corporate Services

Gregory F. Black Environmental Affairs

Joe L. Craig Fuels

J. E. Dolezal Energy Control

James V. Haner Accounting

Don C. Mann Purchasing

Tom Millay Personnel

Earl A. Millspaugh Operations and Maintenance

James H. McIllwain Construction

David E. Schultz System Planning and Design Engineering

Phil Waggoner Electronic Data Processing

**SUPERINTENDENTS** 

Richard Greenwell Reid/Green Plant

Virgil Mitchell Transmission

Steve Moss Wilson Plant

Barry Wood Coleman Plant

CORPORATE ATTORNEY

Morton Holbrook General Counsel Holbrook, Gary Wible & Sullivan, P.S.C. Owensboro, Kentucky

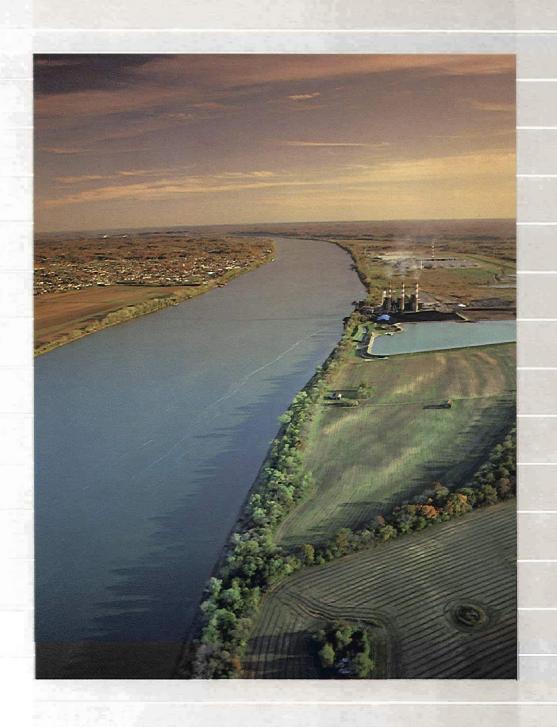
CORPORATE AUDITORS

Peat, Marwick, Mitchell & Co. Louisville, Kentucky

# BIG RIVERS ELECTRIC CORPORATION

Post Office Box 24 201 Third Street Henderson, Kentucky 42420 (502) 827-2561

# ELECTRIC CORPORATION



1 9 8 3 ANNUAL REPORT

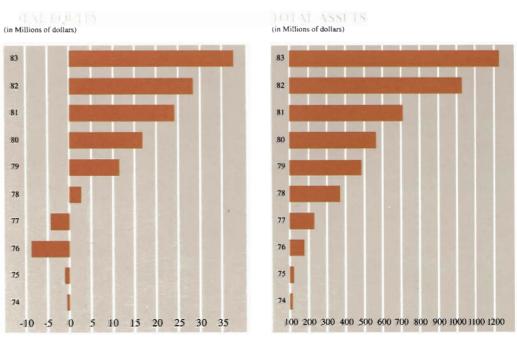
# BIG RIVERS ELECTRIC CORPORATION

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# FINANCIAL HIGHLIGHTS

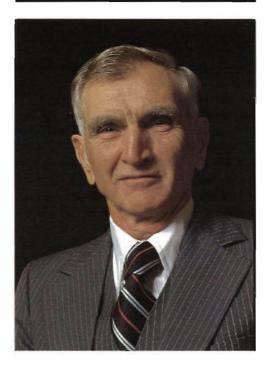
		1983	1982	Increase (Decrease)	% Increase (Decrease)
Dollars in Thousands)	Operating Revenues	258,277	232,716	25,561	11.0
	Operating Expenses	212,019	190,537	21,482	11.3
	Net Margins	8,918	3,531	5,387	152.6
	Construction Expenditures	239,342	290,082	(50,740)	(17.5)
	Energy Sales (Megawatt Hours) A. To Members	o: 6,719,419	6,420,879	298,540	4.6
	B. Intersystem	2,098,823	1,106,369	992,454	89.7
	System Peak Demand in Megawatts	952	947	5	.5
	Cost of Fuel Used in Generation	99,585	91,185	8,400	9.2
	Assets	1,225,799	1,029,257	196,542	19.1
	Accumulated Margins and Equi	ty 37,749	28,338	9,411	33.2
	Employees Full Time	794	680	114	16.8
	Revenue Per kWh Sold (Mills)	29.28	30.91	(1.63)	(5.3)



# PRESIDENT'S MESSAGE

Outside circumstances significantly affected Big Rivers Electric Corporation's operations this past year. The weather in 1983 had a negative influence on many of the 70,000 consumers who receive electricity from one of Big Rivers' four distribution members. A severe ice storm in January played havoc with utility poles and lines throughout all of Western Kentucky. Farmers suffered from spring floods, a record-setting summer heat wave and drought. During July and August record amounts of electricity were used by cooperatives' members in trying to maintain comfort. Had our industrial loads not been reduced due to the economy, Big Rivers would have set a new coincidental peak.

In addition to solving operational problems and meeting today's needs, we must prepare for future demands. It is natural to think ahead to next year when the D. B. Wilson Plant in Ohio County comes on line, but we should not overlook the impact it already has had on Western Kentucky's economy. The construction of the coal-fired generating plant has provided hundreds of men and women with jobs at a time when many were out of work. Coal supplied to the new plant from Hopkins County also means more jobs for West Kentuckians. Ohio County's tax base will increase markedly, and operating the plant will require about 151 full-time employees.



We reported last year on studies being made to determine the feasibility of hydroelectric generating facilities at the Smithland, Uniontown and Newburgh Dams on the Ohio River. Early in 1983, these studies indicated that it was not economically feasible for us to proceed with the projects. As a result, Big Rivers withdrew its application for a license to develop the Smithland Dam and also withdrew applications for preliminary permits on the Newburgh and Uniontown Dams.

As the year closed, we looked to January 1, 1984, when Jackson Purchase Electric Cooperative Corporation (JPECC) begins using power generated in the Big Rivers' system. Although the long-term power contract between Big Rivers and JPECC was signed in 1977, that distribution cooperative continues to receive its power from Kentucky Utilities until the cutover is completed.

An all-requirements contract assures Jackson Purchase consumer-members all the power they need, whenever they need it, through 2022. Right now that results in approximately 100 megawatts added to our load.

Jackson Purchase serves nearly 19,000 consumer-members in McCracken, Livingston, Ballard, Carlisle, Marshall and Graves counties.

The General Manager and others will bring you up-to-date about the year's operations in their individual reports.

Morton Henshaw

Morton Henshaw President

# GENERAL MANAGER'S MESSAGE

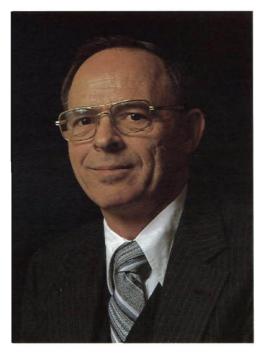
What began as a bleak outlook for the Corporation ended with the best financial year in Big Rivers' history. In part, the turnaround was due to the overall improvement in the national economy — lower interest rates, increased housing and industries cranking up to normal production levels. But the major impact on our Corporation's success was \$48.3 million in sales of electricity to utilities outside our own system.

This feat was no accident, quite the contrary. We consciously put together a sales team and actively marketed our competitively priced power to utilities in eight states. While we sought and acquired long-term contracts, we also actively sought to secure short-term and hour-by-hour sales of power.

Not only did this give us a banner year, more importantly it enabled us to operate without seeking a wholesale rate increase. We have not had a rate increase since January 1981 and will not have one until the D. B. Wilson Plant is commercialized in late 1984. We think that is a good, solid record attained during a miserable economy.

We have an excellent management team, a capable workforce and a progressive Board of Directors. These create the makings of an efficient generation and transmission cooperative (G&T), one always working to keep our rates competitive while providing reliable electric power.

We had many bright spots throughout the year which will be covered in departmental reports. As the General Manager, I feel it my duty to talk briefly about some of the concerns we faced. One that continues into 1984 is the time-consuming task of tracking environmental legislative proposals at both state and federal levels. Both federal Clean Air and Clean Water Acts are slated to be amended in 1984. Revisions also are proposed for Kentucky's water quality and solid waste laws.



Numerous bills are before Congress relating to acid deposition. And what we consider to be an emotional, knee-jerk means of tackling acid deposition troubles us. It worries us because many of the proposals would mean a sizeable increase in our consumer-members' electric bill without any guaranteed improvement in solving the problem. Big Rivers continues to favor accelerated scientific study and then action. We oppose punitive legislative action based on insufficient data.

The Kentucky Public Service Commission (PSC) ordered a study of electric utilities' power planning and alternative load forecasting methods. The PSC hired Energy Systems Research Group (E.S.R.G.), Boston, to conduct the study. To date, E.S.R.G. has drafted a series of reports and a summary. The PSC and the utilities participating in the study have reviewed two of the studies.

The \$720 million cost of bringing a new coal-fired, 395-megawatt (MW) power plant on line will necessitate a wholesale rate increase during 1984. Just as we worked hard readying the Wilson Plant for commercialization late next year, we worked just as diligently in not having a rate increase this year. And we were successful.

We continued streamlining, encouraging increased productivity, altering fuel contracts, making changes to keep the cost of the new plant down, renegotiating financing for pollution control bonds and marketing electricity outside our system whenever possible. These actions, and others, kept us financially sound during a year which was beginning to recover from a nationwide economic crisis.

Big Rivers was established in the early 1960s to provide West Kentuckians with a dependable source of electricity at a reasonable cost. Looking to 1984 and beyond, the Wilson Plant will help us continue providing our four member distribution co-ops with all the electricity their member-owners demand, and our rates will continue to be competitive.

Our employees deserve special recognition for their dedication and increased productivity. We commend them.

W. H. Thorpe General Manager Big Rivers experienced significant financial changes in 1983, the best financial year in the Corporation's history, realizing margins of \$8.9 million.

The refinancing of \$90 million of Federal Financing Bank notes in November 1982, and the overall improvement in interest rates in 1983, combined to decrease Big River's total net interest expense by \$2.3 million.

The Production Department's continued reduction in the use of outside contractors, the general slowing of inflation, and increased employee productivity enabled Big Rivers to lower certain operating and maintenance expense.

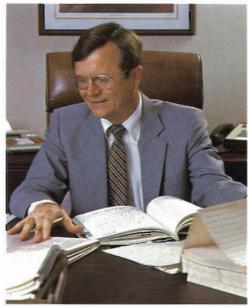
More sales increased our need for coal, and Big Rivers was able to purchase coal at considerable savings. This savings of approximately \$5.2 million in fuel costs was passed on directly to the members through the Fuel Adjustment Clause (FAC) in Big Rivers' tariff.

The Internal Revenue Service code requires that Big Rivers receive at least 85 percent of its gross income from members in order to be exempt from federal taxation of income.

As a result of the substantial sales of electricity to non-members, Big Rivers did not qualify for exemption from federal and state income taxes for 1983. It is expected that no income taxes will be owed.

On March 25, Big Rivers refinanced \$61 million of Pollution Control Revenue Bonds with Federal Financing Bank notes. The bonds were issued by the County of Webster, Kentucky, and the proceeds loaned to Big Rivers for financing pollution control equipment at the Robert D. Green Plant. Use of the tax-exempt borrowings saved \$9.5 million in interest costs over their six-year life.

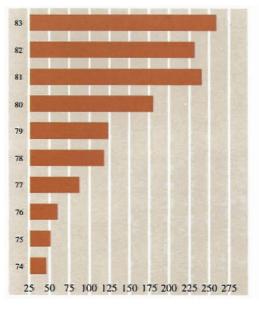
The Corporation completed financing of pollution control equipment at the D. B. Wilson Plant with the sale on June 30, 1983, of \$58.8 million of tax-exempt Pollution Control Floating Rate 30-Year Demand Bonds. The interest rate will be set each week at 62.5 percent of the coupon equivalent rate for 13-week United States Treasury Bills. The rate was 6.15 percent on the day of sale. Irving Trust Company of New York provided an irrevocable stand-by letter of credit, which expires October 1, 1987. The Series 1983 issue was given an Aa1 rating by Moody's Investors Services.



Reguld G. Hollander



(in Millions of dollars)



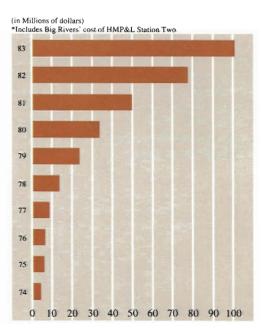
A financing team was assembled late this year to pursue a transaction that will sell and then lease back Wilson Unit No. 1. Essentially, a lessor would purchase Unit No. 1 from Big Rivers, and Big Rivers would in turn lease it back for a period of approximately 35 years. If this is successful, it will substantially reduce the rate request that will be necessary when that unit is brought on line in late 1984.

Conversion of the IBM System 38 computer is scheduled for completion in 1984 and will provide a completely integrated data base from which more timely financial and operational data can be obtained.

During the year Big Rivers expanded its Electronic Data Processing operations by training skilled individuals to provide maintenance to these critical process computer systems to assure reliability in energy control and power production.

Purchasing, in a joint effort with the Production Department, instituted a program to codify spare parts at Wilson. By purchasing the parts from the original manufacturer instead of buying them from a third party supplier, substantial savings have been realized.

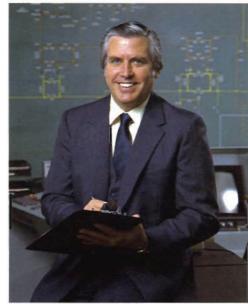
The Accounting Department is responsible for the General, Plant and Payroll Accounting Systems as well as the corporate budgets. It incorporated all of the above functions into the design of the System 38 to develop a comprehensive data base on which to base financial planning decisions.



The depressed economy which prevailed in 1983 presented both a problem and an unusual opportunity to Big Rivers. The problem being that industrial capacity was reduced, namely the two largest industries in our service area were operating at only two-thirds capacity early in the year. The opportunity was to market reserve and unused capacity to other utilities.

In spite of the fact that the recession depressed sales, Big Rivers was successful in selling power to other utilities as far north as the Great Lakes and as far south as the Gulf of Mexico These sales totalled \$48.3 million, and were a major factor in keeping Big Rivers from needing a rate increase this year. The Corporation continues to aggressively pursue innovative price structuring and intensive marketing to maximize utilization of generation and transmission capacity.

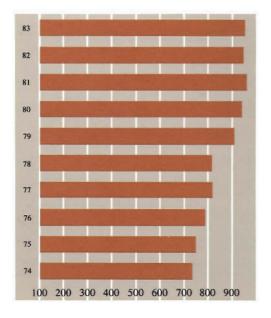
These sales also resulted in improved operating efficiency of the generating units evident by the fact that the average capacity factor of our generating units with intersystem sales was 75.3%, while without these sales it would only have been 57.7%. Intensive efforts continue to sell any excess capacity either as firm power or partial ownership in the Wilson unit.

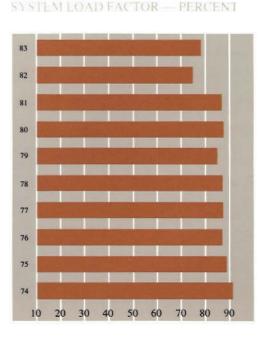


Big Rivers' interconnections with Henderson Municipal Power and Light, Southern Illinois Power Cooperative, East Kentucky Power Cooperative. Louisville Gas and Electric Company, Southern Indiana Gas and Electric Company, Kentucky Utilities Company and Hoosier Energy Division of Indiana Statewide REC, Inc. were extremely valuable in this effort. The Corporation has contracts with the Tennessee Valley Authority (TVA) for the sale of short-term power and surplus energy. In addition, we have a contract with TVA for wheeling power through their system.

On December 24, 1983, at 11:00 p.m., the 1983 system coincidental peak was 952 MW which compares to the previous system peak of 956 MW in 1981. This was not our all-time system peak due to the economic recession on some of our industries.

All necessary communications equipment for the five new substations erected by Engineering and Transmission was installed for relaying, telemetry, supervisory control and data acquisition (SCADA), and telephone. The communications department also completed installation of a two-way radio system required to extend communications coverage to the D. B. Wilson Plant and Jackson Purchase ECC. Finally, telephone systems were installed at the Wilson Plant and the new Central Laboratory.





# PRODUCTION AND CONSTRUCTION

The Production Department shattered the previous generating record. During 1983 our net generation delivered to the system (including Big Rivers' share of Henderson Municipal Power and Light Station Two generation) was 8,198,978,300 kilowatt-hours (kWh), up 211,879,600 kWh from 1981's record of 7,987,098,700 kWh.

The average cost per kWh generated was 25.63 mills which was down 9.2 percent from the 1982 cost of 28.23. This reduction was contrary to the established trend of continued increasing cost of generation.

In addition to generating record amounts of energy, we continued to concentrate on efficiency of operations, maintenance of cost control and increased unit availability. The chart below demonstrates success.



	Nameplate	Poun		Availa	alent ability		e Rate	Out Fac	tor
	Rating	Coal Pe	rKWH	9	6	9	6	9	6
Unit	MW	1982	1983	1982	1983	1982	1983	1982	1983
Reid Plant near Sebree, Kentucky Reid Unit 1	81.600	.9767	.9684	95.4	96.1	5.37	0.89	57.5	73.9
Coleman Plant near Hawesville, Kentucky									
Coleman Unit I	174.250	.8889	.8837	90.8	94.0	1.77	3.31	82.1	86.7
Coleman Unit 2	174.250	.8816	.8813	92.1	96.1	1.48	0.47	82.9	90.4
Coleman Unit 3	172.800	.8672	.8515	94.5	97.1	5.03	3.80	77.9	85.6
Green Plant near									
Sebree, Kentucky									
Green Unit 1	242.105	.9126	.9275	99.4	99.8	1.09	0.59	81.7	86.0
Green Unit 2	242.133	.9489	.9417	99.9	99.6	1.39	1.13	85.7	88.6
HMP&L Station Two near Sebree, Kentucky									
Unit 1	175.984	.8725	.8544	98.6	97.1	2.28	1.62	86.9	87.4
Unit 2	178.000	.8812	.8412	96.7	92.1	1.72	1.51	81.0	80.8





The addition of a performance engineer at each plant has made possible the establishment of testing procedures and periodic testing to evaluate the performance of each turbine, boiler, air heater and other components. Not only do these tests reveal equipment performance, but they also assist in scheduling maintenance.

Big Rivers' staff completed the development of the maintenance management system and implemented such on a limited basis. This system permits us to plan in detail the man-hour requirements and parts necessary to repair and maintain each component of our power plants. This system along with the IBM 38 has improved our overall approach to maintenance scheduling, inventory control, maintenance management, equipment history, preventive maintenance and the work order system. The net result is a more efficient use of time, tools and personnel. To date the result has been very gratifying.

The Central Machine Shop and the expertise of the machinists provide high quality, timely repair service. Continued cost and time savings have justified expansion of the Central Machine Shop.

A new Central Laboratory was constructed to provide us the ability to make our own analysis of coal and environmental samples. Full utilization of this facility is expected during 1984.

The Wilson Plant is on a 2,300-acre site along the Green River near Matanzas in Ohio County. It is scrubber-equipped to burn local, high-sulfur coal and to meet environmental standards. With the addition of this unit we expect to meet our projected load requirements well into the 1990s. The unit is scheduled for synchronization in the late spring of 1984 and is 92% complete at year end.

Staffing of the Wilson Plant for operation began during the year. To fill the 151 positions, we are transferring several experienced employees from our existing plants and advertised through the local news media our intention to employ additional personnel to fully staff the Wilson Plant and to fill vacant positions at the other plants. The results were overwhelming: Big Rivers' Personnel Department accepted more than 5,000 applications in a two-week period. The Wilson employees are in training and start-up operations.

For the first time, Big Rivers' cost of coal per million British Thermal Units (BTU) decreased from the previous year. The average cost of coal used in generation of electricity was \$ 30.38 per ton, or 138.4¢ per million BTU, compared to \$30.68 per ton, or 143.3¢ per million BTU in 1982. This lower cost was largely due to:

- a. Arrangements made with long-term contract suppliers for the Reid and Coleman Plants to supply part of the tonnage as high-sulfur coal for the Green Plant at reduced prices. A total of 292,343 tons were supplied at costs averaging \$5.97 per ton lower than the average cost under the regular prices for those contracts, a savings of approximately \$1.7 million.
- b. Short-term purchases at depressed spot market prices, supplementing the quantities of coal Big Rivers was obligated to purchase under its long-term contracts. These purchases totalled 463,930 tons, averaging \$7.51 per ton lower than the average cost under the regular long-term contract prices, saving approximately \$3.5 million.
- c. Substantial decrease in rate of inflation, resulting in relatively little escalation of long-term contract prices.

These savings were passed directly on to the consumer-owners of Big Rivers' BREC

member cooperatives through the Fuel Adjustment Clause (FAC).

Big Rivers burned 4.02 million tons of coal during 1983 to produce electricity, up from 3.46 million tons in 1982. Approximately 88% of the tonnage received was purchased under long-term contracts of five years or more. The largest receipts were from MAPCO's mines in Western Kentucky, including one million tons from MAPCO's Retiki Mine for use in the Green Plant, which is equipped with scrubbers to use this high-sulfur coal, and 210,000 tons of lower-sulfur coal from MAPCO's Dotiki Mine for use in the Reid Plant. Other supplies came from Indiana and Ohio as well as our own state.

The Green River No. 9 Mine, constructed by Green River Coal Co., Inc., near Madisonville, was essentially complete at the end of the year. This new underground mine will be the primary



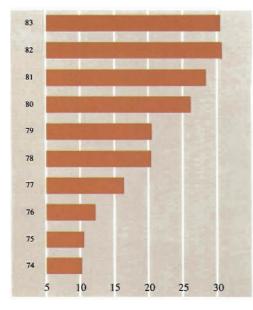
source of coal for the Wilson Plant which is equipped with limestone scrubbers, allowing use of high-sulfur coal. Big Rivers entered into two additional contracts during the year for supply of coal to the Wilson Plant, supplementing the long-term contract. These are a 20-year contract with Diamond J. Coal Co. and a two-year contract with Green River Coal Co., Inc., both at prices reflecting the current coal market conditions.

Big Rivers purchased 55 rail cars necessary for unit-train transportation of the coal to the Wilson Plant.

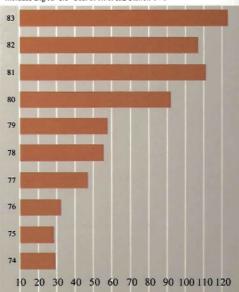
Big Rivers reached an agreement with Cravat Coal Company of Cadiz, Ohio to reduce the delivered cost of coal and to change the source from Ohio and Eastern Kentucky to Western Kentucky. Upon the receipt of appropriate regulatory approval, Big Rivers will pay Cravat \$12.5 million, and the delivered cost to our plants will be reduced by approximately \$11 per ton. We project a net savings of \$37 million will be realized by our consumers through the FAC over the remaining eight-year life of the contract.

Under Kentucky regulation, the FAC increases or decreases are rolled into the base energy rate once every two years and the FAC is set at zero. On July 7, an order was issued approving an increase in the fuel component of the base energy rate from 13.57 mills to 15.56 mills per kWh.

\*Cost Per Ton Burned



(in Millions of dollars)
\*Includes Big Rivers' Cost of HMP&L Station Two



# ENGINEERING AND TRANSMISSION

The year 1983 was one of the most productive years in the history of the Engineering and Transmission Departments. In terms of the dollar cost of new construction, more funds were invested in transmission and substation facilities during 1983 than in the previous 17 years combined.

The project involving direct participation of the largest number of our own employees was construction to serve the Jackson Purchase system. To begin providing service to our newest member system by January 1984, construction of two major 161/69 kilovolt (kV) stepdown substations, 39 miles of 161 kV transmission line, and 64 miles of 69 kV transmission line had to be completed during this year. We completed right-of-way procurement, surveying and design work, and construction contract





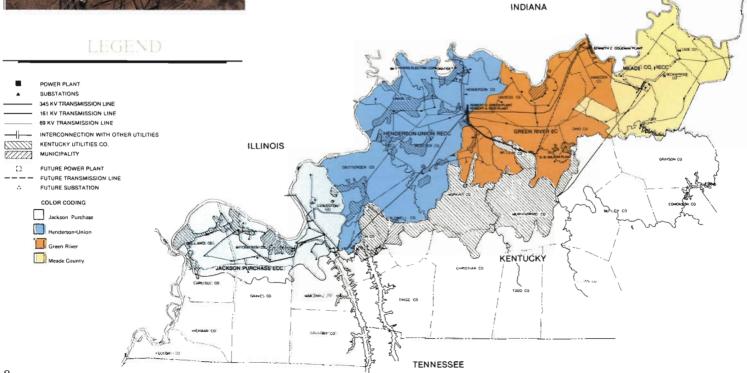
B. Scott Res

preparation in 1982. During 1983, construction inspection and contract administration were carried out by Big Rivers' employees, as well as check-out of substation relaying and control schemes prior to energizing. A system cutover procedure was developed and coordinated with Kentucky Utilities (KU) to provide for an orderly and timely transfer of load from the KU system to Big Rivers' system.

The largest project in terms of construction cost was the Wilson Plant transmission system. To integrate the new plant with the existing transmission system, 68 miles of 345 kV transmission line, eight short sections of 161 kV line, two large 345/161 kV substations, and the Wilson Plant 345/161 kV switchyard were needed. In August 1983, Big Rivers passed another milestone by energizing its first 345 kV transmission line and substations at the Reid and Wilson plants, thereby providing high-voltage power to the Wilson site for plant system check-out and start-up.

Associated with both the Wilson and Jackson Purchase projects were field assembly and oil filling of eight large power transformers and 28 circuit breakers, involving the filtering and pumping of about 350,000 gallons of insulating oil by Big Rivers' employees.

Including the right-of-way procurement, engineering design, contract administration, line construction, oil handling, and construction inspection done by our employees, we saved over \$2 million — a cost that would have been incurred by using consultants and contractors to do this work. Systems, and development of forecasts of future demand for electricity were accomplished on our new engineering computer system. Computer access was expanded to allow member cooperatives to study their distribution system design problems.

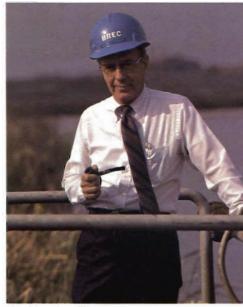


# ENVIRONMENTAL AND PUBLIC AFFAIRS

With the start-up of Wilson Unit No. 1 scheduled in 1984, the department was completing final permit applications for this plant. Additionally, conferences were held with the various agencies to assure that start-up and initial operation are in compliance.

In addition to various reporting and study requirements contained in plant operating permits, the Environmental Department initiated or participated in several special studies:

- Contour mapping of the plant ash ponds to determine the volume filled and predict the remaining life to allow adequate time to develop alternatives.
- Initiated a study to determine growth patterns of various agricultural and horticultural plants in combinations of scrubber sludge, ash and soil.
- Performed a biological assessment of a proposed transmission right-ofway. A result of this work was the location of a wetland and a potential Indiana Bat nesting area in the right-of-



Handen Timmons

way. Agreements were made with the Rural Electrification Administration (REA) and the Kentucky Department of Fish and Wildlife Resources to mitigate impacts in these areas.

- In preparation for re-permitting, began an assessment of the water quality of the rivers at each operating plant to determine impacts.
- Implemented a quality assurance program of the measurement instrumentation used in recording data.
- During 1983 the department continued normal compliance and reporting functions in the area of air, water and waste management.

The Public Affairs Department has placed special emphasis on expanding corporate communications with distribution cooperatives' employees and consumer-members, Big Rivers' employees, other generation and transmission cooperatives and governmental leaders. This expansion has included audio-visual presentations, a written educational and informational package and group discussions.







# LABOR RELATIONS AND CORPORATE SERVICES

For the past three years this department has been a catalyst in trying to improve relations between management and the bargaining unit. Following the five-week strike during the spring of 1981, a major Corporate objective has been to improve employee relations. Feedback from the power plants indicates substantial success. We have given priority to supervisor training, held regular labor/ management meetings and actively sought input before developing new major policies or changing existing ones. At year's end negotiations had begun on a new contract. The existing contract expires April 23, 1984.

A visible expression of our concern for all Big Rivers' employees is the Employee Assistance Program, which was established in March 1983, after more than a year's research and planning. The program is designed to assist employees and their families with personal problems in a humanitarian way. Solving these problems enhances the employee's life and accordingly im-



proves the employee's overall job performance.

Our Pre-Retirement Planning Program focused on our employees 55 years and older. A two-day seminar featured ses-

sions on financial aspects, legal concept, healthful living, social security, housing alternatives and adapting to retirement.

Significant strides continued to be made in the Corporate Employee Protection Program. During 1983 comprehensive guidelines for employee protection were put together in a new manual, stressing safety as a shared responsibility of the employee and the Corporation. Big Rivers' Accident Incident Rate was one of the lowest levels in 11 years!

Again this year Big Rivers' employees participated in the Educational Assistance Program, with more than 100 employees receiving tuition reimbursement for training at area technical, vocational schools and colleges. Also, 52 employees attended supervisory classes sponsored by Western Kentucky University.

As we began staffing the D. B. Wilson Plant, total permanent employment reached an all-time high of 794 with 114 employees being added during this year.















# STATEMENTS OF REVENUES AND EXPENSES

(In thousands)

Year ended December 31		1983	1982	1981
	Operating revenues (notes 4 and 7)	\$258,277	232,716	240,476
	Operating expenses: Operations:			
	Fuel for electric generation	98,375	89,988	86,270
	Power purchased and interchanged, net	55,494	46,343	58,848
	Other	25,241	21,766	19,777
	Maintenance	12,924	12,922	14,220
	Depreciation and amortization	17,782	17,548	17,073
	Taxes	2,203	1,970	1,817
	Total operating expenses	212,019	190,537	198,005
	Electric operating margins	46,258	42,179	42,471
	Interest and other deductions:			
	Interest	98,075	74,948	48,626
	Allowance for funds used during construction	(59,877)	(34,481)	(11,533
	Other deductions	137	149	93
	Total interest and other			
	deductions	38,335	40,616	37,186
	Operating margins	7,923	1,563	5,285
	Nonoperating margins:			
	Interest earned	4,007	2,583	1,598
	Interest earned credited to construction	(3,057)	(694)	-
	Other capital credits and patronage allocations	45	79	80
	Net margins	\$ 8,918	3,531	6,963

# STATEMENTS OF EQUITIES

(In thousands)

V		CONTROL OF THE PARTY OF THE PAR		Other	equities
ear ended December 31		Total equities	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
	Balance at December 31, 1980	\$16,706	14,392	570	1,744
	Margins for 1981:				
	Operating	5,285	5,285	_	_
	Nonoperating	1,598	1,598	_	-
	Other capital credits and	0.0	0.0		
	patronage allocations	80	80	7.4	
	Capital surcharge	615		74	541
	Balance at December 31, 1981	24,284	21,355	644	2,285
	Margins for 1982:				
	Operating	1,563	1,563		_
	Nonoperating	1,889	1,889		F 101 - 10
	Other capital credits and				
	patronage allocations	79	79		
	Capital surcharge	523		63	460
	Balance at December 31, 1982	28,338	24,886	707	2,745
	Margins for 1983:				
	Operating	7,923	7,923	_	
	Nonoperating	950	950	-	-
	Other capital credits and				
	patronage allocations	45	45	-	_
	Capital surcharge	493		46	447
	Balance at December 31, 1983	\$37,749	33,804	753	3,192
ee accompanying notes of financial statements.					

# **BALANCE SHEETS**

(	In	tho	usa	nds)	

December 31		1983	1982
Assets	Visition I. a. a. (a. a. 2)	61.002.017	071 77
	Utility plant, net (note 2)	\$1,093,917	871,651
	Productive capacity under purchased	73 900	24 400
	power contract (note 5)	32,800	34,400
	Other deposits and investments, at cost	2,621	2,659
	Current assets:		
	Operating funds	1,384	4,656
	Construction funds	26,823	47,646
	Receivables	24,176	21,411
	Fuel for electric generation	26,648	28,596
	Material and supplies	8,303	7,838
	Total current assets	87,334	110,147
	Deferred charges (note 3)	9,127	10,400
		\$1,225,799	1,029,257

# **Equities and Liabilities**

Commitments and contingencies (notes 2 and 8)	\$1,225,799	1.029.257
Deferred credits	688	567
Total current liabilities	85,502	71,385
Accrued expenses	25,471	4,620
Accounts payable	53,298	60,032
liabilities (note 4)	7,833	6,733
Current maturities of long-term		
Current liabilities:	7,120,007	
Total capitalization	1,138,509	957,305
Long-term liabilities, net of current maturities (note 4)	1,100,760	928,967
Êquities	\$ 37,749	28,338
Capitalization:		

See accompanying notes to financial statements.

# STATEMENTS OF CHANGES IN FINANCIAL POSITION

(In thousands)

Year ended December 31		1983	1982	1981
	Sources of working capital:			
	Net margins	\$ 8,918	3,531	6,963
	Items which do not use working capital:			
	Depreciation of utility plant	17,076	16,736	15,988
	Amortization of deferred charges	2,727	1,262	1,994
	Other amortization	138	23	
	Working capital provided	THE RESERVE OF THE PARTY OF THE		-3-4
	by operations	28,859	21,552	24,945
	Long-term borrowings	179,610	299,781	169,486
	Other	652	650	1,655
	Decrease in working capital	38,030	_	_
		\$247,151	321,983	196,086
	Uses of working capital:			
	Additions to utility plant, net	239,342	290,082	157,389
	Reduction of long-term debt	6,355	4,753	5,516
	Increase in deferred charges	1,454	6,036	690
	Increase in other investments		544	390
	Increase in working capital		20,568	32,101
		\$247,151	321,983	196,086
	Increase (decrease) in working capital:			
	Operating funds	(3,272)	(4,730)	8,879
	Construction funds	(20,823)	47,606	34
	Receivables	2,765	(1,142)	3,536
	Fuel for electric generation	(1,948)	1,654	(4,551
	Material and supplies	465	571	1,494
	Notes payable to banks	_	_	20,500
	Current maturities of long-term liabilities	(1,100)	228	851
	Accounts payable	6,734	(23,491)	2,134
	Accrued expenses	(20,851)	(128)	(776
	Increase (decrease) in	n - Back		
	working capital	\$ (38,030)	20,568	32,101

December 31, 1983, 1982 and 1981

# (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers) is a nonprofit electric generation and transmission cooperative association. Big Rivers supplies the power needs of its four member distribution cooperatives and markets power to nonmember utilities. The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and require Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

The primary source of borrowed funds for Big Rivers is the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers. Big Rivers expects to utilize the REA guaranteed loan program to finance all of the planned expansion costs, except the costs of pollution control equipment which is being financed out of present or intended future borrowings. Big Rivers has conditional loan guarantee commitments from REA to finance the cost of approved utility plant expansion.

Big Rivers' rate structure, approved by KPSC, provides for a base rate consisting of a demand charge and an energy charge. The rate structure also contains a fuel adjustment clause under which the energy charge is to be increased or decreased in each billing period to the extent that actual fuel costs and certain purchased power costs together, are greater or less than the base period costs included in the base rates. The application of the fuel adjustment clause is subject to semi-annual review by KPSC.

#### (b) System of Accounts

Big Rivers maintains its accounts on an accrual basis and follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Revenue Recognition

Revenues are based on month-end meter readings.

#### (d) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straightline method over the estimated service lives of the depreciable assets. Rates used to compute depreciation are as follows:

Production plant	3%-3.50%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-21%
Unclassified plant	
in service	2.75%-3.50%

## (e) Operating and Construction Funds

Operating and construction funds consist primarily of temporary investments in U.S. Government and agency securities which are carried at cost and adjusted for accrued interest, which approximates market.

# (f) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at the lower of weighted average cost or market.

(g) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

# (h) Pension and Deferred Compensation Plans

Big Rivers has trusteed noncontributory and contributory retirement plans covering substantially all employees. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. Big Rivers' policy is to fund annual pension and deferred compensation costs accrued. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (i) Income Taxes

For the years 1982 and prior, Big Rivers, a nonprofit cooperative corporation, was tax exempt under Section 501(c) (12) of the Internal Revenue Code which requires that at least 85% of gross income be from members. Nonmember income in 1983 exceeded the 15% allowable, therefore Big Rivers lost its tax-exempt status. There was no income tax liability for 1983 since a loss was incurred for income tax reporting.

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(2)		5 x 5 x			43 33	•
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200			- 000			

The following summarizes utility plant:		
	(In tho	usands)
	1983	1982
Classified plant in service:		
Production plant	\$ 434,278	429,388
Transmission plant	26,118	23,737
Station equipment	33,428	30,327
General plant	10,853	9,365
Intangible	190	190
Unclassified plant in service	237	2,098
	505,104	495,105
Less accumulated depreciation	91,375	74,721
	413,729	420,384
Construction in progress	653,519	451,267
Plant held for future use	26,669	
	\$1,093,917	871,651

Construction in progress at December 31, 1983 consists primarily of costs associated with construction of a 440 megawatt generating unit (Wilson 1) and Wilson 1 and 2 related common area and transmission facilities. Wilson 1 and the related common area and transmission facilities are expected to be commercialized in October 1984 and to cost \$720 million.

In December 1983, the Board of Directors authorized management to pursue the possibility of the sale and lease back of Wilson I. In January 1984, a request for proposals was submitted to institutional investors for consideration of their participation in the leveraged lease financing. No definitive conclusion has been reached in re-

gard to the possible sale and leaseback transaction.

Plant held for future use at December 31, 1983 consists of costs associated with facilities of a 440 megawatt generating unit (Wilson 2), construction of which has been deferred. Costs of \$23.2 million associated with these facilities were included in construction in progress at December 31, 1982. The original expected cost of Wilson 2 was \$441 million. The capitalization of interest relating to Wilson 2 has been suspended as of September 1, 1983. The needs and feasibility for the completion of the unit will be addressed and a determination made to either continue construction at a future date or to seek rate relief to recover the costs incurred.

Commitments with vendors at December 31, 1983 for all approved construction projects total \$19.5 million, primarily in connection with Wilson 1 and the related common area and transmission facilities. Approximately \$95 million of construction costs are expected to be incurred in 1984.

At December 31, 1983, Big Rivers has un-

used conditional loan commitments from REA for additional long-term financing of approximately \$691.6 million to meet approved construction projects.

The average rates used for the capitalization of interest during construction in 1983, 1982 and 1981 were 10.9%, 13.2% and 13.5%, respectively.

# (3) Deferred Charges

Deferred charges consisted of the following:

	(In tho	(In thousands)	
	1983	1982	
Premium on FFB debt	\$4,461	4,604	
Panama Mine closing	1,152	2,207	
Unamortized debt expense	1,641	1,773	
Other	1,873	1,816	
	\$9,127	10,400	

In November 1982, Big Rivers elected to refinance \$90 million of FFB short-term mortgage notes with long-term notes at a lower interest rate. As a result of this election, Big Rivers was required to pay a premium of \$4.6 million. The premium is being amortized over the term of the

long-term mortgage notes.

Panama mine closing costs are being recovered through an energy surcharge granted by the KPSC. The costs are being amortized based on collection of the surcharge.

# (4) Long-term Liabilities

A summary of long-term liabilities follows:			
	(In thousands)		
	1983	1982	
Rural Electrification Administration			
(REA) - 2% and 5% mortgage notes			
payable, maturing from April 1998			
through May 2012	\$ 98,372	102,022	
Federal Financing Bank (FFB) - 7.51%			
to 14.91% mortgage notes payable,			
maturing January 1984 through			
December 2017	833,742	651,941	
County of Ohio, Kentucky, 7.25%, \$82.5			
million promissory note, due			
November 1985 (less unamortized			
discount)	82,248	82,111	
County of Ohio, Kentucky, promissory note,			
with variable interest rate, currently			
5.81%, maturing June 2013	58,800	_	
County of Webster, Kentucky, promissory			
note refinanced through borrowings			
from FFB in March 1983	-	61,000	
Louisville Bank for Cooperatives (LBC) -			
mortgage note with variable interest			
rate, currently 11.5%, maturing			
April 1987	2,547	4,121	
Obligation under purchased power contract			
(see note 5)	32,800	34,400	
Other sundry borrowings	84	105	
Total long-term liabilities	1,108,593	935,700	
Less current maturities	7,833	6,733	
	\$1,100,760	928,967	

Included in mortgage notes payable to FFB are short-term notes aggregating \$439.7 million at December 31, 1983. The terms of the loan agreement permit Big Rivers to refinance these short-term notes with long-term borrowings. Amounts due in 1984 and 1985 are \$267.3 and \$172.4 million, respectively.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. Pursuant to an REA loan agreement, Big Rivers has the ability to and intends to refinance the obligation with long-term borrowings.

In June 1983, the County of Ohio, Kentucky issued \$58.8 million of Pollution Control Demand Bonds, Series 1983, the proceeds of which were loaned to Big Rivers. The funds are held by a trustee until required for construction of pollution control equipment. The unused portion of the borrowed funds is reflected in construction

funds. Pursuant to an REA loan agreement, Big Rivers has the ability to and intends to refinance this obligation with long-term borrowings, prior to the October 1987 expiration of the irrevocable standby letter of credit provided by Irving Trust Company of New York.

The aggregate maturities of long-term liabilities (excluding those borrowings discussed above to be refinanced) for the years 1985 through 1988 are \$6.8, \$7.0, \$7.6, and \$8.4 million, respectively.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

Big Rivers has unsecured line-of-credit agreements with three banks permitting short-term borrowing for general corporate purposes totalling \$40.5 million. Rates for such borrowing are variable, with most being at the prevailing prime rate of interest. There are no borrowings under any of these agreements.

## (5) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 315 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 86% which is expected to decrease to 83% by 1988. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay

interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1983, 1982 and 1981 was approximately \$34.8, \$27.8 and \$34.6 million, respectively. Such costs are treated in the rate-making process as power purchased and interchanged, net.

# (6) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$880, \$759 and \$541 thousand in 1983, 1982 and 1981, respec-

tively. The accumulated plan benefits and net assets as of the most recent actuarial valuation date available are as follows:

1983	1982	
\$2,107	1,472	
111	96	
\$2,218	1,568	
\$3,909	2,476	
	\$2,107 111 \$2,218	\$2,107 1,472 111 96 \$2,218 1,568

The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 6% in 1983 and 1982.

# (7) Major Customers

### Operating revenues were as follows:

	(In	thousands)		
	1983	1982	1981	
Members:				
Green River Electric Corporation	\$111,265	106,689	107,318	
Henderson-Union Rural Electric				
Cooperative Corporation	77,219	78,986	85,197	
Jackson Purchase Electric				
Cooperative Corporation	14,292	13,162	10,295	
Meade County Rural Electric				
Cooperative Corporation	7,164	6,811	6,298	
Nonmembers	48,337	27,068	31,368	
	\$258,277	232,716	240,476	

National-Southwire Aluminum Company and Atlantic Richfield Company (formerly Anaconda Aluminum) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for

these two customers (Green River Electric Corporation for National-Southwire Aluminum Corporation and Henderson-Union Rural Electric Cooperative Corporation for Atlantic Richfield Company) were as follows:

- on it		(In	thousands)		
		Green River	Henderson-Union	Combined	
	1983	\$82,352	63,436	145,788	
	1982	\$79,846	65,748	145,594	
	1981	\$84,761	73,841	158,602	

In 1983, Big Rivers provided the power needs of Jackson Purchase Electric Cooperative Corporation through purchase power sources. In January 1984, Jackson Purchase became an average system cost member and began using power generated in the Big Rivers' system. With the Jackson Purchase electric energy needs being furnished in 1984 by the Big Rivers' sys-

tem and the anticipated continued upturn in the energy needs of the aluminum companies, management believes that the energy needs, including sales to nonmembers, will, after the commercialization of Wilson 1 in October 1984, be approximately 75% to 80% of the total steam generating capacity.

# (8) Litigation

At December 31, 1983, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of all legal actions and

claims will not have a material effect on Big Rivers' financial position or results of operations.

### ACCOUNTANTS' REPORT

Peat, Marwick, Mitchell & Co. Certified Public Accountants The Fifth Avenue Building 444 South Fifth Street

Louisville, Kentucky 40202 502-587-0535

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1983 and 1982 and the related statements of revenues and expenses, equities and changes in financial position for each of the years in the three year period ended December 31, 1983. Our examinations were 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1983 and 1982 and the results of its operations and the changes in its financial position for each of the years in the three year period ended December 31, 1983, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT, MARWICK, MITCHELL & CO.

February 3, 1984

## COMPARATIVE STATISTICAL ANALYSIS —

	1983	1982	1981	1980	
Operating Revenue	\$ 258,276,967	232,716,033	240,476,418	179,429,591	
Expenses:	Ψ 200,270,707	232,710,033	210,170,110	177,127,071	
Operation and Maintenance	136,539,322	124,675,180	120,266,830	91,232,809	
Purchased Power and					
Interchanged, Net	55,494,464	46,342,616	58,848,412	52,947,305	
Depreciation and Amortization	17,782,446	17,548,448	17,073,065	11,516,775	
Taxes	2,202,576	1,970,317	1,817,332	1,441,297	ı
Interest	38,198,269	40,467,426	37,092,495	18,528,992	
Other	136,778	149,400	92,954	56,197	ı
Total	250,353,855	231,153,387	235,191,088	175,723,375	-
Operating Margin (Loss)	7,923,112	1,562,646	5,285,330	3,706,216	Г
Nonoperating Margin (Loss)	994,948	1,968,247	1,677,561	1,080,410	
Net Margin (Loss)	\$ 8,918,060	3,530,893	6,962,891	4,786,626	
Utility Plant at Cost	\$ 531,772,691	495,105,598	483,371,934	313,289,264	Ī
Construction Work in Progress	653,519,304	451,265,803	173,576,481	186,458,271	
Total Electric Plant	1,185,291,995	946,371,401	656,948,415	499,747,535	
Less Accumulated Depreciation	91,374,775	74,720,991	58,643,004	42,843,216	
Utility Plant Net	\$1,093,917,220	871,650,410	598,305,411	456,904,319	
Total Assets	\$1,225,799,340	1,029,256,522	708,233,625	560,828,507	
Member Maximum			The state of the s		Г
Demand — MW	952	947	956	943	
Installed Generating					ı
Capacity — Gross	1,153	1,153	1,153	911	ı
Purchased Power — HMP&L					ı
Station Two	270	253	253	256	
Purchased Standby Power	100	100	100	100	ı
KWh — Millions —	2 4 2 2			2000000	
Sales to Members	6,719.42	6,420.88	7,482.78	7,529.34	1
Sales to Non-Members	2,098.82	1,106.37	1,455.27	475.36	ı
Generated	6,474.14	5,848.11	6,164.23	5,187.78	ı
Purchased					И
HMP&L Station Two	1,724.84	1,127.18	1,822.87	1,989.04	
Other	790.65	681.21	1,097.02	966.38	
System Load Factor — %	78.4	74.8	87.1	88.1	
Employees at Year-End	794	680	667	622	

## TEN-YEAR SUMMARY

1979	1978	1977	1976	1975	1974
124,077,992	117,873,040	87,745,285	60,926,026	51,532,866	46,377,266
53,217,700	52,753,054	43,278,427	33,055,570	24,107,293	21,959,599
52,238,507	49,559,041	32,249,409	29,012,642	22,266,033	19,584,733
5,976,160	5,111,273	4,444,813	3,274,979	3,011,521	3,011,133
780,799	712,919	631,557	565,273	564,348	524,148
4,988,213	3,808,979	3,206,173	2,611,967	2,188,085	2,132,974
23,017	25,940	5,290	31,733	35,950	41,530
117,224,396	111,971,206	83,815,669	68,552,164	52,173,230	47,254,117
6,853,596	5,901,834	3,929,616	(7,626,138)	(640,364)	(876,851)
1,219,271	620,969	144,720	(171,552)	(48,483)	152,872
8,072,867	6,522,803	4,074,336	(7,797,690)	(688,847)	(723,979)
283,281,046	130,333,952	124,665,252	122,471,149	112,031,490	110,330,152
125,427,944	157,127,012	57,229,121	12,343,345	10,734,956	2,512,887
408,708,990	287,460,964	181,894,373	134,814,494	122,766,446	112,843,039
32,900,415	28,361,983	24,534,449	21,008,189	17,766,620	15,004,180
375,808,575	259,098,981	157,359,924	113,806,305	104,999,826	97,838,859
480,817,488	374,646,226	226,712,745	174,716,621	120,326,021	113,833,594
	A Mariana		100		
910	819	820	790	748	737
911	669	669	669	669	603
711	00)	007	007	307	445
255	262	262	267	271	283
100	100	100	100	100	100
7,029.28	6,526.85	6,189.32	5,920.81	5,703.45	5,778.23
58.50	79.39	59.54	3.87	129.17	219.70
3,911.05	3,678.16	3,711.16	3,215.64	3,644.96	3,834.79
1,931.09	1,805.31	1,855.88	1,736.04	1,675.03	1,904.61
1,387.12	1,253.09	814.89	1,092.25	614.44	367.85
85.3	87.5	87.7	87.3	88.9	91.2
555	488	401	346	246	239
					-

## CORPORATE DIRECTORY

OFFICERS	MANAGERS
Morton Henshaw President	Don E. Augenstein General Services
Texal Brooks Vice President	Gregory F. Black Environmental Affairs
William B. Briscoe Secretary-Treasurer	Joe L. Craig Fuels
William E. Seaton Assistant Secretary-Treasurer	J. E. Dolezal Energy Control
GENERAL MANAGER W. H. Thorpe	James V. Haner Accounting
ASSISTANT GENERAL MANAGER Paul A. Schmitz	Don C. Mann Purchasing
VICE GENERAL MANAGERS  Robert F. Burkard	Tom Millay Personnel
President  Texal Brooks Vice President  William B. Briscoe Secretary-Treasurer  William E. Seaton Assistant Secretary-Treasurer  GENERAL MANAGER  W. H. Thorpe  ASSISTANT GENERAL MANAGER  Paul A. Schmitz	Earl A. Millspaugh Operations and Maintenance
Finance	James H. McIllwain Construction
Corporate Services and	David E. Schultz System Planning and
	Design Engineering Phil Waggoner
	Electronic Data Processing SUPERINTENDENTS
	Richard Greenwell Reid/Green Plant
	Virgil Mitchell Transmission
	Steve Moss Wilson Plant
	Barry Wood Coleman Plant
	CORPORATE ATTORNEY
	Morton Holbrook General Counsel Holbrook, Gary Wible & Sullivan, P.S.C. Owensboro, Kentucky
	CORPORATE AUDITORS

Peat, Marwick, Mitchell & Co. Louisville, Kentucky

24

### **DIRECTORS**

(Three from each member cooperative)

Green River Pleasin Comparation



Texal Brooks



J. Edward Delker



Edward F. Johnson

W. H. Thorpe General Manager



William Briscoe



Morton Henshaw



C. G. Truitt



Paul A. Schmitz Assistant General Manager



John C. Burnett



J. D. Cooper



William Seaton



Stanley Jones



Edwin L. Reid

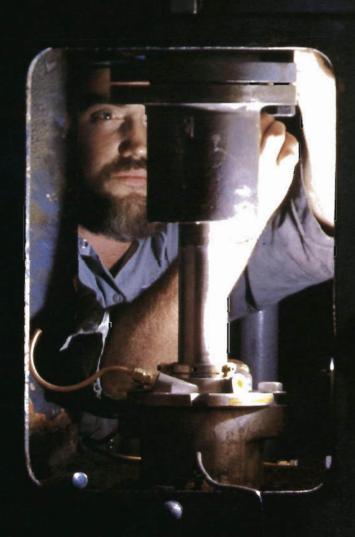


Harvey Sanders



Post Office Box 24 201 Third Street Henderson, Kentucky 42420 (502) 827-2561 BIG RIVERS
ELECTRIC CORPORATION

1982 Annual Report



### Let Us Always Remember . . .

Whereas, **B. Wilson** served with distinction on the Big Rivers Electric Corporation's Board of Directors for 18 years; and

Whereas, since 1972, **B. Wilson** was Vice President of this Board of Directors and during that decade led us through some difficult times and into a new era of growth and added responsibility; and

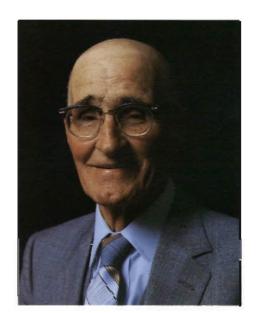
Whereas, **B. Wilson** gave so unselfishly of his time and talents to his God, church, family, community, state and nation; and

Whereas, his leadership contributed so much to the principle for which this Corporation was formed, and for 33 years his commitment to the rural electric cooperative program has set an example for others,

Now, Therefore, Be It Resolved, by the Directors of Big Rivers Electric Corporation, that the untimely passing of **D. Wilson** is a deep and personal loss to the Corporation and to its members. We express to the family of our deceased friend our true and sincere feeling of affection.

Be It Further Resolved, that this resolution become a permanent part of the minutes of this meeting, and a certified copy of same be presented to his widow and family. Witness our hand and corporate seal on this 10th day of December, 1982.

, 00	<i>i</i> 0
Morton Henshaw	Mathy Jones
PRESIDENT	
SECRETARY TREASURER	John C. Bunett
SECRETARY	
William B. Briscol ASSISTANT SECRETARY TREASURER	Edwin & Rud
ASSISTANT SECRETARY-TREASURER	1
Chester & Faturett	Harrey Sandus
Jule Seaton	S. B. Jahren
Mooyen	Edward Delher
S	
	GENERAL MANAGER



The sun rises over gently sloping pastureland and flat farmland and creates a picturesque morning hard to match. Once again West Kentuckians awake to a spectacular sunrise.

That sunrise may dawn on a spring morning of dogwoods in bloom or a crisp fall day colored by maples and redbuds. Or it may light an ice-covered fantasy world on a cold winter's morning.

Whatever the weather, much of West Kentucky depends on Big Rivers Electric Corporation to light and operate its homes, farms, industries and commercial businesses. Big Rivers and its member distribution cooperatives sustain a quality of life West Kentuckians have worked hard to attain.





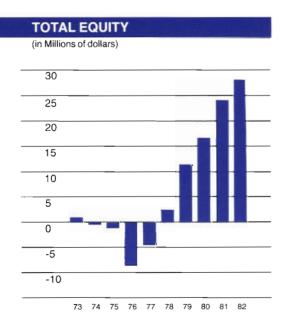
# FINANCIAL HIGHLIGHTS

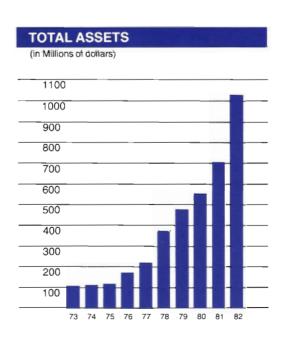
(Dollars in Thousands)

	1982	1981	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	232,716	240,476	(7,760)	(3.2)
Operating Expenses	190,537	198,005	(7,468)	(3.8)
Net Margins	3,531	6,963	(3,432)	(49.3)
Construction Expenditures	290,082	157,389	132,693	84.3
Energy Sales (Megawatt Hours): A. To Members	6,421	7,483	(1,062)	(14.2)
B. Intersystem	1,106	1,455	(349)	(24.0)
System Peak Demand in Megawatts	947	956	(9)	(.9)
Cost of Fuel Used in Generation	91,185	87,409	3,776	4.3
Assets	1,029,257	708,234	321,023	45.3
Accumulated Margins and Equity	28,338	24,284	4,054	16.7
Employees Full Time	680	667	13	1.9
Revenue Per kWh Sold (Mills)	30.91	26.87	4.04	15.0

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### **OPERATIONS REVIEW**

Consumers usually don't think about their supplier of electricity until something happens and it isn't there. Even then, power plants are thought of in terms of equipment, machinery and fuel. Often overlooked is the most important aspect of any business — the human element.

Big Rivers is proud of the highly skilled and well-trained men and women who maintain our corporate goal of providing reliable power at the most reasonable cost possible. We are happy to report that during 1982 Big Rivers had no wholesale rate increase. Much of the reason is due to the innovation, dedication and hard work of our employees.

Before highlighting the year, we'll give a little background about who we are and why.

Twenty-one years ago rural electric leaders from West Kentucky joined together under the name of Big Rivers Electric Corporation to develop a reliable and reasonably-priced source of electricity. Today, Big Rivers, a non-profit corporation, has four member distribution cooperatives: Green River Electric Corporation; Henderson-Union Rural Electric Cooperative Corporation; Jackson Purchase Electric Cooperative Corporation and Meade County Rural Electric Cooperative Corporation. These systems serve the electrical requirements of more than 70,000 consumermembers in 22 Western Kentucky counties.

It takes three power plants with a net generating capacity of 1,300 megawatts (MW) to meet the electrical demands of these residential, commercial and industrial consumers. During the past 10 years residential consumers of our member systems have doubled their use of electricity. Our generating capacity has increased correspondingly.

We will add another 395 MW to the net capacity when the D. B. Wilson Plant is commercialized in mid-1984, meeting the distribution cooperatives' projected power requirements.

At the end of December, the Wilson Plant, located along the Green River in Ohio County, was more than 50 percent completed, right on schedule.

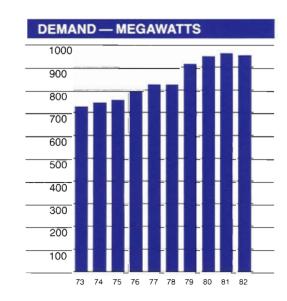
The construction stage is one in which visible progress is evident from one end of the site to the other. Progress has not been hampered; we have had a readily available work force, no labor difficulties, overall the weather has been good and equipment deliveries have been timely. In late 1982, 1,700 people worked at the site, and the weekly payroll exceeded \$1 million.

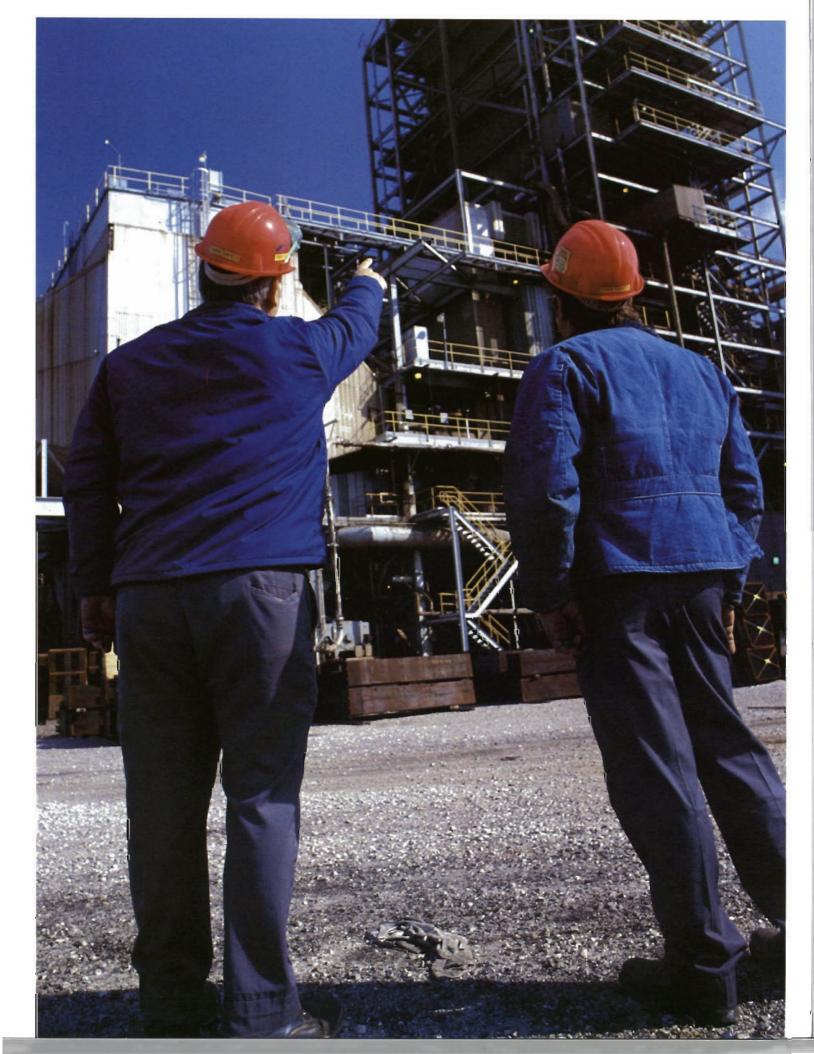
Big Rivers' staffing for Wilson is underway, and additional key personnel will be locating at the plant in early 1983. More than 150 full-time Big Rivers' employees will be needed to operate the plant.





In late 1982, during peak construction of the D. B. Wilson Plant, more than 1,700 men and women were employed, boosting Western Kentucky's economy more than \$1 million in weekly payroll. Unit No. 1 is scheduled to be commercialized in July 1984.





Looking to the future, Big Rivers is studying the feasibility of installing hydroelectric generating facilities at the Uniontown and Newburgh dams on the Ohio River. These dams were constructed by the United States Corps of Engineers for navigational purposes and are located near Uniontown, Kentucky, and Newburgh, Indiana. Big Rivers was issued the preliminary permits by the Federal Energy Regulatory Commission (FERC) on August 11, 1982. The permits allow up to 24 months to conduct studies and collect data necessary to determine the feasibility of hydroelectric generation at these dams.

The Uniontown Dam, under normal pool elevations, provides an 18-foot head of water which could be used in generation, while the Newburgh Dam has a 16-foot head. Preliminary estimates indicate that the Uniontown Dam could accommodate an installed capacity of 75 MW and provide 320,000,000 kilowatt-hours (kWh) annually. Newburgh may have the potential of 60 MW capacity and 250,000,000 kWh per year. The feasibility studies will address the expected cost of development and the incremental value of the power as well as the exact capacity that may be installed and its related energy output. When the studies are completed, a decision then can be made whether it is economical to develop the sites.

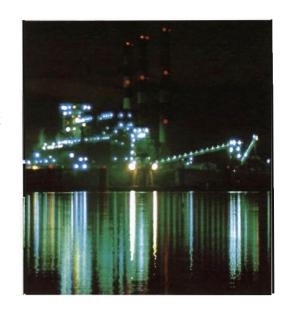
Also, Big Rivers has entered into an agreement with the Henderson City Utility Commission which has filed an application for a license to develop hydro facilities at the Smithland Dam, which is also on the Ohio River, near Smithland, Kentucky. The agreement provides that the Henderson City Utility Commission will sell to Big Rivers all capacity and energy not needed by Henderson's electric customers.

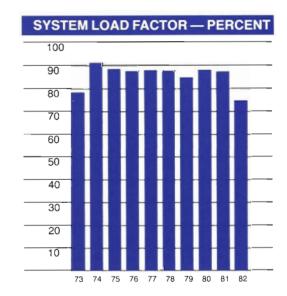
The Smithland Dam, under normal pool elevations, provides a 22-foot head which would ultimately accommodate the installation of 176 MW of generating capacity with a potential of 565,000,000 kWh. FERC has requested additional information from Henderson, and it is unknown at this time whether Henderson will be granted a license.

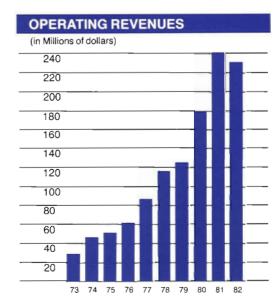
This year Big Rivers sold 6,420,879,480 kWh to the member distribution cooperatives. While industrial sales decreased 1,087,185,920 kWh, or 17.27 percent, the residential sales increased 25,287,722 kWh, or 2.13 percent.

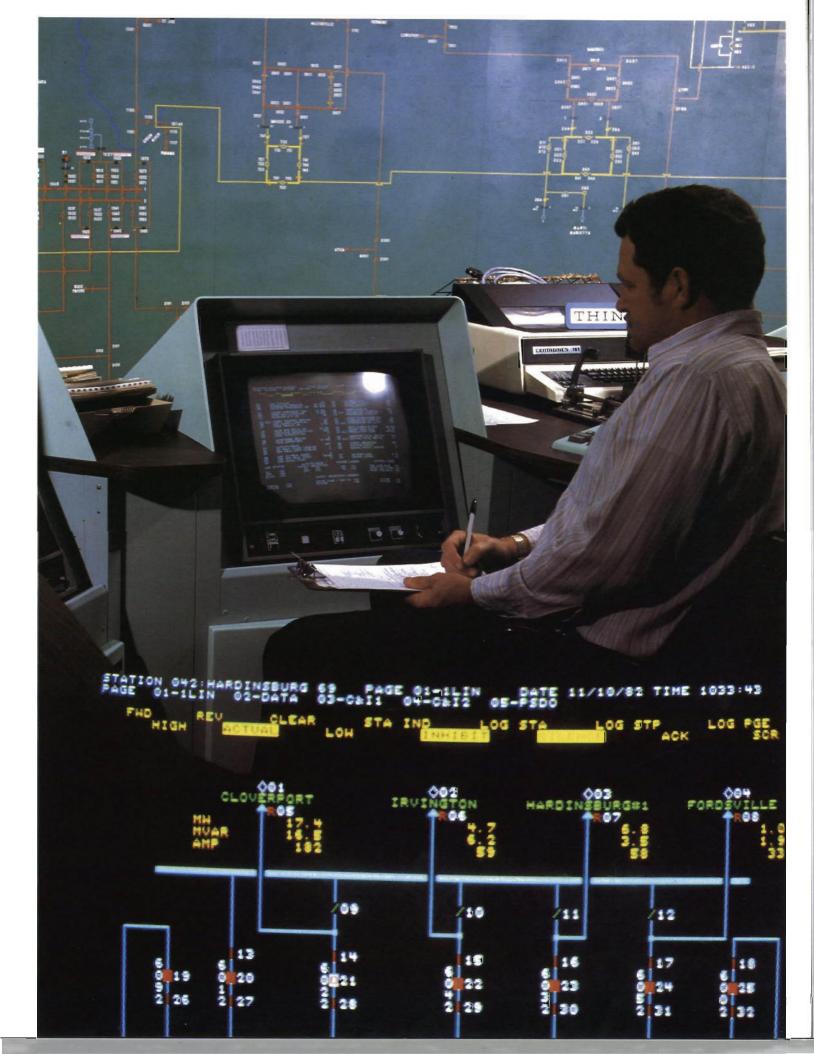
While 1982 saw many other utilities applying for a rate increase, Big Rivers did not. One of the factors which kept us fiscally sound this year was 1,106,369,000 kWh sales to other electric utilities. We sold power as far north as Lake Superior and as far south as the Gulf of Mexico. We might add that these intersystem sales didn't just happen. Big Rivers aggressively marketed reserve power which made better use of our facilities and prevented us from having to seek a wholesale power rate increase. We are very competitive in the marketplace since our fuel cost is comparatively low. Being located in Western Kentucky, our generating plants are in and near leading coal producing counties. Kentucky is the leading coal producing state in the nation.

The 1982 coincidental peak of 947 MW was reached January 11. This compared to the previous year's system peak of 956 MW which still stands as a Big Rivers' record. This corporation's 1982 load factor was 74.84 percent which held down the wholesale power cost for all consumermembers.









Big Rivers has interconnection agreements with the following utilities: Henderson Municipal Power and Light, Southern Illinois Power Cooperative, East Kentucky Power Cooperative, Louisville Gas and Electric Company, Southern Indiana Gas and Electric Company, Kentucky Utilities Company and Hoosier Energy Division of Indiana Statewide REC, Inc. The Corporation has contracts with the Tennessee Valley Authority (TVA) for the sale of short-term power and surplus energy. In addition, we maintain a contract with TVA for wheeling power through their system.

Big Rivers and Green River Coal Co., Inc., Madisonville, Kentucky, during the summer signed a long-term contract for the primary coal supply of the Wilson Plant. This nearby source of high-sulfur coal will help Big Rivers continue to provide electric power at reasonable cost. The Wilson Plant will be equipped with flue gas desulfurization scrubbers, making it possible to use this high-sulfur coal.

The term of the contract is 20 years, and Big Rivers has the option to extend it an additional 10 years. Deliveries are to begin in 1984 and the quantities are to increase each year, reaching 1.2 million tons for 1989.

Green River Coal has begun construction of the new underground coal mine in Hopkins County, Kentucky, about 22 miles from the Wilson Plant.

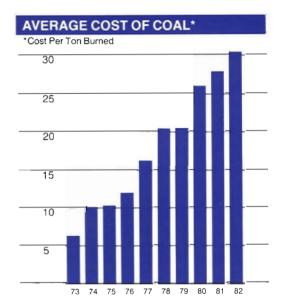
While electricity cost has increased steadily the last few years, a dependable and easily accessible supply of coal will hold down our costs. That is significant since nearly 50 percent of our operating cost is for coal.

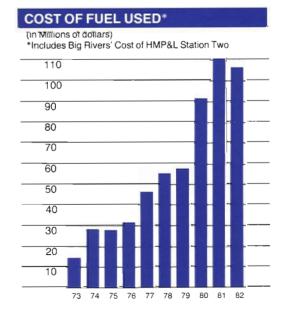
Big Rivers consumed approximately 3.46 million tons of coal during 1982 to produce electricity. Over 80 percent of the coal received was purchased under long-term contracts. The largest receipts were from MAPCO, Inc. from mines in Western Kentucky, this being the primary supply of coal for the Robert D. Green Plant, which is equipped with scrubbers. Coal of lower sulfur content, necessary to meet air pollution control requirements at the Kenneth C. Coleman and Robert A. Reid Plants and Henderson Municipal Power and Light Station Two, came from other suppliers in Kentucky, Indiana and Ohio.

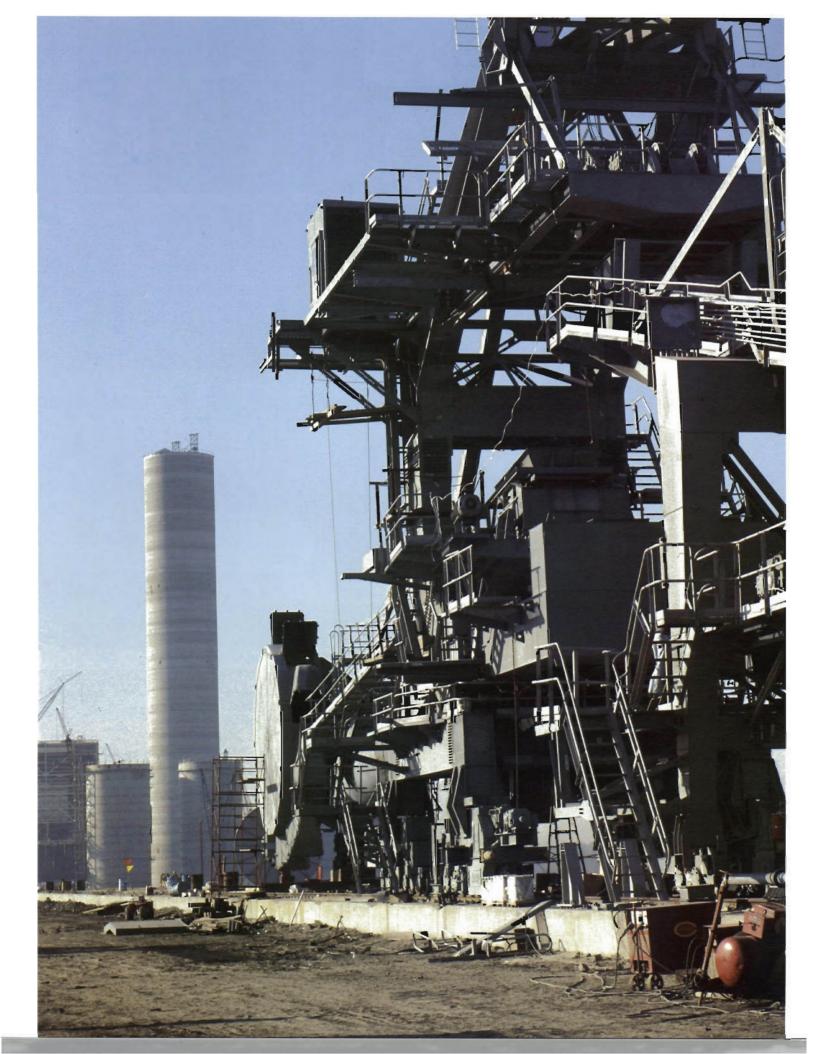
The average cost of coal used in generation was \$30.68 per ton, or 143.3¢ per million BTU, compared to \$28.26 per ton, or 132.9¢ per million BTU in 1981. This higher coal cost was largely due to escalating costs of mining and transporting coal, including an increase in the Black Lung Tax and the expiration of the last of two low-cost, long-term contracts.



Completion of the Wilson Plant surpassed 50 percent at year's end. In the foreground is the massive coal stacker-reclaimer, while the 600-foot smokestack towers in the background.







HMP&L Station Two's Unit No. 1 came back on line December 20 after having undergone major repairs. Extensive damage was sustained by the boiler in 1974 when it was overheated during a start-up. The Corporation and the City of Henderson settled out of court during 1981 with Home Insurance Company for \$7 million.

While new boiler tubing was being installed, Big Rivers performed routine maintenance on the Unit No. 1 turbine. An inspection of the HMP&L Plant's stack was made when Unit No. 2 was out for a scheduled two-week maintenance program. Minor repairs were made to the stack.

With HMP&L Unit No. 1 off line 38 weeks, it was necessary to modify medium-sulfur coal contracts to avoid an excessive inventory. This and a depressed coal market helped us secure additional amounts of high-sulfur coal resulting in a direct savings of \$1.7 million to our consumer-members. On December 10, the Board of Directors approved modifications to coal contracts which will save consumer-members \$1 million in 1983.

Big Rivers also saved money by improving efficiency and by decreasing operating costs. Let us give a few examples.

The Production Department, through continuance of preventive maintenance and implementing a performance engineering program, improved unit efficiency, in some cases as much as 15 MW per unit. The employees at the power plants deserve special recognition for this increased output.

Looking to further lower costs, the Production Department reduced by about 75 percent the use of outside contractors. This was possible after some of Big Rivers' personnel were trained in special skills, thereby eliminating most needs for outside help. At present, we have eliminated the use of all outside contractors except for unit outage maintenance work.

When the Wilson Plant comes on line, more than \$1.3 million each year in potential operating costs will be saved by switching from Thiosorbic lime to less costly limestone as the reagent in the flue gas desulfurization scrubber.

Big Rivers' in-house engineering staff develops the specifications and supervises the construction of various projects at our plants, saving time and money.

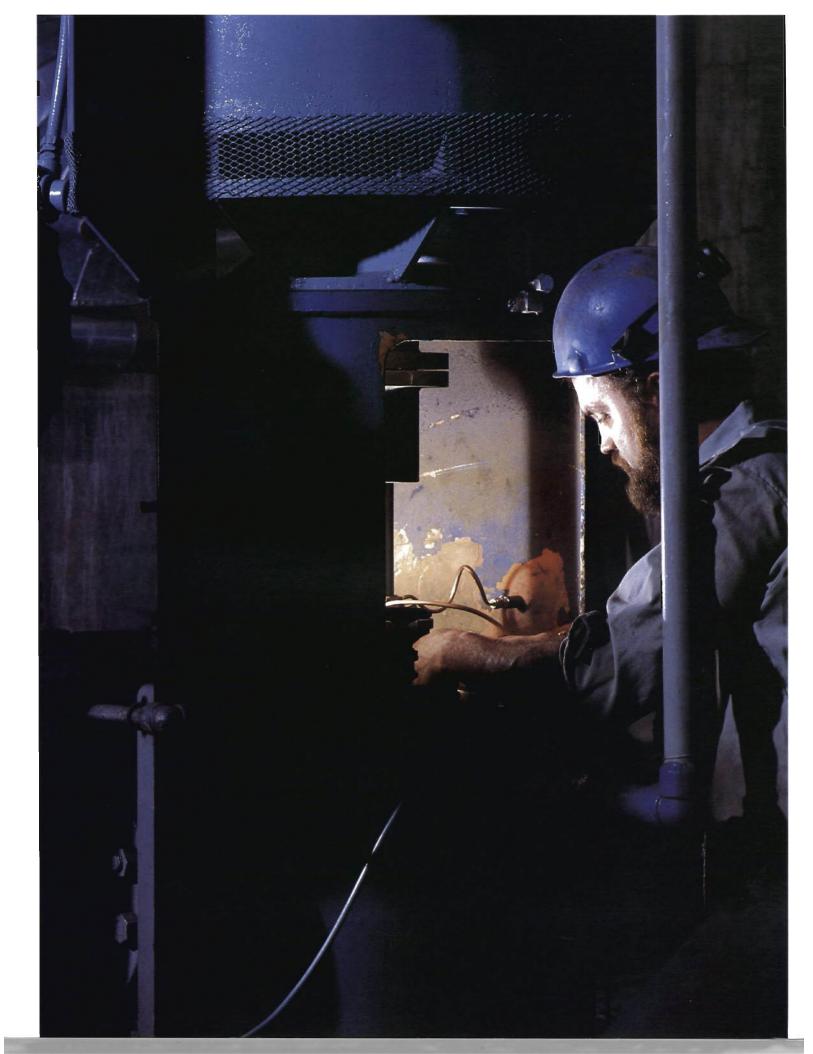




Updating the transmission system map is almost a continuous project. Two substations and 103 miles of new lines are being added to tie Jackson Purchase Electric Cooperative Corporation into the Big Rivers' system.



Unit No. 1 of Henderson Municipal Power and Light's Station Two was off line 38 weeks for major boiler repairs. During the outage, routine maintenance of the turbine (top photo above and at left) was performed.







The move to the IBM System 38 and the Prime Computer has yielded a unified and comprehensive corporate-wide data processing system.



Keeping the air and water clean is expensive. The cost of flue gas desulfurization scrubbers and related environmental facilities (such as the limestone silos pictured above) at the D. B. Wilson Plant will total \$152 million, or 23 percent of the Wilson construction cost.

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During the entire year a special emphasis was placed on using the Central Machine Shop. This has all but eliminated outside machinery work, and cost reductions have fully justified the shop. Additionally, we are getting quicker solutions to maintenance problems and receiving better quality work.

The decision was made this year for Big Rivers to build and operate its own central laboratory. This facility will be located adjacent to the head-quarters parking lot in downtown Henderson. Big Rivers' employees will do coal and environmental testing in the laboratory and reduce costs in doing so.

We have contracted to sell all excess fly ash from our Reid/Green units and are investigating doing the same at Coleman and Wilson.

Following record-high interest rates, mid-1982 saw a significant and long-needed drop in interest rates. Big Rivers took advantage of the decline and secured a low interest rate at which to finance pollution control equipment at the Wilson Plant. On November 10, 1982, the Corporation sold \$82.5 million of tax-exempt Pollution Control Bonds which financed about half the cost of pollution control equipment at Wilson. These bonds have an interest rate of 7.25 percent and should save Big Rivers, and ultimately our distribution cooperatives' consumer-members, several million dollars. The remaining cost of Wilson pollution control equipment is expected to be financed in early 1983 through another bond issue.

On November 24, the Corporation converted \$90 million in short-term loans with interest rates in the 15 to 16 percent range into long-term debt at a rate of 10.5 percent.

Keeping a handle on the fluctuating economy is no easy task. It requires expert, daily monitoring of signals indicating economic changes. To assist us in obtaining a more viable economic planning/forecasting system, Big Rivers adapted and improved upon a forecasting program. The financial planning model allows our computer to play the "what if" game by changing economic variables that affect future expenses and income.

The move to the IBM System 38 and the Prime Computer in 1982 has yielded a unified and comprehensive data processing system which is corporate wide. For the first time at Big Rivers, our power plant personnel will be able to plug into the informational system for help in monitoring plant efficiency. Also, our Engineering Department, through the Prime Computer, has hardware and software fine-tuned to the engineering discipline. The informational system here, in addition to its administrative capabilities, will improve cost effectiveness and efficiency throughout the Corporation.

This year the Data Processing Department evaluated purchasing Word Processing Computer equipment to assist the clerical staff in handling the multiplying paperwork. The benefits have been gratifying; clerical staff efficiency has improved.

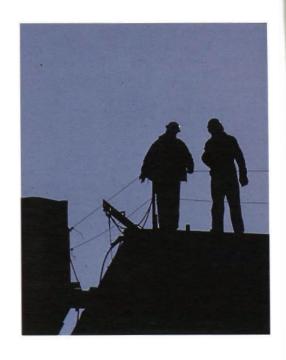
A \$3.2 million expansion of our microwave system was installed this year. While the primary purpose is in adding communications to the Wilson Plant and the Jackson Purchase Electric Cooperative Corporation territory, it also is vital in improving our communication reliability at Coleman, Reid/Green and existing transmission substations. We emphasize a dependable and safe transmission of power. The expansion and upgrading of our microwave system provide us a dual loop for added protection as well as communications channels for telephone, two-way radio and future electronic metering.

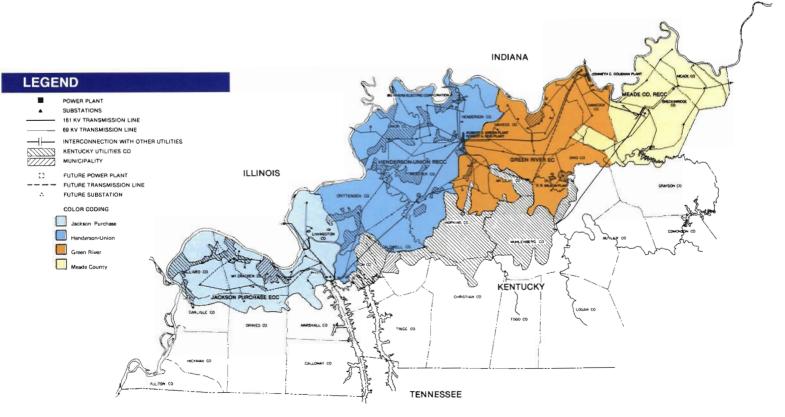
The Engineering/Transmission Department added an operations and maintenance engineer and five construction inspectors. The investment has paid off in improved construction performance, and nearly \$1 million in inspection costs will be saved by having our in-house construction inspection team.

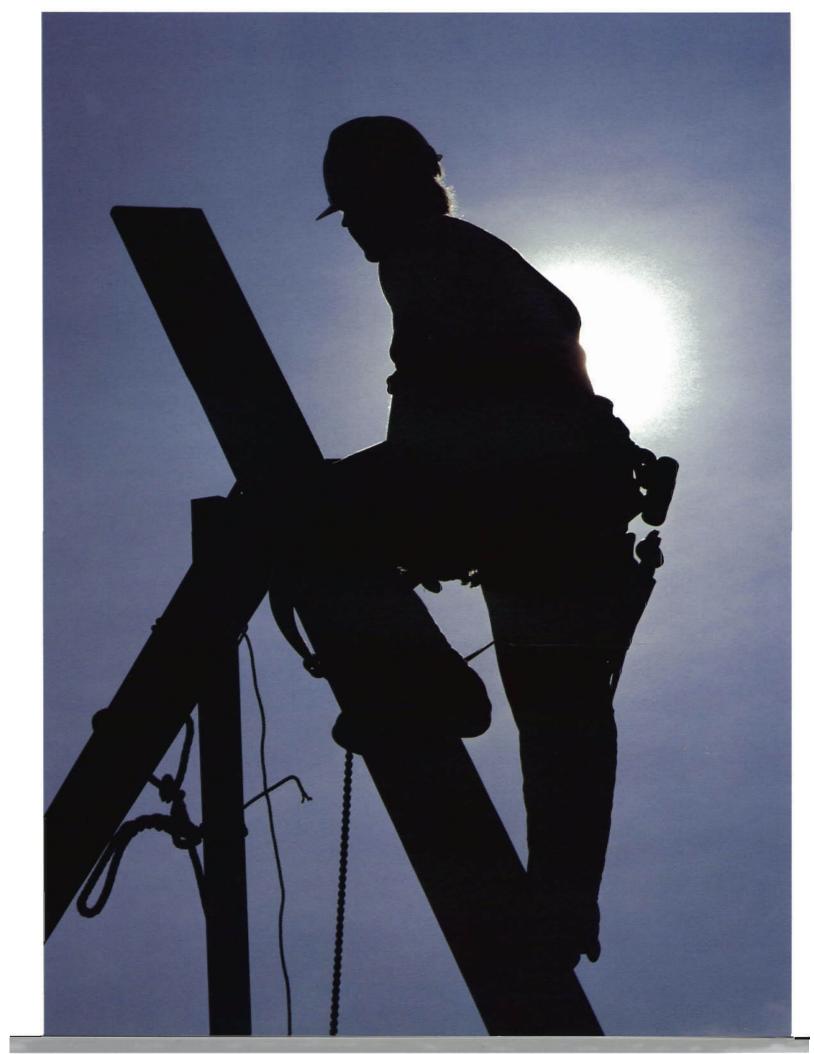
With engineering designs completed, we began construction of both the Livingston County and McCracken County substations. In conjunction with tieing the Jackson Purchase ECC into our system, 39 miles of 161 kV lines and 64 miles of 69 kV lines are being added.

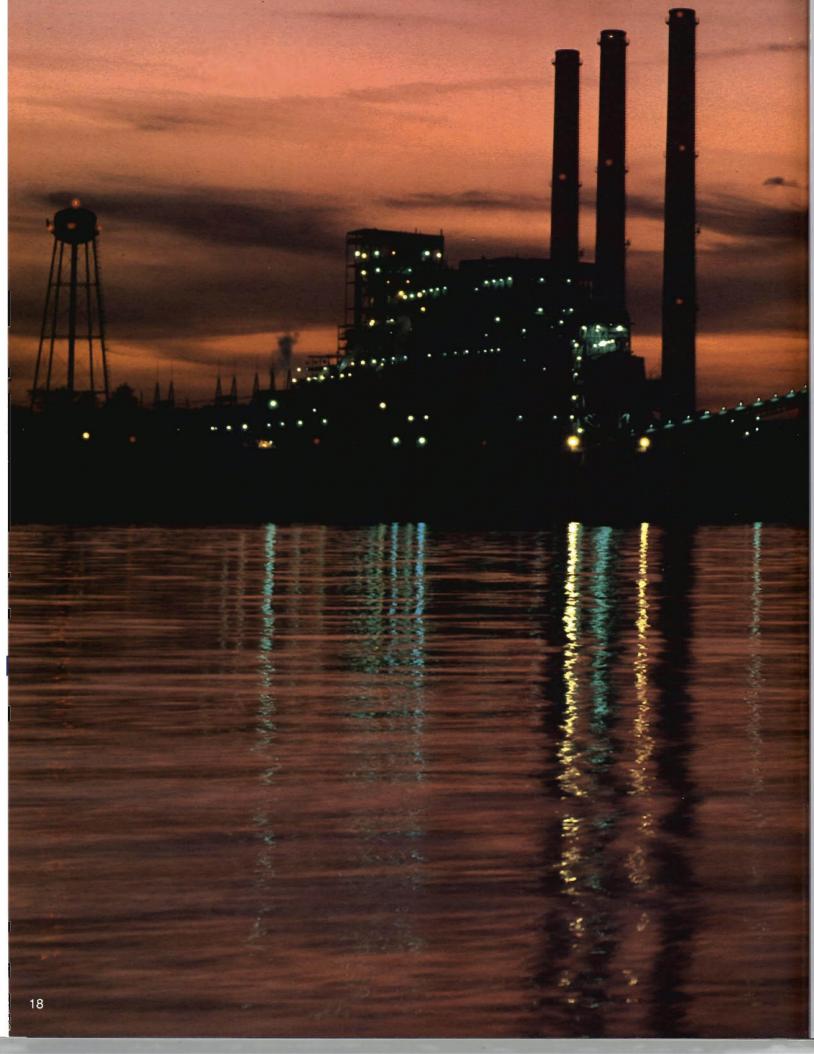
To connect the Wilson Plant to our other plants, construction of 65 miles of 345 kV Extra High Voltage (EHV) lines has begun. We also are building new EHV substations at Reid/Green and Coleman and the Wilson switchyard.

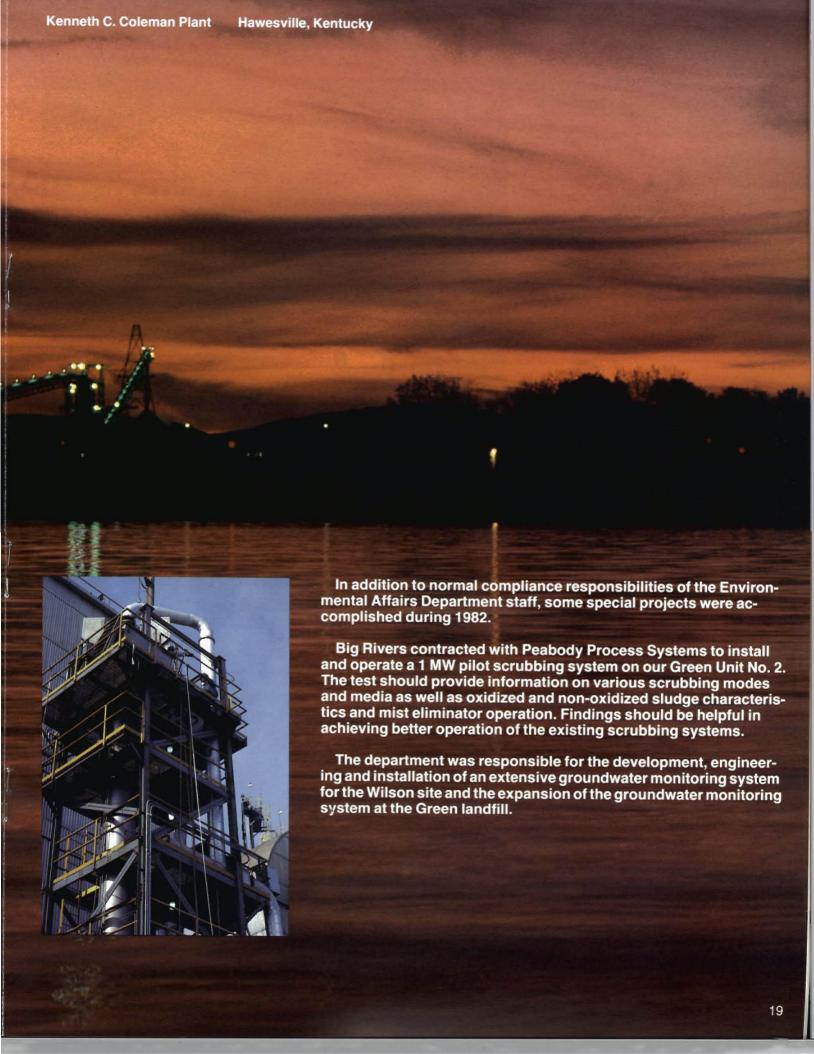
Environmental protection is a special concern of Big Rivers. Located in the area which noted naturalist and artist John James Audubon called home, we want clean air and water for our children and future generations.











Last but not least we want to talk about Big Rivers' employees. The year saw the initiation of several new and successful programs for our employees:

In April, a Safety Awards Program began, and it has been met with interest and enthusiasm. Both management and the union have supported this program designed to make Big Rivers "a safe place to work." The employees' efforts were rewarded with a 42 percent reduction in on-the-job lost-time accidents.

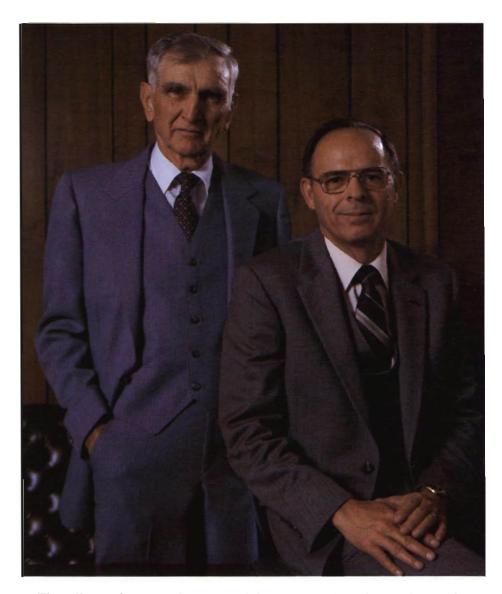
The Employee Assistance Program this year began offering professional help to employees with alcohol/drug problems and made available preretirement counseling to help employees plan for the future.

This fall a Salaried Employees' Savings Plan took effect and was greeted with 75 percent participation. For each percent of the employee's contribution (up to a maximum of 6 percent), the Corporation, as an incentive, matches an amount equal to 50 percent of the employee's contribution.

More than 500 employees participated in corporate training programs established to improve immediate and long-range career development. Over 125 employees sought individual training at area technical schools and colleges to study subjects related to their jobs and careers, and the Corporation reimbursed their tuition.

In January it was necessary for us to lay off 19 employees. The reduction was made because a fifth shift used for training of employees for the Green Plant was no longer needed and the deferred maintenance program begun in 1976 was completed. Within six months, however, through employee attrition, all the employees laid off were called back to work.

We are proud of the dedication and the productivity of Big Rivers' employees. It takes all employees working to their potential for this Corporation to efficiently serve our distribution cooperatives and their consumer-members.



The efforts of our employees and the prudent direction and conscientious guidance of our Board of Directors all worked together to cause a successful year. We look to 1983 in anticipation of opportunities which will permit us to continue meeting our objectives of using available resources efficiently and supplying our members with reliable service at a reasonable cost.

Morton Henshaw President W. H. Thomas

W. H. Thorpe General Manager

# STATEMENTS OF REVENUES AND EXPENSES

For the years ended December 31, 1982, 1981 and 1980

			(In thousands)
	1982	1981	1980
Operating revenues (notes 2, 5 and 8)	\$232,716	240,476	179,430
Operating expenses:			
Operations:			
Fuel for electric generation	89,988	86,270	68,021
Power purchased and interchanged, net	46,343	58,848	52,947
Other	21,770	19,777	13,361
Maintenance	12,922	14,220	9,851
Depreciation	16,459	15,798	10,240
Amortization of Panama Mine closing (note 4)	1,085	1,275	1,277
Taxes	1,970	1,817	1,441
Total operating expenses	190,537	198,005	157,138
Electric operating margins	42,179	42,471	22,292
Interest and other deductions:			
Interest	74,948	48,626	31,655
Allowance for funds used during construction	(34,481)	(11,533)	(13,126)
Other deductions	149	93	56
Total interest and other			
deductions	40,616	37,186	18,585
Operating margins	1,563	5,285	3,707
Nonoperating margins:			
Interest earned	2,583	1,598	1,017
Interest earned credited to construction	(694)	-	-
Other capital credits and patronage allocations	79	80	63
Net margins	\$ 3,531	6,963	4,787

# STATEMENTS OF EQUITIES

For the years ended December 31, 1982, 1981 and 1980 (In thousands)

	Total equities	Patronage capital	Other ed Donated capital and memberships	quities Consumers' contributions to debt service
Balance at December 31, 1979	\$11,303	9,605	495	1,203
Margins for 1980:	55. 57	ľ		
Operating	3,707	3,707	_	_
Nonoperating	1,017	1,017	_	_
Other capital credits and			1	
patronage allocations	63	63	-	_
Capital surcharge	616	_	75	541
Balance at December 31, 1980	16,706	14,392	570	1,744
Margins for 1981:				
Operating	5,285	5,285	_	_
Nonoperating	1,598	1,598	-	-
Other capital credits and			1	
patronage allocations	80	80	_	_
Capital surcharge	615	_	74	541
Balance at December 31, 1981	24,284	21,355	644	2,285
Margins for 1982:		'		
Operating	1,563	1,563	_	_
Nonoperating	1,889	1,889	_	_
Other capital credits and	4		4	
patronage allocations	79	79	_	_
Capital surcharge	523	<u>=</u>	63	460
Balance at December 31, 1982	\$28,338	24,886	707	2,745

See accompanying notes to financial statements.

December 31, 1982 and 1981

	1982	1981
Assets Utility plant, net (note 3)	\$ 871,651	598,305
Productive capacity under purchased	φ 6/1,051	330,303
power contract (note 6)	34,400	36,000
Investments in associated companies	0 1, 700	33,000
and other	2,659	2,115
Current assets:		_,
Operating funds	4,656	9,386
Construction funds	47,646	40
Receivables	21,411	22,553
Fuel for electric generation	28,596	26,942
Material and supplies	7,838	7,267
Total current assets	110,147	66,188
Deferred charges (note 4)	10,400	5,626
	\$1,029,257	708,234
		· · · · · ·
Equities and Liabilities		
Capitalization:		İ
Equities	\$ 28,338	24,284
Long-term liabilities, net of current		
maturities (note 5)	928,967	635,516
Total capitalization	957,305	659,800
Current liabilities:		
Current maturities of long-term		
liabilities (note 5)	6,733	6,961
Accounts payable	60,032	36,541
Accrued expenses	4,620	4,492
Total current liabilities	71,385	47,994
Deferred credits	567	440
Commitments and contingencies (notes 3 and 9)		
	\$1,029,257	708,234
	1	0

# STATEMENTS OF CHANGES IN FINANCIAL POSITION

(In thousands)

For the years ended December 31, 1982, 1981 and 1980

	1982	1981	1980
Sources of working capital:			
Net margins	\$ 3,531	6,963	4,787
Items which do not use working capital:			
Depreciation of utility plant	16,459	15,798	10,240
Amortization of Panama Mine closing	1,085	1,275	1,277
Amortization of Peabody Coal Company	}		
arbitration award	_	719	3,842
Other	477	190	219
Working capital provided			
by operations	21,552	24,945	20,365
Long-term borrowings	299,781	169,486	51,138
Other	650	965	672
Decrease in working capital			25,301
	\$321,983	195,396	97,476
Uses of working capital:			
Additions to utility plant, net	290,082	157,389	83,609
Reduction of long-term debt	4,753	5,516	7,526
Increase in deferred charges and other	6,580	390	6,341
Increase in working capital	20,568	32,101	
	\$321,983	195,396	97,476
Increase (decrease) in working capital:			
Operating funds	(4,730)	8,879	(2,937)
Construction funds	47,606	34	(16,773)
Receivables	(1,142)	3,536	3,983
Fuel for electric generation	1,654	(4,551)	10,030
Material and supplies	571	1,494	1,638
Notes payable to banks		20,500	(20,500)
Current maturities of long-term liabilities	228	851	2,018
Accounts payable	(23,491)	2,134	(2,126)
Accrued expenses	(128)	(776)	(634)
Increase (decrease) in			(05.00.)
working capital	\$ 20,568	32,101	(25,301)

### ES TO FINANCIAL STATEMEN'

December 31, 1982, 1981 and 1980

#### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers) is a nonprofit electric generation and transmission cooperative association engaged in supplying electric power to four electric distribution cooperatives (members). The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and require Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

The primary source of borrowed funds for Big Rivers is the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers. Big Rivers expects to utilize the REA guaranteed loan program to finance all of the planned expansion costs, except the costs of pollution control equipment which is being financed out of present or intended future borrowings. Big Rivers has conditional loan guarantee commitments from REA to finance the cost of approved utility plant expansion.

#### (b) System of Accounts

Big Rivers maintains its accounts on an accrual basis and follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Interest expense on restricted tax-exempt borrowings is capitalized at the actual rate of the borrowing, net of interest earned on investment of those tax-exempt borrowings. Capitalization of interest is discontinued when the project is completed and the asset is ready for service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Rates used to compute depreciation are as follows:

Production plant	3%-3.50%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-21%
Unclassified plant	

in service 2.75%-3.50%

### (d) Operating and Construction Funds

Operating and construction funds consist primarily of temporary investments in U.S. Government and agency securities under repurchase agreements which are carried at cost and adjusted for accrued interest, which approximates market.

#### (e) Inventories

Inventories, consisting of fuel for electric generation and material and supplies, are valued at the lower of weighted average cost or market and charged to operations as used.

#### (f) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the members and credited to a capital account for each member on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to members on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of members. Neither operating nor nonoperating losses are allocated to the members.

- (g) Pension and Deferred Compensation Plans

  Big Rivers has trusteed noncontributory and contributory retirement plans covering substantially all employees. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. Big Rivers' policy is to fund annual pension and deferred compensation costs accrued. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.
- (h) Income Taxes

Big Rivers is a nonprofit corporation under the laws of the Commonwealth of Kentucky and has been granted exemptions from Federal and state income taxes.

#### (2) Rate Matters

Big Rivers is periodically granted rate adjustments based upon hearings and approval by KPSC. The following shows the effective date, amount of annual increase (computed by applying the rate increase to base year kWh sales) and base year for all increases granted since January 1, 1980:

	Amount of		
Effective	annual	Base	
date	increase	year	
	(In thousands)		
June 4, 1980	\$ 3,600	1978	
January 21, 1981	\$24,100	1979	

On August 13, 1981, Big Rivers was granted an intersystem sales adjustment credit which provided for return to its members of margins earned from intersystem sales and wheeling charges from July 1, 1981 through December 31, 1981. The total credit of \$2,834,000 was accounted for as a reduction of operating revenues in 1981.

Big Rivers' rate structure, approved by KPSC, provides for a base rate consisting of a demand charge and an energy charge. The rate structure also contains a fuel adjustment clause under which the energy charge is to be increased or decreased in each billing period to the extent that actual fuel costs and certain purchased power costs together, are greater or less than the base period costs included in the base rates. The application of the fuel adjustment clause is subject to semi-annual review by KPSC.

#### (3) Utility Plant

The following summarizes utility plant:	(In thousands)		
	1982	1981	
Classified plant in service:			
Production plant	\$429,388	427,224	
Transmission plant	23,737	21,014	
Station equipment	30,327	27,080	
General plant	9,365	7,935	
Intangible	190	119	
	493,007	483,372	
Unclassified plant in service	2,098	_	
Construction in progress	451,267	173,576	
	946,372	656,948	
Less accumulated depreciation	74,721	58,643	
	\$871,651	598,305	

Unclassified plant in service at December 31, 1982 consists primarily of transmission facilities placed in service in 1982.

Construction in progress at December 31, 1982 and 1981 consists primarily of costs associated with construction of two 440 megawatt generating units (Wilson 1 and 2) and related common area and transmission facilities. Wilson 1, including common area and transmission facilities, is currently expected to be completed in 1984 and to cost \$670 million. A completion date for Wilson 2 has not been fixed. The original expected cost of Wilson 2 was \$441 million. Estimated costs include interest charged to construction.

Commitments with vendors at December 31, 1982 for all approved construction projects total \$255.9 million, primarily in connection with Wilson 1 and related common area and transmission facilities. Approximately \$266.0 million of construction costs are expected to be incurred in 1983.

At December 31, 1982, Big Rivers has unused conditional loan commitments from REA for additional long-term financing of approximately \$873.4 million to meet approved construction projects.

Rates used for the capitalization of interest during construction in 1982, 1981 and 1980 were 13.2%, 13.5% and 10.6%, respectively.

#### (4) Deferred Charges

Deferred charges consisted of the following:	(In thous	(In thousands)		
	1982	1981		
Premium on FFB debt	\$ 4,604	_		
Panama Mine closing	2,207	3,292		
Boiler repair costs	_	1,573		
Unamortized debt expense	1,773	_		
Other	1,816	761		
	\$10,400	5,626		

On November 24, 1982, Big Rivers elected to refinance \$90 million of FFB 15.30% to 16.48% short-term mortgage notes with long-term mortgage notes at an interest rate of 10.49%. As a result of this election, Big Rivers was required to pay a premium of \$4.6 million in addition to interest accrued to the effective date of the refinancing. The premium is being amortized over the term of the long-term mortgage notes.

Panama mine closing costs are being recovered through an energy surcharge granted by the

KPSC. The costs are being amortized based on collection of the surcharge.

Big Rivers had previously deferred costs of repair parts and cost of litigation incurred in connection with legal action, as a co-plaintiff, to recover certain costs from an insurance carrier for boiler damages. In late 1981, an out of court settlement was made and all repairs to the boiler were completed in 1982.

#### (5) Long-term Liabilities

A summary of long-term liabilities follows:	(In thousa	(In thousands)	
. 0	1982	1981	
Rural Electrification Administration (REA) — 2% and 5% mortgage notes payable, maturing from April 1998 through May 2012	\$102,022	105,249	
Federal Financing Bank (FFB) — 7.51% to 14.92% mortgage notes payable, maturing January 1983 through	ψ102,022	100,240	
December 2016 County of Ohio, Kentucky, 7.25%, \$82.5 million promissory note, due	651,941	434,562	
November 1985 County of Webster, Kentucky, promissory note with variable interest rate.	82,111	_	
currently 5.61%, due April 1983 Louisville Bank for Cooperatives (LBC) — mortgage note with variable interest rate, currently 12.40%, maturing	61,000	61,000	
April 1987 Obligation under purchased power contract	4,121	5,073	
(see note 6)	34,400	36,000	
Other sundry borrowings	105	593	
Total long-term liabilities	935,700	642,477	
Less current maturities	6,733	6,961	
	\$928,967	635,516	

Included in mortgage notes payable to FFB are short-term notes aggregating \$414.7 million at December 31, 1982. The terms of the loan agreement permit Big Rivers to refinance these short-term notes with long-term borrowings. Amounts due in 1983 and 1984 are \$170.3 and \$244.4 million, respectively.

In January 1982, the County of Webster, Kentucky issued \$61 million of Pollution Control Revenue Bonds, Series 1981, the proceeds of which were loaned to Big Rivers and used to refinance the Pollution Control Interim Revenue Bonds issued by the County of Webster in November 1978. Under the Trust Indenture, Big Rivers was required to pay to the Trustee for deposit in the Interest Fund, the amount of \$1.5 million on the date of issuance of the Series 1981 Bonds and the amount of accrued interest on the first day of each month thereafter. The balance on deposit is reflected in operating funds. Pursuant to an REA loan agreement, Big Rivers has the ability to and intends to refinance this obligation with long-term borrowings.

In November 1982, the County of Ohio, Kentucky issued \$82.5 million of Pollution Control Interim Bonds, Series 1982, the proceeds of which were loaned to Big Rivers. The funds are held by a trustee until required for construction of pollution control equipment. The unused portion of the borrowed funds is reflected in construction funds. Pursuant to an REA loan agreement, Big Rivers has the ability to and intends to refinance this obligation with long-term borrowings.

The aggregate maturities of long-term liabilities (excluding those borrowings discussed above to be refinanced) for the years 1984 through 1987 are \$8.1, \$7.1, \$8.7, and \$10.4 million, respectively.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

Big Rivers has unsecured line-of-credit agreements with three banks permitting short-term borrowing for general corporate purposes totalling \$40.5 million. Rates for such borrowing are variable, with most being at the prevailing prime rate of interest. There are no borrowings under any of these agreements.

#### (6) Purchased Power

Big Rivers, under contracts with the City of Henderson, Kentucky, (City) operates the City owned 296 megawatt generating station (Station Two) and agrees to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity is currently 85% which is expected to decrease to 82% by 1987. The contracts expire in 2003. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contracts could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1982, 1981 and 1980 was approximately \$27.8, \$34.6 and \$33.0 million, respectively. Such costs are treated in the rate-making process as power purchased and interchanged, net.

### (7) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$759, \$541 and \$463 thousand in 1982, 1981 and 1980, respectively. The accumulated plan benefits and net assets as of the most recent actuarial valuation date available are as follows:

(In thousands) January 1 1982 1981 Actuarially-computed present value of accumulated plan benefits: Vested 747 \$1,119 Nonvested 195 147 894 \$1,314 Net assets available for benefits. at approximate market value \$2,476 1,713

The assumed rate of return used in determining the actuarially-computed present value of accumulated plan benefits was 6% in 1982 and 1981.

#### (8) Major Customers

The amount of energy sales to the four member distribution cooperatives were as follows:

	(In thousands)		
	1982	1981	1980
Green River Electric Corporation	\$106,689	107,318	86,155
Henderson-Union Rural Electric			
Cooperative Corporation	78,986	85,197	69,219
Meade County Rural Electric			
Cooperative Corporation	6,811	6,298	5,218
Jackson Purchase Electric	1		
Cooperative Corporation	13,162	10,295	9,914
	\$205,648	209,108	170,506

National-Southwire Aluminum Company and Atlantic Richfield Company (formerly Anaconda Aluminum) purchase substantial amounts of electric energy under contracts with members expiring in 2010. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Corporation and Henderson-Union Rural Electric Cooperative Corporation for Atlantic Richfield Company) were as follows:

	(In thousands)		
	Green River	Henderson-Union	Combined
1982	\$79,846	65,748	145,594
1981	\$84,761	73,841	158,602
1980	\$69,168	60,111	129,279

Big Rivers currently provides the power needs of Jackson Purchase Electric Cooperative Corporation through purchase power sources. On January 1, 1984, Jackson Purchase will become an average system cost member.

#### (9) Litigation

At December 31, 1982, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of all legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

## **ACCOUNTANTS' REPORT**



Certified Public Accountants 2400 First National Tower

101 South Fifth Street Louisville, Kentucky 40202 502-587-0535

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1982 and 1981 and the related statements of revenues and expenses, equities and changes in financial position for each of the years in the three year period ended December 31, 1982. Our examinations were 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1982 and 1981 and the results of its operations and the changes in its financial position for each of the years in the three year period ended December 31, 1982, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT, MARWICK, MITCHELL & CO.

January 28, 1983

# COMPARATIVE STATISTICAL ANALYSIS —

Operating Revenue         \$ 232,716,033         240,476,418         179,429,591         124,077,992           Expenses:         Operation and Maintenance Purchased Power and Interchanged, Net Depreciation and Amortization Taxes         124,675,180         120,266,830         91,232,809         53,217,700           Depreciation and Amortization Taxes         11,763,48,448         17,073,065         11,516,775         5,976,160           Taxes Other         40,467,426         37,092,495         18,528,992         4,988,213           Other         231,153,387         235,191,088         175,723,375         117,224,396           Operating Margin (Loss) Nonoperating Margin (Loss)         1,968,247         1,677,561         1,080,410         1,219,271           Net Margin (Loss)         3,530,893         451,055,98         451,265,803         3,706,216         6,853,596           Construction Work in Progress         451,265,803         173,576,481         186,458,271         283,281,046           Total Electric Plant Less Accumulated Depreciation Utility Plant Net         \$ 871,650,410         58,643,004         42,843,216         428,943,216         428,943,216         428,742,444         448,786,626         8,072,867         375,908,575         460,804,319         375,808,575         460,804,319         375,808,575         460,804,319         375,808,575<		1982	1981	1980	1979
Expenses:         Operation and Maintenance Purchased Power and Interchanged, Net Depreciation and Amortization Taxes         124,675,180         120,266,830         91,232,809         53,217,700           Depreciation and Amortization Taxes         17,548,448         17,073,065         11,516,775         5,976,160           Interest Interest Other         40,467,426         37,092,495         18,528,992         4,988,213           Other         149,400         92,954         56,197         23,017           Total         231,153,387         1,677,561         1,080,410         1,219,271           Nonoperating Margin (Loss) Nonoperating Margin (Loss)         1,968,247         1,677,561         1,080,410         1,219,271           Net Margin (Loss)         3,530,893         6,962,891         4,786,626         8,072,867           Utility Plant at Cost Cess Accumulated Depreciation Utility Plant Net         451,265,803         173,576,481         186,458,271         408,708,990           Total Assets         74,720,991         58,643,004         42,843,216         42,843,216         32,900,415           Member Maximum Demand — MW Installed Generating Capacity — Gross         1,153         1,153         911         911           Purchased Fower — HMP&L Station Two         253         253         256         255 <t< td=""><td>Operating Revenue</td><td>\$ 232,716,033</td><td>240,476,418</td><td>179,429,591</td><td>124,077,992</td></t<>	Operating Revenue	\$ 232,716,033	240,476,418	179,429,591	124,077,992
Purchased Power and Interchanged, Net Depreciation and Amortization Taxes 1,970,317 1,7073,065 11,516,775 5,976,160 17,548,448 17,073,065 11,516,775 5,976,160 17,548,448 17,073,065 11,516,775 5,976,160 1,970,317 1,817,332 1,441,297 780,799 1,982,13 1,992,954 56,197 23,017 1,562,646 1,962,891 1,9	Expenses:			, ,	, ,
Interchanged, Net   Depreciation and Amortization   Taxes   1,970,317   1,817,332   1,441,297   780,799   780,799   18,528,992   4,988,213   231,153,387   235,191,088   1,677,561   1,080,410   1,219,271   1,224,396   1,677,561   1,080,410   1,219,271   1,219,271   1,224,396   1,289,264   1,2	Operation and Maintenance	124,675,180	120,266,830	91,232,809	53,217,700
Depreciation and Amortization   17,548,448   1,7073,065   11,516,775   5,976,160   780,799   1					
Taxes	Interchanged, Net	46,342,616	58,848,412	52,947,305	52,238,507
Interest Other	Depreciation and Amortization	17,548,448	17,073,065	11,516,775	5,976,160
Other         149,400         92,954         56,197         23,017           Total         231,153,387         235,191,088         175,723,375         117,224,396           Operating Margin (Loss)         1,562,646         5,285,330         3,706,216         6,853,596           Nonoperating Margin (Loss)         1,968,247         1,677,561         1,080,410         1,219,271           Net Margin (Loss)         4,786,626         8,072,867         8,072,867           Utility Plant at Cost         495,105,598         483,371,934         186,458,271         125,427,944           Construction Work in Progress         74,720,991         58,643,004         186,458,271         125,427,944           Total Electric Plant         946,371,401         558,643,004         42,843,216         32,900,415           Less Accumulated Depreciation         \$871,650,410         598,305,411         456,904,319         375,808,575           Total Assets         \$1,029,256,522         708,233,625         560,828,507         480,817,488           Member Maximum         947         956         943         910           Installed Generating         253         253         256         255           Purchased Power — HMP&L         253         253         256	Taxes	1,970,317	1,817,332	1,441,297	780,799
Total	Interest	40,467,426	37,092,495	18,528,992	4,988,213
Operating Margin (Loss) Nonoperating Margin (Loss)         1,562,646 1,968,247         5,285,330 1,677,561         3,706,216 1,080,410         6,853,596 1,219,271           Net Margin (Loss)         \$ 3,530,893         \$ 4,677,561         1,080,410         1,219,271           Utility Plant at Cost Construction Work in Progress Total Electric Plant Less Accumulated Depreciation Utility Plant Net         445,1265,803         173,576,481         186,458,271         125,427,944           Wember Maximum Demand — MW Installed Generating Capacity — Gross Purchased Power — HMP&L Station Two         \$ 1,153         1,153         911         911           Purchased Standby Power KWh — Millions — Sales to Members Sales to Non-Members Generated HMP&L Station Two Other         6,420.88         7,482.78         7,529.34         7,029.28           Purchased HMP&L Station Two Other         1,127.18         1,822.87         1,989.04         1,931.09           System Load Factor — %         74.8         87.1         88.1         85.3	Other	149,400	92,954	56,197	23,017
Nonoperating Margin (Loss)   1,968,247   5,3530,893   3,530,893   4,786,626   3,072,867   2,83,281,046   125,427,944   4,786,626   2,83,281,046   125,427,944   4,786,626   2,83,281,046   1,219,271   2,219,271   2,219,271   3,072,867   2,219,271   3,072,867   2,219,271	Total	231,153,387	235,191,088	175,723,375	117,224,396
Net Margin (Loss)   \$ 3,530,893   \$ 6,962,891   4,786,626   8,072,867   283,281,046   451,265,803   74,720,991   58,643,004   42,843,216   32,900,415   125,427,944   12	Operating Margin (Loss)	1,562,646	5,285,330	3,706,216	6,853,596
Utility Plant at Cost   Construction Work in Progress   Total Electric Plant   Less Accumulated Depreciation   Utility Plant Net   Total Assets   Member Maximum   Demand — MW   Millions — Sales to Members   Sales to Non-Members   Sales to Non-Members   Capacity — Gross   Capac	Nonoperating Margin (Loss)	1,968,247	1,677,561	1,080,410	1,219,271
Utility Plant at Cost         \$ 495,105,598         483,371,934         313,289,264         283,281,046           Construction Work in Progress         Total Electric Plant         946,371,401         656,948,415         499,747,535         408,708,990           Less Accumulated Depreciation         74,720,991         \$8,643,004         42,843,216         32,900,415           Utility Plant Net         \$871,650,410         598,305,411         456,904,319         375,808,575           Member Maximum         947         956         943         910           Installed Generating         253         253         256         255           Purchased Power — HMP&L         253         253         256         255           Purchased Standby Power         100         100         100         100           KWh — Millions —         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         6,420.88         7,482.78         7,529.34         7,029.28           Generated         5,848.11         6,164.23         5,187.78         3,911.05           Purchased         1MP&L Station Two         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02	Net Margin (Loss)	\$ 3,530,893	6,962,891	4,786,626	8,072,867
Total Electric Plant         946,371,401         656,948,415         499,747,535         408,708,990           Less Accumulated Depreciation         \$871,650,410         \$58,643,004         42,843,216         32,900,415           Utility Plant Net         \$871,650,410         \$598,305,411         456,904,319         375,808,575           Member Maximum         947         956         943         910           Installed Generating         947         956         943         910           Purchased Power — HMP&L         253         253         256         255           Purchased Standby Power         100         100         100         100           KWh — Millions —         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Members         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         1,106.37         1,455.27         475.36         58.50           Generated         5,848.11         6,164.23         5,187.78         3,911.05           Purchased         HMP&L Station Two         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02         966.38         1,387.12 <tr< td=""><td></td><td>\$ 495,105,598</td><td></td><td></td><td></td></tr<>		\$ 495,105,598			
Total Assets   Sales to Members   Sales to Members   Sales to Non-Members   Generated   HMP&L Station Two   Other   System Load Factor — %   System Load Factor — %   Station Two   Other   System Load Factor — %   Station Two   Station Two   System Load Factor — %   Sales to Members   Station Two   System Load Factor — %   Sales to Members   System Load Factor — %   Station Two   St	Construction Work in Progress	451,265,803	173,576,481	186,458,271	125,427,944
Sample   S	Total Electric Plant	946,371,401	656,948,415	499,747,535	408,708,990
Total Assets         \$1,029,256,522         708,233,625         560,828,507         480,817,488           Member Maximum Demand — MW         947         956         943         910           Installed Generating Capacity — Gross         1,153         1,153         911         911           Purchased Power — HMP&L Station Two         253         253         256         255           Purchased Standby Power KWh — Millions — Sales to Members         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         1,106.37         1,455.27         475.36         58.50           Generated HMP&L Station Two Other         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02         966.38         1,387.12           System Load Factor — %         74.8         87.1         88.1         85.3	Less Accumulated Depreciation	74,720,991	58,643,004	42,843,216	32,900,415
Member Maximum         947         956         943         910           Installed Generating         Capacity — Gross         1,153         1,153         911         911           Purchased Power — HMP&L Station Two         253         253         256         255           Purchased Standby Power         100         100         100         100           KWh — Millions —         5ales to Members         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         1,106.37         1,455.27         475.36         58.50           Generated         5,848.11         6,164.23         5,187.78         3,911.05           Purchased         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02         966.38         1,387.12           System Load Factor — %         74.8         87.1         88.1         85.3		\$ 871,650,410	598,305,411	456,904,319	375,808,575
Demand — MW       947       956       943       910         Installed Generating Capacity — Gross       1,153       1,153       911       911         Purchased Power — HMP&L Station Two       253       253       256       255         Purchased Standby Power KWh — Millions — Sales to Members       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members Sales to Non-Members Generated Furchased HMP&L Station Two Other Station Two Other System Load Factor — %       1,127.18       1,822.87       1,989.04       1,931.09         System Load Factor — %       74.8       87.1       88.1       85.3	Total Assets	\$1,029,256,522	708,233,625	560,828,507	480,817,488
Installed Generating       Capacity — Gross       1,153       1,153       911       911         Purchased Power — HMP&L       253       253       256       255         Purchased Standby Power       100       100       100       100         KWh — Millions —       5ales to Members       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members       1,106.37       1,455.27       475.36       58.50         Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3	Member Maximum				
Capacity — Gross       1,153       1,153       911       911         Purchased Power — HMP&L Station Two       253       253       256       255         Purchased Standby Power KWh — Millions — Sales to Members       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members Generated Purchased HMP&L Station Two Other       5,848.11       6,164.23       5,187.78       3,911.05         Purchased HMP&L Station Two Other System Load Factor — %       1,127.18       1,822.87       1,989.04       1,931.09         System Load Factor — %       74.8       87.1       88.1       85.3	Demand — MW	947	956	943	910
Purchased Power — HMP&L         253         253         256         255           Purchased Standby Power         100         100         100         100           KWh — Millions —         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Members         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         1,106.37         1,455.27         475.36         58.50           Generated         5,848.11         6,164.23         5,187.78         3,911.05           Purchased         HMP&L Station Two         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02         966.38         1,387.12           System Load Factor — %         74.8         87.1         88.1         85.3	Installed Generating				
Station Two         253         253         256         255           Purchased Standby Power         100         100         100         100           KWh — Millions —         5ales to Members         6,420.88         7,482.78         7,529.34         7,029.28           Sales to Non-Members         1,106.37         1,455.27         475.36         58.50           Generated         5,848.11         6,164.23         5,187.78         3,911.05           Purchased         HMP&L Station Two         1,127.18         1,822.87         1,989.04         1,931.09           Other         681.21         1,097.02         966.38         1,387.12           System Load Factor — %         74.8         87.1         88.1         85.3	Capacity — Gross	1,153	1,153	911	911
Purchased Standby Power       100       100       100       100         KWh — Millions —       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Members       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members       1,106.37       1,455.27       475.36       58.50         Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3	Purchased Power — HMP&L				
KWh — Millions —       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members       1,106.37       1,455.27       475.36       58.50         Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3		253	253	256	255
Sales to Members       6,420.88       7,482.78       7,529.34       7,029.28         Sales to Non-Members       1,106.37       1,455.27       475.36       58.50         Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3		100	100	100	100
Sales to Non-Members       1,106.37       1,455.27       475.36       58.50         Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3					
Generated       5,848.11       6,164.23       5,187.78       3,911.05         Purchased       HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3		1	7,482.78	7,529.34	7,029.28
Purchased       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3	Sales to Non-Members	1,106.37	1,455.27	475.36	58.50
HMP&L Station Two       1,127.18       1,822.87       1,989.04       1,931.09         Other       681.21       1,097.02       966.38       1,387.12         System Load Factor — %       74.8       87.1       88.1       85.3	Generated	5,848.11	6,164.23	5,187.78	3,911.05
Other         681.21         1,097.02         966.38         1,387.12           System Load Factor — %         74.8         87.1         88.1         85.3					<b>\</b>
System Load Factor — % 74.8 87.1 88.1 85.3		1,127.18	1,822.87	1,989.04	1,931.09
			1,097.02	966.38	
Employees at Year-End         680         667         622         555	•	74.8	87.1	88.1	85.3
	Employees at Year-End	680	667	622	555



### TEN-YEAR SUMMARY

1978	1977	1976	1975	1974	1973	
117,873,040	87,745,285	60,926,026	51,532,866	46,377,266	29,276,253	
52,753,054	43,278,427	33,055,570	24,107,293	21,959,599	16,606,564	
49,559,041	32,249,409	29,012,642	22,266,033	19,584,733	6,758,852	
5,111,273	4,444,813	3,274,979	3,011,521	3,011,133	2,943,896	
712,919	631,557	565,273	564,348	524,148	503,831	
3,808,979	3,206,173	2,611,967	2,188,085	2,132,974	2,077,876	
25,940	5,290	31,733	35,950	41,530	42,540	
111,971,206	83,815,669	68,552,164	52,173,230	47,254,117	28,933,559	
5,901,834	3,929,616	(7.626,138)	(640,364)	(876,851)	342,694	
620,969	144,720	(171,552)	(48,483)	152,872	178,094	
6,522,803	4,074,336	(7,797,690)	(688,847)	(723,979)	520,788	
130,333,952	124,665,252	122,471,149	112,031,490	110,330,152	108,435,060	
157,127,012	57,229,121	12,343,345	10,734,956	2,512,887	3,561,570	
287,460,964	181,894,373	134,814,494	122,766,446	112,843,039	111,996,630	
28,361,983	24,534,449	21,008,189	17,766,620	15,004,180	12,246,142	
259,098,981	157,359,924	113,806,305	104,999,826	97,838,859	99,750,488	
374,646,226	226,712,745	174,716,621	120,326,021	113,833,594	111,280,099	
819	820	790	748	737	722	
669	669	669	669	603	603	
262	262	267	271	283	162	
100	100	100	100	100	100	
6,526.85	6,189.32	5,920.81	5,703.45	5,778.23	4,873.24	
79.39	59.54	3.87	129.17	219.70	106.90	
3,678.16	3,711.16	3,215.64	3,644.96	3,834.79	3,800.29	
1,805.31	1,855.88	1,736.04	1,675.03	1,904.61	837.33	
1,253.09	814.89	1,092.25	614.44	367.85	449.84	
87.5	87.7	87.3	88.9	91.2	78.7	
488	401	346	246	239	221	



### **CORPORATE DIRECTORY**

DIRECTORS — (Three from each member cooperative)

### **Green River Electric Corporation**



Texal Brooks

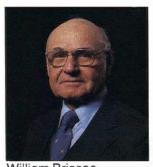


J. Edward Delker

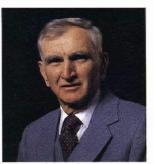


Edward F. Johnson

### Henderson-Union Rural Electric Cooperative Corporation



William Briscoe



Morton Henshaw



C. G. Truitt

### Meade County Rural Electric Cooperative Corporation



John C. Burnett



J. D. Cooper



William Seaton

### **Jackson Purchase Electric Cooperative Corporation**



Stanley Jones



Edwin L. Reid



Harvey Sanders



W. H. Thorpe General Manager



Paul A. Schmitz Assistant General Manager

OFFICERS Morton Henshaw President

Texal Brooks
Vice President

William B. Briscoe Secretary-Treasurer

William E. Seaton Assistant Secretary-Treasurer

GENERAL MANAGER W. H. Thorpe

ASSISTANT GENERAL MANAGER
Paul A. Schmitz

VICE GENERAL MANAGERS Robert F. Burkard Energy Supply

Ronald G. Hollander Finance

Ronald W. Johnson Corporate Services and Labor Relations

Floyd L. Mitchell Production/Construction

B. Scott Reed Engineering

W. Hayden Timmons
Environmental and Public Affairs

MANAGERS
Don E. Augenstein
General Services

Gregory F. Black Environmental Affairs

Joe L. Craig Fuels

J. E. Dolezal Energy Control

James V. Haner Accounting

Don C. Mann Purchasing

Tom Millay Personnel

Earl A. Millspaugh Operations and Maintenance

James H. McIllwain Construction

David E. Schultz
System Planning and
Design Engineering

Phil Waggoner Electronic Data Processing

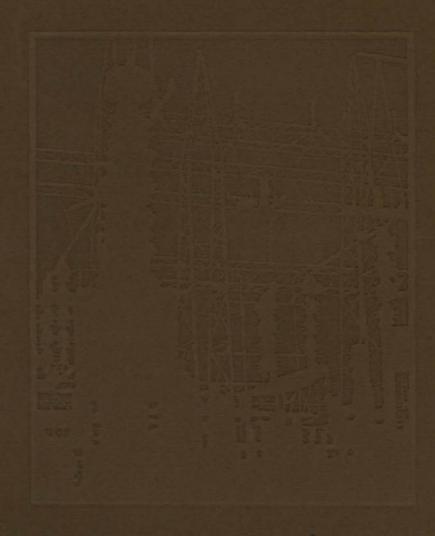
CORPORATE ATTORNEY
Morton Holbrook
General Counsel
Holbrook, Gary
Wible & Sullivan, P.S.C.
Owensboro, Kentucky

CORPORATE AUDITORS
Peat, Marwick, Mitchell & Co.
Louisville, Kentucky



Post Office Box 24 201 Third Street Henderson, Kentucky 42420 (502) 827-2561

# BIG RIVERS



1981 Annual Report

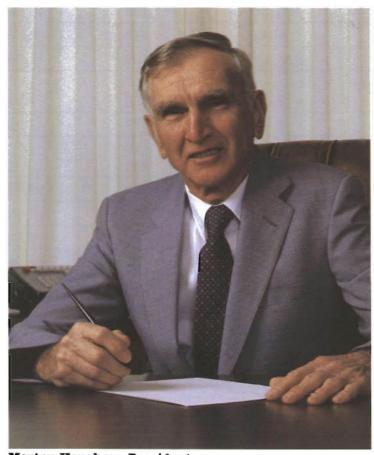
# Financial Highlights

### (Dollars In Thousands)

	1981	1980	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	240,476	179,430	61,046	34.0
Operating Expenses	198,005	157,138	40,867	26.0
Net Margins	6,963	4,787	2,176	45.5
Construction Expenditures	157,389	83,609	73,780	88.2
Energy Sales (Megawatt Hours): A. To Members	7,483	7,529	(46)	(.6)
B. Intersystem	1,455	475	980	206.3
System Peak Demand in Megawatts	956	943	13	1.4
Cost of Fuel Used in Generation	87,409	68,940	18,469	26.8
Assets	708,234	560,829	147,405	26.3
Accumulated Margins and Equity	24,284	16,706	7,578	45.4
Employees Full Time	667	622	45	7.2
Revenue Per kWh Sold (Mills)	26.87	22.41	4.46	19.9

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Morton Henshaw, President

As President and Lleneral
Manager it is our privilege
to prisent Big Rivers Electric
Corporation's 1981 Annual Report.
Our joint report typifies
the close relationship
Big Rivers feels toward its
service area.
Big Rivers Electric Corporation
began as a solution to providing



W. H. Thorpe, General Manager

rural electric cooperatives in western Kentucky with a stable and low-cost source of electricity.

More than two dicades later, with three power plants in operation and another one under construction, Big Rivers is providing reliable power and continuing to keep wholesale power cost reasonable.

## A Positive Sense of Direction





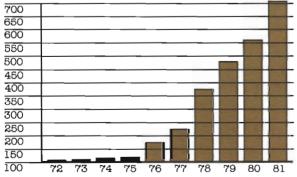
During 1981, Big Rivers continued meeting those twin goals. This year Big Rivers sold 7,482,777,682 kWh to its four distribution cooperatives—Green River Electric Corporation, Henderson-Union Rural Electric Cooperative Corporation, Jackson Purchase Electric Cooperative Corporation and Meade County Rural Electric Cooperative Corporation. Additionally, 1,455,268,000 kWh were sold as intersystem sales to interconnected electric utilities.

With the impact of inflation touching every facet of the American economy, utilities certainly have not been exempt from increased costs. However, prudent planning, wise expenditures, flexible investment programs and conscientious employees were contributing factors in realizing net margins of \$6,962,891 as compared to \$4,786,626 for 1980. Big Rivers in 1981 had operating revenues totalling \$240,476,418 or \$61,046,827 higher than the previous year. Effective January 21, 1981, a 16.7 percent general rate increase, or \$24 million based on 1979 sales, was granted by the Kentucky Public Service Commission (PSC). The increase was approved to coincide with the commercialization of the Robert D. Green Plant Unit No. 2. Other factors responsible for additional 1981 revenues were increased fuel costs and intersystem sales.

In times when both business and individual budgeting skills are being critically tested, it was more than satisfying when Big Rivers was able to credit to the distribution cooperatives more than \$2.8 million in margins from sales of power to other utilities. Aggressive marketing of available reserve capacity coupled with unexpected

### Total Assets

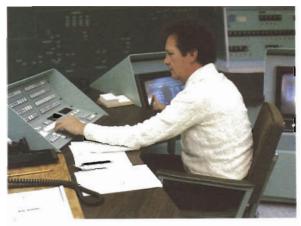




power requirements by other utilities resulted in Big Rivers' ability to sell much greater amounts of power outside the system than had been anticipated. With approval by the Kentucky PSC, the member-cooperatives passed along this refund dollar for dollar to their consumer-members.

On February 11, 1981, at 7 p.m., a new system coincidental peak of 956 megawatts (MW) was reached; this compared to the previous year's system peak of 943 MW.

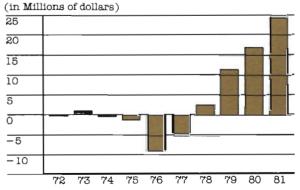
We are pleased to report that the January 19, 1981, commercialization of Green Unit No. 2 increased Big Rivers' nameplate generating capacity to 1,507 MW and brought needed reserves to the system. All of our generating units are coal-fired steam plants except for one 66 MW oil-fired unit used only for peaking and emergency. Big Rivers maintains a contract with Southeastern Power Administration (SEPA) for the purchase of 40 MW of peaking capacity and 100 MW of standby capacity which is shared with two other generating and transmission systems. Also, Big Rivers has interconnection agreements with the following utilities: Henderson Municipal Power & Light; Southern Illinois Power Cooperative; East Kentucky Power Cooperative; Louisville Gas and Electric Company: Southern Indiana Gas and Electric Company: Kentucky Utilities Company; and Hoosier Energy Division of Indiana Statewide REC, Inc. The corporation has a contract with the Tennessee Valley Authority (TVA) for the sale of surplus energy. In addition, we maintain a contract with TVA for wheeling power through the TVA system to South Mississippi Electric Power Association and Alabama Electric Cooperative.



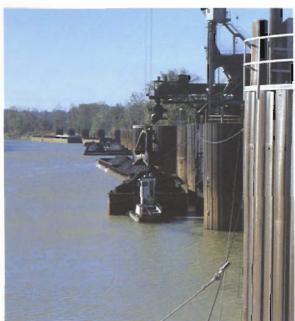












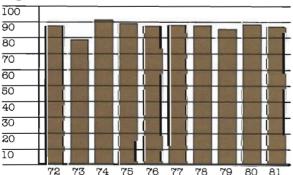
To meet the demand made on the generating units during the year, Big Rivers consumed approximately 3.9 million tons of coal to produce electricity.

Over 88 percent of the coal received was purchased under long-term contracts. The largest receipts were from MAPCO, Inc., from mines in western Kentucky. MAPCO and Peabody Coal Company were the primary suppliers of coal for the Green plant, which is equipped with scrubbers to use high sulfur coal. Coal of lower sulfur content, necessary to meet air pollution control requirements at the Kenneth C. Coleman Plant and the Robert A. Reid Plant and Henderson Municipal Power and Light (HMP&L) Station Two, came largely from other suppliers in Kentucky, Indiana and Ohio.

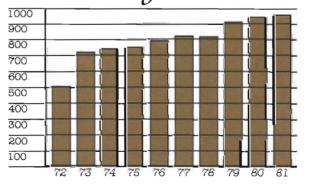
The average cost of coal used in generation was \$28.26 per ton, or 132.9¢ per million BTU compared to \$26.14 per ton, or 123.5¢ per million BTU in 1980. This increase in coal costs was due largely to higher costs of mining and transporting coal, including the labor cost increases resulting from the United Mine Workers of America (UMWA) contract settlement. Another contributing factor was the expiration of one of the low-cost, long-term contracts with Peabody Coal Company.

At the beginning of 1981, Big Rivers was well along in building up additional coal inventory at its power plants in preparation for the nationwide UMWA strike which began on March 27 and lasted until June 6. Big Rivers was able to maintain adequate coal supplies and provide uninterrupted, dependable service to its members.

System Load Factor -- Percent



Demand-Megawatts



We believe it is important to point out that through the years, Big Rivers' positive influence in western Kentucky has been visible. Its ability to offer low-cost power was decisive in attracting and keeping large industries in western Kentucky, bringing jobs and economic stability to this part of the state. Because of its large industrial load, Big Rivers this year maintained a load factor of 87.1 percent and was able to keep its average system cost of power down.

During 1981, our member cooperatives completed new power requirements studies to project their systems' electric needs through 1990. Big Rivers' engineers consolidated these studies and extended the forecast to 1995. Because results indicated a rural growth rate of about 4 percent while prior studies had predicted nearly a 10 percent growth rate, the D. B. Wilson Plant Unit No. 2, scheduled for completion in 1986, was delayed.



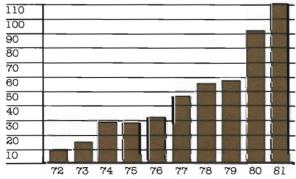




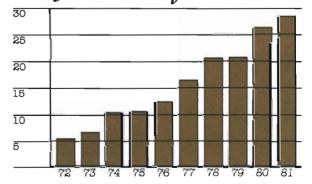




(in Millions of dollars)
\*Includes Big Rivers' Cost of HMP&L Station Two



### Average Cost Per Ton of Coal Used







These load estimates make no provisions for possible construction of four large synthetic fuel plants or other major industrial expansion being considered within the distribution members' service area. Reduction in government funds allocated to the development of synthetic fuel production and the possible elimination of any federal financial assistance leave the future uncertain. Should any of the proposed synthetic fuel plants be built, added electric power requirements could necessitate resuming the earlier construction of Wilson Unit No. 2.

Ground was broken for the new Wilson power plant in June of 1980. Construction of Unit No. 1, a 440 MW unit to be operational in July 1984, progressed slightly ahead of schedule during 1981. Even with a temporary slowdown due to near record rainfall during the spring, by the end of December construction was two weeks ahead of the timetable.

While construction of Unit No. 1 was taking place, other projects relating to the commercialization of Wilson were under way.

A \$3.1 million expansion of and improvement in the existing microwave system has been undertaken to provide a reliable communications link to the Wilson plant and to the Jackson Purchase ECC when it is added to our system in January 1984. Due to be completed the last quarter of 1982, the new microwave network will provide an alternate routing system, or loop, as well as allowing for expansion to Wilson and to the Jackson Purchase ECC.

Economic studies were completed to determine the voltage level, structure types and conductor size for the new Reid-to-Wilson-to-Coleman transmission line. The studies determined that this line be initially energized at

345~kV, the first 345~kV transmission system development for Big Rivers. Design work was begun for the 345/161~kV substations at Reid and Coleman plants which are required to interconnect the 345~kV line to the existing transmission system.

Also, planning and designing of facilities to serve Jackson Purchase continued during 1981. More than 39 miles of 161 kV and 60 miles of 69 kV transmission lines, as well as substations in Livingston and McCracken counties, will be required to serve the Jackson Purchase load.

Through 1981, about 60 percent of the right-of-way easements had been acquired, 95 percent of the engineering survey was completed and 75 percent of the line design was finished.

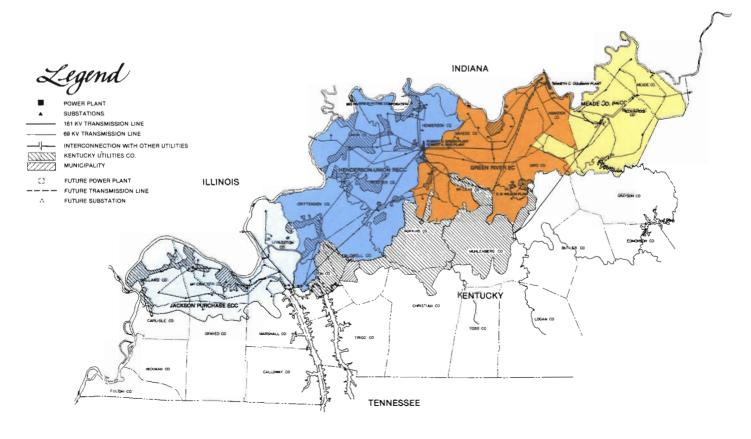
A 161 kV line terminal was added to the Hardinsburg Substation during the year to feed approximately 17 miles of 161 kV transmission line to serve the new Meade County 161/69 kV, 50 MVA substation. The engineering design of all of these facilities and the construction of both substations were accomplished with Big Rivers' own personnel, saving \$700,000.





11







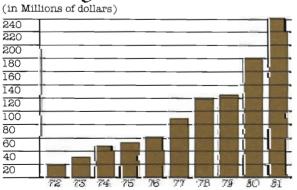


The maintenance of equipment continues to receive special emphasis, and again this year all generating units underwent scheduled two-week outages in both the spring and fall for routine maintenance. Also, Coleman Nos. 1 and 2 underwent turbine overhauls.

A \$7 million out-of-court settlement with Home Insurance Company was reached on a lawsuit filed by Big Rivers and the City of Henderson. The legal action was taken by Big Rivers and the City of Henderson to recover damages to the boiler of HMP&L Station Two Unit No. 1 which was overheated during a start-up in 1974. In the spring of 1981 the court ruled in favor of the plaintiffs and awarded \$5.6 million for repair costs and \$2.3 million in interest. Home appealed the award to the Sixth Circuit Court of Appeals in Cincinnati where it remained pending until settlement was reached. The unit is scheduled for remedial work beginning on April 1, 1982, which will require approximately 34 weeks to complete.

The dredging of the Reid/HMP&L ash pond began in late summer and ended in December. After constructing an ash disposal area within the Green plant landfill, ash from the Reid/HMP&L ash pond was pumped to this new area. The cost of this project was \$1.3 million. The dredging allows the continued use of the existing ash pond.

### Operating Revenues



The transmission mapping system, begun in 1980, is approximately 50 percent complete and will locate all Big Rivers' transmission structures and lines on a topographic map. This system will ease maintenance and emergency operations by expediting the locating of facilities on which repairs should be made.

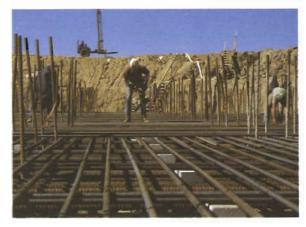
A computerized equipment list is being developed to show nameplate information, recommended spare parts, and suggested maintenance for each major piece of equipment for every substation. Eventually, the maintenance history and inventory of replacement parts will be added to this list, thereby increasing our ability and efficiency in servicing equipment and stocking replacement parts.

The 1980s find this corporation highly automated, technologically sophisticated and carefully computerized; yet our ability to operate at capacity is enhanced with dedicated employees throughout.

Total full-time employment of 667 at year's end, a 7.2 percent increase over 1980, reflected steady growth. Most of the added employees were needed to oversee the construction of the new power plant and to respond to increasing governmental regulations.

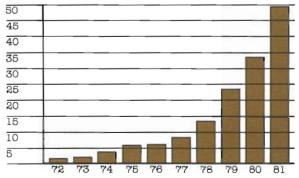


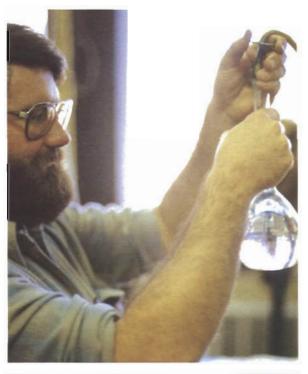




### Long-Term Interest Cost \*

(in Millions of dollars)
\*Includes Big Rivers' cost of HMP&L Station Two







Big Rivers is dedicated to its policy of taking affirmative action in the employment of all individuals. The corporation has established objectives which direct management to accomplish these equal opportunity goals of continued utilization of the human resources available in the communities in which we serve.

This year, more than 450 employees participated in training programs designed to improve immediate and long-range career development. Big Rivers also offers tuition reimbursement; over 100 employees pursued individual training at area technical schools and colleges to study subjects related to their jobs and careers.

On March 17, a 42-month contract between Big Rivers and Local 1701 of the International Brotherhood of Electrical Workers (I.B.E.W.) expired. Following a five-week strike, on April 23 a new no-strike, no-lockout contract was finalized. The agreement covers approximately 400 operation and maintenance employees who are located primarily in the generation and transmission departments. During the five-week strike, Big Rivers' supervisory and administrative personnel manned the operations and provided continued uninterrupted service. The new three-year contract will remain in effect until April 22, 1984.

In meeting the power requirements of its four distribution cooperatives and the 70,000 consumer-members they serve, Big Rivers recognizes its responsibility to maintain clean air and clean water.

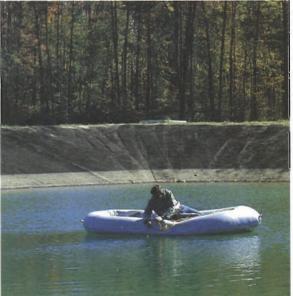
This year our Environmental Affairs Department received full departmental status, and several new programs were initiated. Among them were:

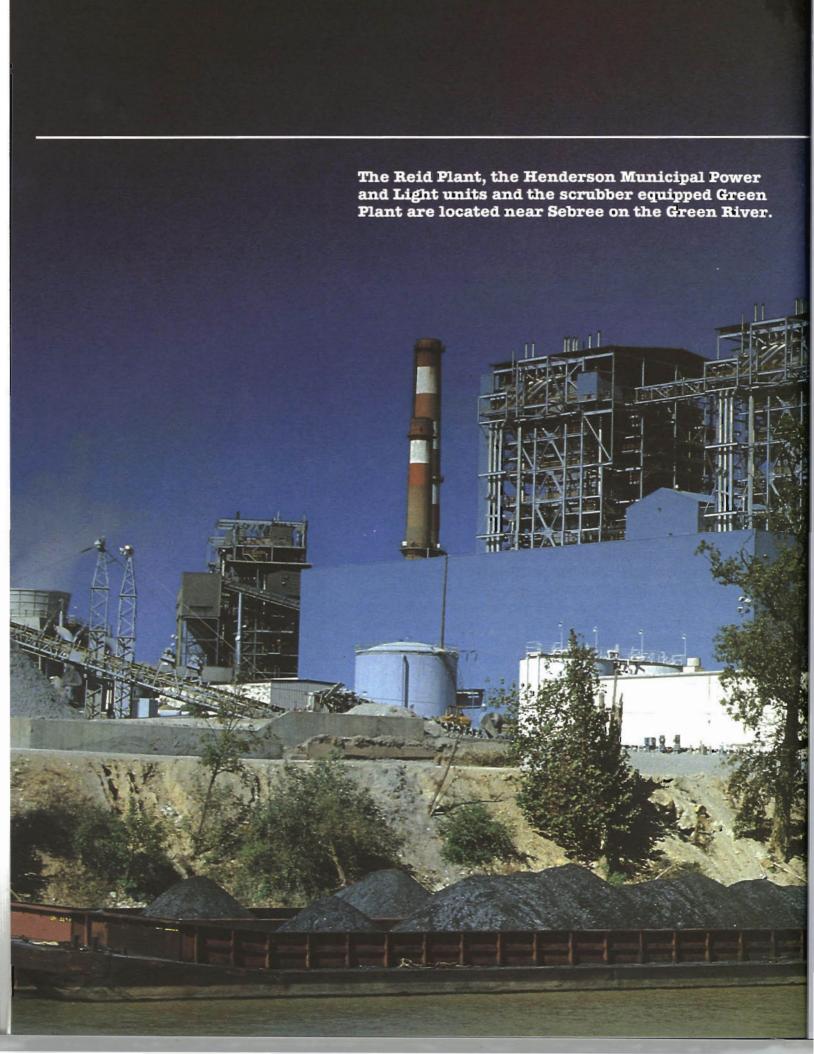
- utilization of quality assurance procedures.
- more frequent site inspections to guarantee compliance with permit requirements.
- refining and updating oil spill and polychlorinated biphenyl (PCB) control plans.
- completed the Borrower's Environmental Report on the microwave communications system.

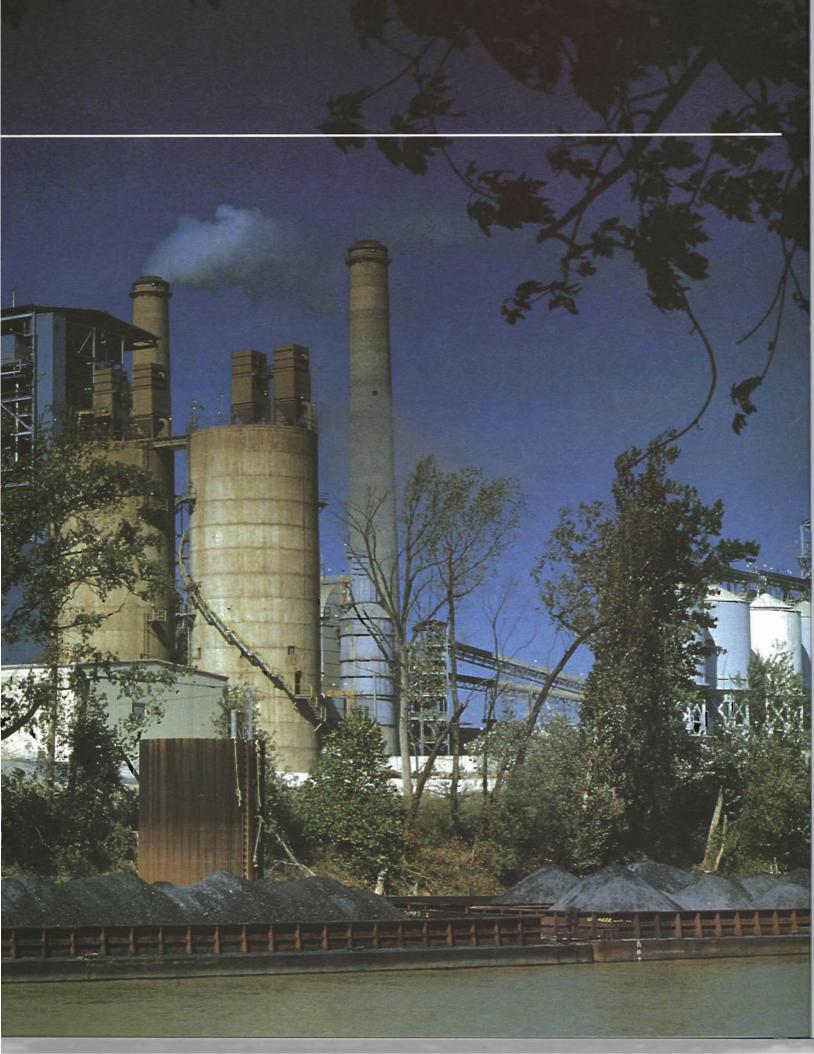
Meeting the state and federal environmental laws and regulations is very expensive, and the cost continues to escalate. However, results from a member survey of Big Rivers' cooperatives and conclusions from a nationwide Harris poll concur that Americans are willing to pay the price for keeping the environment clean.

On January 8, 1982, the County of Webster, Kentucky, successfully issued \$61 million of Series 1981 Pollution Control Revenue Bonds to refinance \$61 million Series 1978 Interim Pollution Control Revenue Bonds which matured. The proceeds of the Series 1978 bonds were loaned by the county to Big Rivers Electric Corporation and were used by the corporation to pay the cost of certain pollution control facilities at the Green plant located in Webster County. The plant was commercialized on January 19, 1981. The Series 1981 bonds will mature April 1, 1983, and will bear interest payable semi-annually at a rate which will float on a weekly basis and will be equal to 68 percent of the average per annum coupon equivalent of the discount rate at which 13-week United States Treasury Bills are sold during each week. The Series 1981 issue was given a MIG-1 rating by Moody's and was purchased by tax exempt mutual funds. This refinancing was approved by the Kentucky PSC and the Rural Electrification Administration. It is the corporation's intention to refinance this issue before April 1, 1983, with long-term borrowings.









# Recapping the Highlights

We look back at 1981 with pride in the accomplishments our corporation made. In recapping the highlights, Big Rivers sold record amounts of power, refunded money to the member distribution cooperatives, hit a new peak, maintained a high availability factor of its generating units, provided uninterrupted service during both the coal miners' and the I.B.E.W. strikes, and construction of our new power plant ran ahead of schedule. All in all it was an excellent year.

The challenge of 1982, and indeed for this decade, will be a constant battle to keep rates as low as possible while supplying dependable electric power. The Big Rivers' Board of Directors and Management look forward to meeting that responsibility.

Morton Henshaw President

Motor Kenshow

W. H. Thorpe

W. H. Thorpe General Manager



# Statements of Revenues and Expenses

For the years ended December 31, 1981 and 1980	(Dollars in Thousand	
	1981	1980
Operating revenues (notes 2, 5 and 9)	\$240,476	179,430
Operating expenses: Operations:		
Fuel for electric generation	86,270	68,021
Power purchased and interchanged, net	58,848	52,947
Other	19,777	13,361
Maintenance	14,220	9,851
Depreciation	15,798	10,240
Amortization of Panama Mine abandonment (note 4)	1,275	1,277
Taxes	1,817	1,441
Total operating expenses	198,005	157,138
Electric operating margins	42,471	22,292
Interest and other deductions:		
Interest	48,626	31,655
Allowance for funds used during construction	(11,533)	(13,126)
Other deductions	93	56
Total interest and other deductions	37,186	18,585
Operating margins	5,285	3,707
Nonoperating margins—interest	1,598	1,017
Other capital credits and patronage allocations	80	63
Net margins	\$ 6,963	4,787

# Statements of Lquities

For the years ended December 31, 1981 and 1980			(Dollars in Thousands)	
<del></del>		-	Other e	quities
	Total equities	Patronage capital	Donated capital and memberships	Consumers' contributions to debt service
Balance at December 31, 1979	\$11,303	9,605	495	1,203
Margins for 1980: Operating	3,707	3,707	_	_
Other capital credits and patronage allocations	63	63	_	_
Nonoperating	1,017	1,017	_	
Capital surcharge	616		75	541
Balance at December 31, 1980	16,706	14,392	570	1,744
Margins for 1981: Operating	5,285	5,285	_	_
Other capital credits and patronage allocations	80	80	_	_
Nonoperating	1,598	1,598	_	
Capital surcharge	615		74	541
Balance at December 31, 1981	\$24,284	21,355	644	2,285

### Balance Sheets

Agget	-

December 31, 1981 and 1980	(Dollars in Thousands)	
	1981	1980
Utility plant, net (note 3)	\$598,305	456,904
Productive capacity under purchased power contract (note 7)	36,000	37,500
Investments in associated companies and other	2,115	1,725
Current assets: Operating funds: Cash	254	356
Temporary investments	9,132	151
Construction funds—cash	40	6
Receivables	22,553	19,017
Inventories: Fuel for electric generation	26,942	31,493
Material and supplies	7,267	5,773
Other current assets	29	1,003
Total current assets	66,217	57,799
Deferred charges (note 4)	5,597	6,901
	\$708,234	560,829

### Equities and Liabilities

Capitalization:		
Equities	\$ 24,284	16,706
Long-term liabilities, net of current maturities (note 5)	635,516	473,046
Total capitalization	659,800	489,752
Current liabilities: Notes payable to banks (note 6)		20,500
Current maturities of long-term liabilities (note 5)	6,961	7,812
Accounts payable	36,541	38,675
Accrued expenses	4,492	3,716
Total current liabilities	47,994	70,703
Deferred credits	440	374
Commitments and contingencies (notes 3, 4 and 10)		
	\$708,234	560,829

See accompanying notes to financial statements.

# Statements of Changes in Financial Position

For the years ended December 31, 1981 and 1980	(Dollars	in Thousands)
	1981	1980
Sources of working capital:		
Net margins	\$ 6,963	4,787
Items which do not use (provide) working capital:	15 700	10.040
Depreciation of utility plant  Amortization of Panama Mine abandonment	15,798	10,240
	1,275	1,277
Amortization of Peabody Coal Company arbitration award	719	3,842
Other amortization and depreciation	190	219
Allowance for funds used during construction	(11,533)	(13,126)
Working capital provided by operations	13,412	7,239
Long-term borrowings	169,486	51,138
Increase in deferred credits	66	56
Additions to equities other than margins	615	616
Decrease in working capital		24,597
	\$183,579	83,646
Uses of working capital: Additions to utility plant, less allowance for funds used during construction	145,856	70 492
Reduction of long-term debt	5,516	70,483
Increase in investments in associated companies and other	390	445
Increase in deferred charges	690	
Increase in working capital		5,192
Increase in working capital	\$1,127 \$183,579	83,646
Changes in components of working capital: Increase (decrease) in current assets: Operating funds: Cash	(102)	122
Temporary investments	8,981	_
Construction funds:	8,361	(3,059)
Cash	34	(25)
Temporary investments		(16,748)
Receivables	3,536	3,983
Inventories:	·	
Fuel for electric generation	(4,551)	10,030
Material and supplies	1,494	1,638
Other current assets	(974)	704
	8,418	(3,355)
Increase (decrease) in current liabilities: Notes payable to banks	(20,500)	20,500
Current maturities of long-term liabilities	(851)	(2,018)
Accounts payable	(2,134)	2,126
Accrued expenses	776	634
	(22,709)	21,242
Increase (decrease) in working capital	\$ 31,127	(24,597)

December 31, 1981 and 1980

#### (1) Summary of Significant Accounting Policies

### (a) General Information

Big Rivers Electric Corporation (Big Rivers) is a not-for-profit electric generation and transmission cooperative association engaged in supplying electric power to four electric distribution cooperatives (members). The members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its members which require the members to buy and receive from Big Rivers all their power and energy requirements and require Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the members extend to the year 2023. Rates to its members are set on a cost of service basis and are subject to approval by the Kentucky Public Service Commission (KPSC) and the United States Department of Agriculture Rural Electrification Administration (REA).

The primary source of borrowed funds for Big Rivers is the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers. Big Rivers expects to utilize the REA guaranteed loan program to finance all of the planned expansion costs, except the costs of pollution control equipment which is being financed out of present or intended future borrowings. At December 31, 1981, REA has issued conditional loan guarantee commitments to finance the cost of approved utility plant expansion.

(b) System of Accounts Big Rivers maintains its accounts on an accrual basis and follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by REA and KPSC. The regulatory agencies retain authority and periodically issue orders on various accounting and rate-making matters.

#### (c) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Allowance for funds used during construction is included on projects with an estimated total cost of \$250,000 or more before consideration of the allowance. The interest capitalized is determined by applying the weighted average annual effective rate of borrowings outstanding during the period to qualifying assets included in construction in progress. Capitalization of interest is discontinued when the project is completed and the asset is placed into service.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Depreciation rates were as follows for 1981 and 1980:

Production plant 3%-3.50%
Transmission plant 2.75%
Station equipment 2.75%
General plant 2%-21%
Unclassified plant in service 2.75%-3.50%

### (d) Temporary Investments

Temporary investments consist of U. S. Government securities under repurchase agreements which are carried at cost and adjusted for accrued interest, which approximates market.

### (e) Inventories

Inventories are valued at the lower of weighted average cost or market. Fuel for electric generation is charged to expense as used.

### (f) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the members and credited to a capital account for each member on a patronage basis. Nonoperating margins shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to members on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of members. Neither operating nor nonoperating losses are allocated to the members.

### (g) Pension and Deferred Compensation Plans

Big Rivers has trusteed noncontributory and contributory retirement plans covering substantially all employees. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. Big Rivers' policy is to fund annual pension and deferred compensation costs accrued. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

### (h) Income Taxes

Big Rivers is a not-for-profit corporation under the laws of the Commonwealth of Kentucky and has been granted exemptions from Federal and state income taxes.

### (i) Fiscal Policies

In 1980, the Board of Directors of Big Rivers adopted a series of fiscal policies which serve as a guideline for future financial planning and current operations. The fiscal policies address a variety of factors including target coverage ratios, capital financing, annual net margin targets, equity accumulation, financial forecasts, reserves and capital credit rotation and allocation. These fiscal policy objectives are affected by periodic rate adjustment authorizations by REA and KPSC.

### (2) Rate Matters (a) General Matters

Big Rivers is periodically granted rate adjustments based upon hearings and approval by KPSC. Increases since January 1, 1980 are as follows:

	Amount of	
Effective date	annual increase	Basis
June 4, 1980	\$ 3,600,000	1978 kWh sales
January 21, 1981	24,100,000	1979 kWh sales

On August 13, 1981, Big Rivers was granted an intersystem sales adjustment credit which provided for return to its members of margins earned from intersystem sales and wheeling charges from July 1, 1981 through December 31, 1981. The total credit of \$2,834,000 was accounted for as a reduction of operating revenues in 1981.

#### (b) Uniform Fuel Adjustment Clause

The rate structure includes a fuel adjustment clause. Prior to January 21, 1981, the clause provided that the fuel and certain purchased power costs in excess of 1978 base costs would be reflected in power billings as a fuel adjustment. With the revision of the fuel adjustment clause in 1978, KPSC authorized Big Rivers to continue the use of a Purchased Power Adjustment Clause which permitted the recovery of purchased power costs, net of intersystem sales and amounts includable in the fuel adjustment clause.

Effective January 21, 1981, costs subject to the fuel adjustment clause were those fuel and certain purchased power costs in excess of 1979 annualized base period costs, and the purchased power adjustment clause was eliminated.

Effective April 1, 1981, costs subject to the fuel adjustment clause were those fuel and certain purchased power costs in excess of November 1980 base period costs.

### (c) Energy Surcharge

In June 1977, the KPSC granted Big Rivers an energy surcharge of .322 mills per kWh for a period not to exceed ten years to provide for: (1) repayment of the cost of the Panama Mine settlement; (2) repayment of \$3.7 million of loan proceeds from the Louisville Bank for Cooperatives (LBC); and (3) a required commitment to purchase \$526 thousand of the "Class C" stock of LBC. Present annual kWh sales are more than adequate to provide revenues necessary to meet these requirements.

#### (3) Utility Plant

The following summarizes utility plant:	(Dollars	in Thousands)
	1981	1980
In service: Production plant	\$427,224	104,669
Transmission plant	21,014	19,978
Station equipment	27,080	20,054
General plant	7,935	3,563
Intangible	119	67
Unclassified plant in service	483,372	148,331 164,958
Construction in progress	173,576	186,458
Less accumulated depreciation	656,948 58,643 \$598,305	499,747 42,843 456,904

Unclassified plant in service at December 31, 1980 consisted primarily of costs associated with a 240 megawatt generating unit (Green 1) placed in service in December 1979. During 1981, Green 1 was unitized and reclassified to the appropriate in service classifications.

Construction in progress at December 31, 1980 included costs associated with a 240 megawatt generating unit (Green 2) which was placed in service in January 1981. During 1981. Green 2 was unitized and reclassified to the appropriate in service classifications.

Construction in progress at December 31, 1981 consists primarily of costs associated with approved construction of two 440 megawatt generating units (Wilson 1 and 2) and related common area and transmission facilities. Wilson 1, including common area and transmission facilities, is currently expected to be completed in 1984 and to cost \$670 million. A completion date for Wilson 2 has not been fixed. The original expected cost of Wilson 2 was \$441 million.

Commitments with vendors at December 31, 1981 for all approved construction projects total \$336 million, primarily in connection with Wilson 1 and related common area and transmission facilities. Approximately \$406 million of construction costs are expected to be incurred in 1982.

At December 31, 1981, Big Rivers has unused conditional loan commitments from REA for additional long-term financing of approximately \$1.1 billion to meet approved construction projects.

Rates used for the capitalization of interest during construction in 1981 and 1980 were 13.5% and 10.6%, respectively.

#### (4) Deferred Charges

Deferred charges consisted of the following:	(Dollars in Thousands)	
	1981	1980
Panama Mine abandonment (a)	\$3,292	4,567
Boiler repair costs (b)	1,573	1,082
Other	732	1,252
	\$5,597	6,901

### (a) Panama Mine

Big Rivers entered into a contract in September 1972 with Peabody Coal Company Abandonment (Peabody) to develop the Panama Coal Mine. The mine was beset with numerous problems from the outset and the project was abandoned in June 1976. In January 1977, Big Rivers entered into an agreement with Peabody to settle claims arising out of the abandonment. Big Rivers agreed to pay Peabody its costs incurred in the development and operation of the mine. The settlement is being paid based upon an additional charge per ton of coal received by Big Rivers under other contracts with Peabody. The KPSC has granted Big Rivers an energy surcharge to recover these costs (see note 2(c) on rate matters).

### (b) Boiler Repair Costs

Big Rivers was a co-plaintiff in a legal action against an insurer to recover certain costs of repairs to a boiler. Costs incurred by Big Rivers to repair the boiler and related litigation expenses were deferred. A portion of these costs are expected to be recovered. However, the actual recovery amount is undeterminable at this time.

#### (5) Long-term Liabilities

A summary of long-term liabilities follows:	(Dollars in Thousands)				
	1981	1980			
Rural Electrification Administration (REA)—2% and 5% mortgage notes payable, maturing from April 1998 through May 2012	\$105,249	108,140			
Federal Financing Bank (FFB)—7.51% to 16.48% mortgage notes payable, maturing from January 1982 through December 2015	434,562	265,673			
Louisville Bank for Cooperatives (LBC)—mortgage note with variable interest rate, currently 13.0%, maturing April 1987	5,073	5,576			
County of Webster, Kentucky, promissory note with variable interest rate not to exceed 8.5%, currently 8.5%, due January 1982	61,000	61,000			
Obligation under purchased power contract (see note 7)	36,000	37,500			
Other sundry borrowings	593	2,969			
Total long-term liabilities	642,477	480,858			
Less current maturities	6,961	7,812			
	\$635,516	473,046			

Included in mortgage notes payable to FFB are notes aggregating \$343.5 million at December 31, 1981 which Big Rivers has the ability to and intends to refinance with long-term borrowings. Amounts due in 1982 and 1983 are \$83.1 and \$260.4 million, respectively.

In November 1978, the County of Webster, Kentucky, issued \$61 million of Pollution Control Interim Revenue Bonds, the proceeds of which were loaned to Big Rivers. Under the agreements, Big Rivers was required to repay the accumulated interest semiannually and to repay the principal within one year of completion of the project. The project was completed in January 1981.

On January 8, 1982, the County of Webster issued Pollution Control Revenue Bonds, Series 1981, the proceeds of which were used to refinance the Interim Revenue Bonds. Under the agreements, Big Rivers is required to repay the accumulated interest semiannually and to repay the principal by April 1, 1983. Big Rivers has the ability to and intends to refinance this obligation with long-term borrowings. The notes issued by the County of Webster will bear interest at a variable rate, adjusted periodically, equal to 68% of the average annual coupon rate equivalent of the discount rate at which 13-week U. S. Treasury bills are sold. The effective rate at January 8, 1982 was 8.28%.

Current maturities of long-term liabilities (excluding those borrowings discussed above to be refinanced) for the years 1983 through 1986 are \$7.4, \$7.2, \$6.5, and \$6.7 million, respectively.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

#### (6) Notes Payable to Banks

At December 31, 1981, Big Rivers had unsecured line-of-credit agreements with three banks permitting short-term borrowing for general corporate purposes totalling \$40.5 million. Rates for such borrowing are variable, with most being at the prevailing prime rate of interest. There were no borrowings under any of these agreements at December 31, 1981.

#### (7) Purchased Power

In 1970, Big Rivers entered into contracts with the City of Henderson, Kentucky, (City) to operate its 296 megawatt generating station (Station Two) and to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity for the period from January 1982 through the expiration of the contract in October 2003 is currently estimated to decrease from 85% in 1982 to 10% in 2003, a weighted average of approximately 56%, but this estimate could change. Big Rivers' allocated portion of Station Two output for the years ending December 31, 1982 through December 31, 1986 decreases from 85% to 79% and will average approximately 82%. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contract could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. As of December 31, 1981, the City had outstanding 5.0% to 5.7% bonds totalling \$73.1 million. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on the most recent estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1981 and 1980 was approximately \$34.6 and \$33.0 million, respectively. Such costs are treated in the rate-making process as power purchased and interchanged, net.

### (8) Pension and Deferred Compensation Plans

Total expense related to the pension and deferred compensation plans was \$541 thousand and \$463 thousand in 1981 and 1980, respectively. A comparison of accumulated benefits and net assets for the pension plans is as follows:

P and a second	(Dollars II	n inousanus)
January 1	1982	1981
Actuarially-computed present value of accumulated plan benefits:	-	
Vested	\$1,119	747
Nonvested	195	147
	\$1,314	894
Net assets available for benefits, at approximate market value	\$2,476	1,713

The assumed rate of return used in determining the actuarially-computed present value of accumulated plan benefits was 6% in 1981 and 1980.

#### (9) Major Customers

The amount of energy sales to the four member distribution cooperatives were as follows:

	(Dollars	in Thousands)
	1981	1980
Green River Electric Corporation	\$107,318	86,155
Henderson-Union Rural Electric Cooperative Corporation	85,197	69,219
Meade County Rural Electric Cooperative Corporation	6,298	5,218
Jackson Purchase Electric Cooperative Corporation	10,295	9,914
	\$209,108	170,506

National-Southwire Aluminum Company and Anaconda Aluminum Company purchase substantial amounts of electric energy under contracts with members expiring in 1996 and 1998, respectively. Sales to members for these two customers (Green River Electric Corporation for National-Southwire Aluminum Corporation and Henderson-Union Rural Electric Cooperative Corporation for Anaconda Aluminum Company) were as follows:

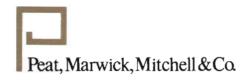
		(Donars	III IIIousanus)
	Green River	Henderson-Union	Combined
1981	\$84,761	73,841	158,602
1980	\$69,168	60,111	129,279

On December 6, 1977, Jackson Purchase Electric Cooperative Corporation became the fourth member of Big Rivers' system. The membership agreement provides that Big Rivers will supply the power needs of Jackson Purchase through purchased power sources until such time that Big Rivers has adequate capacity to serve those needs. On January 1, 1984 Jackson Purchase will become an average system cost member.

### (10) Litigation

At December 31, 1981, there were a number of pending legal actions involving Big Rivers either as defendant or plaintiff. Management believes that the outcome of all legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

### Accountants' Report



Certified Public Accountants

2400 First National Tower 101 South Fifth Street Louisville, Kentucky 40202 502-587-0535

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1981 and 1980 and the related statements of revenues and expenses, equities and changes in financial position for the years then ended. Our examinations were 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1981 and 1980 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT MARWICK, MITCHELL & CO.

February 5, 1982

# Comparative Statistical Analysis-

	1981	1980	1979	1978	
Operating Revenue	\$240,476,418	179,429,591	124,077,992	117,873,040	
Expenses: Operation and Maintenance	120,266,830	91,232,809	53,217,700	52,753,054	
Purchased Power and Interchanged, Net	58,848,412	52,947,305	52,238,507	49,559,041	
Depreciation and Amortization	17,073,065	11,516,775	5,976,160	5,111,273	
Taxes	1,817,332	1,441,297	780,799	712,919	
Interest	37,092,495	18,528,992	4,988,213	3,808,979	
Other	92,954	56,197	23,017	25,940	
Total	235,191,088	175,723,375	117,224,396	111,971,206	
Operating Margin (Loss)	5,285,330	3,706,216	6,853,596	5,901,834	
Nonoperating Margin (Loss)	1,677,561	1,080,410	1,219,271	620,969	
Net Margin (Loss)	\$ 6,962,891	4,786,626	8,072,867	6,522,803	
Utility Plant at Cost	\$483,371,934	313,289,264	283,281,046	130,333,952	
Construction Work in Progress	173,576,481	186,458,271	125,427,944	157,127,012	
Total Electric Plant	656,948,415	499,747,535	408,708,990	287,460,964	
Less Accumulated Depreciation	58,643,004	42,843,216	32,900,415	28,361,983	
Utility Plant Net	\$598,305,411	456,904,319	375,808,575	259,098,981	
Total Assets	\$708,233,625	560,828,507	480,817,488	374,646,226	
Member Maximum Demand—MW	956	943	910	819	
Installed Generating Capacity—Gross	1,153	911	911	669	
Purchased Power—HMP&L Station Two	253	256	255	262	
Purchased Standby Power	100	100	100	100	
KWh—Millions— Sales to Members	7,482.78	7,529.34	7,029.28	6,526.85	
Sales to Non-Members	1,455.27	475.36	58.50	79.39	
Generated	6,164.23	5,187.78	3,911.05	3,678.16	
Purchased HMP&L Station Two	1,822.87	1,989.04	1,931.09	1,805.31	
Other	1,097.02	966.38	1,387.12	1,253.09	
System Load Factor—%	87.1	88.1	85.3	87.5	
Employees at Year-End	667	622	555	488	



Steelwork went up at the D. B. Wilson plant site this summer. Despite near record rainfall during the spring, construction schedule for Unit No. 1 was two weeks ahead of the timetable at year's end.

# Ten Year Summary

1972	1973	1974	1975	1976	1977
19,025,434	29,276,253	46,377,266	51,532,866	60,926,026	87,745,285
13,180,546	16,606,564	21,959,599	24,107,293	33,055,570	43,278,427
952,132	6,758,852	19,584,733	22,266,033	29,012,642	32,249,409
2,834,494	2,943,896	3,011,133	3,011,521	3,274,979	4,444,813
420,993	503,831	524,148	564,348	565,273	631,557
1,965,826	2,077,876	2,132,974	2,188,085	2,611,967	3,206,173
29,464	42,540	41,530	35,950	31,733	5,290
19,383,455	28,933,559	47,254,117	52,173,230	68,552,164	83,815,669
(358,021)	342,694	(876,851)	(640,364)	(7,626,138)	3,929,616
107,987	178,094	152,872	(48,483)	(171,552)	144,720
(250,034)	520,788	(723,979)	(688,847)	(7,797,690)	4,074,336
107,986,098	108,435,060	110,330,152	112,031,490	122,471,149	124,665,252
1,367,304	3,561,570	2,512,887	10,734,956	12,343,345	57,229,121
109,353,402	111,996,630	112,843,039	122,766,446	134,814,494	181,894,373
9,342,964	12,246,142	15,004,180	17,766,620	21,008,189	24,534,449
100,010,438	99,750,488	97,838,859	104,999,826	113,806,305	157,359,924
107,506,853	111,280,099	113,833,594	120,326,021	174,716,621	226,712,745
502	722	737	748	790	820
603	603	603	669	669	669
_	162	283	271	267	262
100	100	100	100	100	100
3,761.48	4,873.24	5,778.23	5,703.45	5,920.81	6,189.32
2.37	106.90	219.70	129.17	3.87	59.54
3,672.05	3,800.29	3,834.79	3,644.96	3,215.64	3,711.16
_	837.33	1,904.61	1,675.03	1,736.04	1,855.88
177.53	449.84	367.85	614.44	1,092.25	814.89
87.5	78.7	91.2	88.9	87.3	87.7
182	221	239	246	346	401



The Green River bank was cleared, and site preparation for the barge unloading dock and related facilities got under way this year at the Wilson plant.

# Corporate Directory



Seated (left to right): William Briscoe, D. B. Wilson, Morton Henshaw, W. H. Thorpe, Texal Brooks and Paul A. Schmitz. Standing (left to right): William Seaton, Edwin L. Reid, C. G. Truitt, Stanley Jones, Edward F. Johnson, Harvey Sanders, J. Edward Delker and John C. Burnett.

#### DIRECTORS

(Three from each member cooperative)

Green River Electric Corporation Texal Brooks J. Edward Delker Edward F. Johnson

Henderson-Union Rural Electric Cooperative Corporation

William Briscoe Morton Henshaw C. G. Truitt

Meade County Rural Electric Cooperative Corporation John C. Burnett William Seaton

Jackson Purchase Electric Cooperative Corporation Stanley Jones

Edwin L. Reid Harvey Sanders

D. B. Wilson

#### **OFFICERS**

Morton Henshaw President

D. B. Wilson Vice President

Texal Brooks

Secretary-Treasurer

William Briscoe Assistant Secretary-Treasurer

#### GENERAL MANAGER

W. H. Thorpe

#### ASSISTANT GENERAL MANAGER

Paul A. Schmitz

#### VICE GENERAL MANAGERS

Robert F. Burkard Energy Supply

Ronald G. Hollander

Ronald W. Johnson

Corporate Services and Labor Relations

Floyd L. Mitchell

Production/Construction

B. Scott Reed Engineering

W. Hayden Timmons

Environmental and Public Affairs

#### MANAGERS

Don E. Augenstein General Services

Gregory F. Black Environmental Affairs

Joe L. Craig Fuels J. E. Dolezal Energy Control

James V. Haner Accounting

Don C. Mann Purchasing

Tom Millay Personnel

Earl A. Millspaugh Operations and Maintenance

James H. McIllwain Construction

David E. Schultz System Planning and Design Engineering

Phil Waggoner Electronic Data Processing

#### CORPORATE ATTORNEY

Morton Holbrook General Counsel Holbrook, Gary, Wible & Sullivan, P.S.C. Owensboro, Kentucky

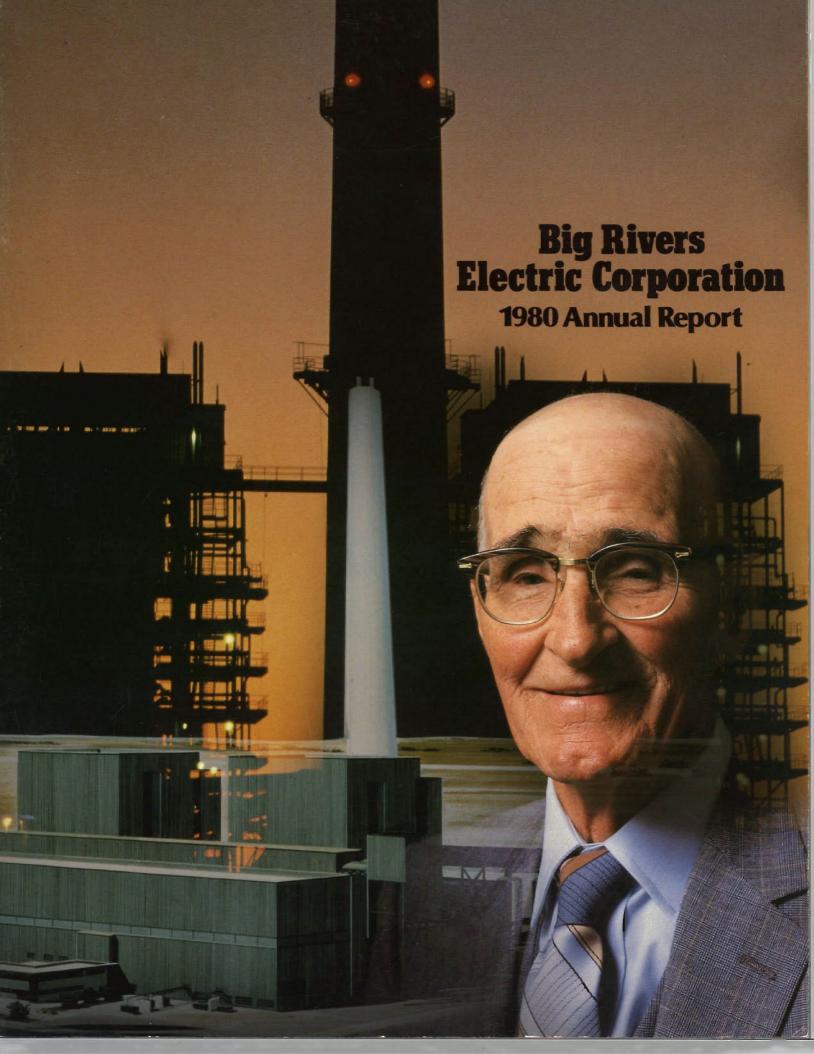
### CORPORATE AUDITORS

Peat, Marwick, Mitchell & Co. Louisville, Kentucky



### BIG RIVERS ELECTRIC CORPORATION

Post Office Box 24 201 Third Street Henderson, Kentucky 42420



### **Financial Highlights**

	1980	1979	Increase (Decrease)	% Increase (Decrease)
Operating Revenues	179,429,591	124,077,992	55,351,599	44.61
Operating Expenses	157,138,186	112,213,166	44,925,020	40.04
Net Margins	4,786,626	8,072,867	(3,286,241)	(40.71)
Construction Expenditures	83,608,637	121,460,334	(37,851,697)	(31.16)
Energy Sales (Megawatt Hours):				
A. To Members	7,529,341	7,029,283	500,058	7.11
B. Intersystem	475,357	58,496	416,861	712.63
System Peak Demand in Megawatts	943	910	33	3.63
Cost of Fuel Used in Generation	68,940,452	40,810,921	28,129,531	68.93
Assets	560,828,507	480,817,488	80,011,019	16.64
Accumulated Margins and Equity	16,705,818	11,303,007	5,402,811	47.80
<b>Employees Full Time</b>	632	555	77	13.87
Revenue Per kWh Sold (Mills)	22.41	17.50	4.91	28.06

### ABOUT THE COMPANY ...

BIG RIVERS ELECTRIC CORPORATION is a non-profit, electric generation and transmission cooperative providing wholesale power requirements of four consumer-owned and controlled member distribution systems. These member distribution cooperatives provide electric energy to consumers in 22 western Kentucky counties.

### THE COVER ...

Honors Mr. D. B. Wilson, who has been a Director of the Corporation for 16 years. Mr. Wilson has served as Vice President of the Board since 1972, representing Meade County Rural Electric Cooperative Corporation where he has served 31 years as a Director and 11 years as President of the Board.

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### **President's Report**

As I look back over 1980, I feel that there are two very important facts which should be reported because they are important to Big Rivers' members.

First, I'm proud of the quality of the Corporation's present management team. Our top management team now has a total of 106 years experience in the electric utility industry. Armed with this experience and expertise, Big Rivers looks forward to the opportunities and challenges we envision for the Corporation, and the western Kentucky area we are proud to serve.

Second, this first year of the decade of the 80's brought Big Rivers Electric Corporation the promise of a unique opportunity for service. During 1980, the first significant steps were taken to develop a synthetic fuels industry in this country, in order to lessen United States' dependence on foreign oil. Several major energy companies began environmental and engineering studies to construct synfuel plants in western Kentucky. Congress passed legislation to assist the development of the industry, including creation of the Synthetic Fuels Corporation.

At present, plants to produce liquid, solid, and gaseous fuels from coal are

planned at Newman, Baskett, Geneva, and Hardinsburg, Kentucky. There is also a possibility of a plant at Slaughters, Kentucky. If the full potential is realized, they will utilize more than 100,000 tons of high sulfur coal daily to produce clean fuels for transportation and industry.

Details of the scope of these planned industries are found elsewhere in this annual report.

Big Rivers' unique opportunity lies in the fact that these planned production sites are in the service area of our member. distribution cooperatives. The Newman site would be served by Green River Electric Corporation, the Baskett and Geneva plants would be served by Henderson-Union Rural Electric Cooperative, and the Hardinsburg location is in the Meade County R. E. C. C. service area. Realizing the potential electric energy needs of this new industry by the late 1980's, Big Rivers' directors and management initiated discussions with the energy companies involved, as well as several governmental units responsible for various facets of the development.

In December a significant meeting was held in Henderson with representa-

tives of the U.S. Department of Energy, Kentucky Department of Energy, Southeastern Power Administration, Farmers Home Administration, Rural Electrification Administration, Green River Area Development District, and the major companies involved. Big Rivers' management pledged its full cooperation and participation in the development of the planned projects, and pointed out the problems which must be solved if we are to have adequate power available when it is needed. U. S. DOE representatives are determining power needs and time frames for the proposed plants, in order to facilitate Big Rivers' planning.

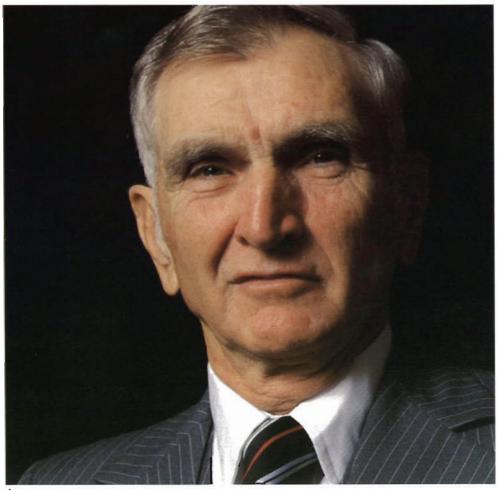
The development of the synthetic fuels industry will also potentially provide 30,000 new jobs during construction, and 5,000 to 7,000 permanent jobs in fuels production. All of us at Big Rivers look forward to this opportunity to help solve the energy crisis. We are confident we can provide adequate service because our D. B. Wilson plant site in Ohio County is large enough to accommodate two additional 600,000 kW units, and we believe that a method of serving the industry can be found without financially impacting the members of our distribution cooperatives.

We realize there are problems to be solved, basically socio-economic and environmental. But a positive, constructive attitude by all corporate and private citizens will solve these problems, as well as provide a tremendous boost to our economy, with a minimal impact on our way-of-life.

MORTON HENSHAW

Motor Lenshow

President, Board of Directors



### **General Manager's Report**

The first year of the new decade of the 80's can best be described as a year of many accomplishments for Big Rivers Electric Corporation. One milestone reached during the year was obtaining approval of the Environmental Impact Statement which cleared the way for the groundbreaking during June, 1980, for the new D. B. Wilson Power Plant, On September 29, 1980, REA Administrator Robert Feragen signed a guaranteed loan commitment in the amount of \$1,110,740,000 to be used in construction of the plant and other related facilities. Unit Nos. 1 and 2 of the new plant, each of which are 440,000 kilowatts, are scheduled for commercialization on July 1, 1984, and January 1, 1986, respectively. The new units are equipped with scrubbers, thereby permitting the use of high-sulfur western Kentucky coal. Big Rivers' Board of Directors and management received deep satisfaction in selecting a site which contained only a small acreage of prime farmland. The area is primarily strip mined land, and not one person was displaced from their home.

Unit Nos. 1 and 2 of the Wilson plant are being built to satisfy the expected needs of the rural consumers and existing industries of our four member systems, as projected by the latest power requirements study.

Still another major accomplishment was the start-up of Unit No. 2 of the Robert D. Green Power Plant during November, 1980. Green No. 2 is a 240,000 kW scrubber-equipped unit, the same as Green No. 1 which was commercialized on December 1, 1979. With this additional generation, Big Rivers now has long needed reserve capacity which will, however, be depleted by the time the new D. B. Wilson plant is placed in service.

Construction was completed on 27,000 feet of additional office space and the new facilities were occupied during January, 1981, thereby bringing all head-quarters' personnel back under one roof.

During the early part of 1980 a wheeling agreement was consummated with the Tennessee Valley Authority whereby Big Rivers can either sell or purchase power from Alabama Electric Cooperative and South Mississippi Electric Power Association. This agreement

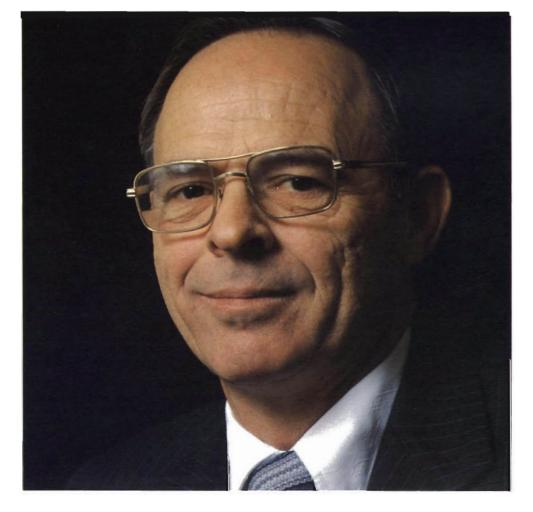
gives Big Rivers another strong interconnection, thereby improving reliability and continuity of service for each of the parties involved.

Significant improvement was again reflected in all areas of operation during 1980. Operating revenues amounted to \$179,429,591 as compared to \$124,077,992 for 1979. Net margins totalled \$4,786,626 as compared to \$8,072,867 for 1979; however, 1979 margins included \$968,175 attributable to the amortization of an adjustment to fuel inventory to reflect the Kentucky Energy Regulatory Commission's directive that all utilities in Kentucky carry fuel inventory at average costs as opposed to the "Last-In-First-Out" method of accounting which had been followed by Big Rivers. Positive margins have now been realized by Big Rivers for four consecutive years, and accumulated net equities now amount to \$16,705,818.

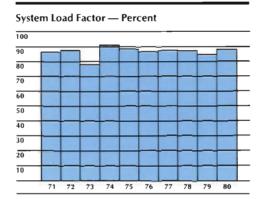
Big Rivers' Board of Directors, staff and all of its employees have one common objective — that is; to provide the member distribution cooperatives with reliable service at the lowest practical cost. I strongly believe this objective was carried out during 1980. For the loyal and dedicated service by the Board of Directors and the employees, I express my deepest appreciation.

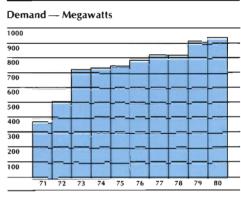
W. H. THORPE

W. H. Thoyse
General Manager



### **Generation**





All of Big Rivers' generating units are coal-fired, steam plants with the exception of a 66 MW oil-fired combustion turbine which is used for peaking and emergency. During 1980, Big Rivers was able to maintain a high availability and

capability ratio. The annual system load factor continued near 88% percent with a plant availability factor of 90% percent. At the end of 1980, Big Rivers owned or operated 1,265,000 kW nameplate generating capacity. With the comple-

tion of Green Unit No. 2, which was placed in commercial operation on January 19, 1981, the total nameplate generating capacity is 1,507,000 kW. The following table presents data regarding each generating unit.

_		Year	KW	KW	Gross		Operating Hou	
Generating Unit	Fuel	Placed In Service	Nameplate Rating	Net Capability	Generation - KWH	In Service	Scheduled	Service Unscheduled
Reid Plant near Sebree, Kentucky								
Reid Unit 1	Coal	1965	81,600	70,000	495,558,000	7,847.7	848.5	87.8
Gas Turbine	Oil	1976	66,400	66,400	1,300,000	22.7	_	_
Coleman Plant near Hawesville, Kentucky								
Coleman Unit 1	Coal	1969	174,250	150,000	1,157,926,200	8,220.5	523.6	39.9
Coleman Unit 2	Coal	1970	174,250	150,000	1,146,520,800	8,163.0	506.1	114.9
Coleman Unit 3	Coal	1972	172,800	150,000	1,075,743,600	7,229.7	575.3	979.0
Green Plant near Sebree, Kentucky Green Unit 1 Green Unit 2*	Coal Coal	1979 1981	242,105 242,133	210,000 210,000	1,630,108,000 105,126,000	7,543.2	984.3	256.5 —
HMP&L Statio Two** near Sebree, Kentucky Unit 1 Unit 2	Coal Coal	1973 1974	175,984 178,000	150,000 150,000	1,180,005,800 1,216,172,400	8,178.8 8,291.8	605.2 482.0	

<sup>\*</sup>Green Unit 2 was synchronized on November 8, 1980 and upon completion of test operations was commercialized on January 19, 1981.

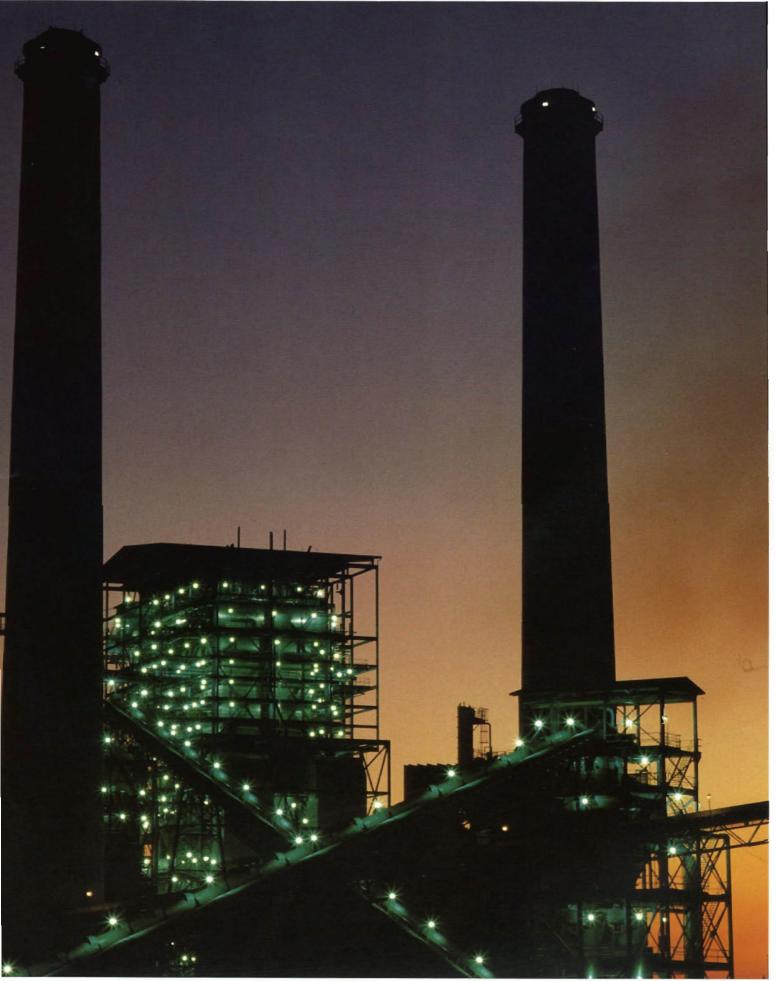
The Coleman Plant's new ash pond, a 50-acre closed circuit facility, was placed in service. Engineering was begun for transferring fly ash from the Reid and HMP&L Station Two plants to the Green Station's solid waste disposal plant. This fly ash will be used to stabilize the Green Plant scrubber's waste. Further, Big Riv-

ers is preparing to dredge the ash pond used by the Reid and HMP&L Station Two generating plants. The material dredged from the existing ash pond will be deposited in a landfill adjacent to the existing solid waste disposal area.

The commercialization of Green Unit No. 2 provides Big Rivers with

long-needed reserve generating capacity. This additional capacity will eliminate Big Rivers' need for purchased power during maintenance periods. Further, this unit will present Big Rivers an opportunity to sell bulk power to neighboring and interconnected utilities on an economic dispatch basis.

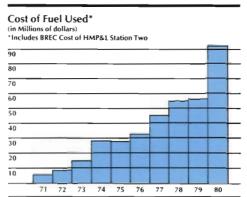
<sup>\*\*</sup>HMP&L Station Two is owned by Henderson Municipal Power & Light and is operated by Big Rivers. Excess power from the units is used by Big Rivers as base load.





### **Fuel**

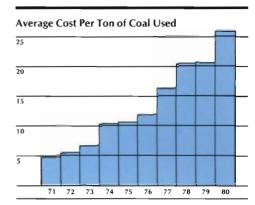




Big Rivers consumed approximately 3.5 million tons of coal during 1980 to produce electricity. Over 77 percent of this coal was purchased under long term contracts with nine suppliers. The largest receipts were from Peabody Coal Company and MAPCO, Inc., from mines in western Kentucky. Coal of lower sulfur content, necessary to meet air pollution control requirements, came from other suppliers in Kentucky, Indiana, and Ohio.

The average delivered cost of coal was \$25.77 per ton, or 117.3¢ per million BTU, compared to \$20.84 per ton, or 95.2° per million BTU in 1979. This increase in coal costs was due largely to five factors: (1) award to Peabody Coal Company by arbitrators of a substantial price increase, (2) costs incurred by the coal suppliers in complying with the regulations of the Surface Mining Control and Reclamation Act, (3) inflation of the costs of mining and transporting coal. particularly the sharp increase in cost of diesel fuel, which is a major item in surface mining and transportation of coal, (4) increased use of lower sulfur coal at the Reid and Coleman plants, and (5) settlement of litigation with MAPCO, Inc.

An Award of Decision was issued in December, 1979 following lengthy arbitration proceedings with Peabody Coal Company over claims for price increases. The award, including a portion retroactive to October, 1977, amounted to approximately \$9.5 million over the remaining terms of contracts with Peabody, extending into 1982. Peabody and Big



Rivers entered into an agreement in February, 1980 to spread the retroactive amounts over the tons remaining to be delivered.

MAPCO, Inc. and Big Rivers entered into an agreement in March, 1980 to settle a pending lawsuit by MAPCO against Big Rivers regarding the obligation of Big Rivers to pay management fee penalties due to reduction of high sulfur coal requirements by Big Rivers from MAPCO's Retiki Mine. This settlement amounts to about \$1 million in total, to be paid by the end of 1981. MAPCO and Big Rivers entered into an agreement in November for purchase of coal from MAPCO's Dotiki Mine in lieu of resumption of full production at the Retiki Mine. These two MAPCO mines, along with the Peabody supplies, are the sources of coal for the Robert D. Green Power Plant, which is equipped with scrubbers to use high sulfur coal.

Big Rivers contracted with E & M Coal, Inc. to supply 3.4 million tons of coal over 10 years for the Reid and Coleman Plants.

The Big Rivers Board of Directors authorized coal inventories to be increased from 60 to 90 days in preparation for the possibility of a coal miners' strike at the expiration of the National Bituminous Coal Wage Agreement in March of 1981.

A Long Range Fuel Procurement Study was completed in July providing guidelines for a coal procurement program for future generating units, to help Big Rivers continue to provide the lowest overall cost of electric power to its consumers.

### Construction

A major milestone in the history of Big Rivers Electric Corporation was reached on June 20, 1980, when ground was broken for the first two units of the D. B. Wilson Power Station in Ohio County, Kentucky, the first one-billion dollar venture for Big Rivers and its member systems.

Within a few days crews moved onto the 2,200 acre site near Centertown, and began clearing and earth moving activities for construction of the two 440,000 kW coal-fired units. An unusually dry summer and fall allowed the moving of nearly two-million cubic yards of earth by year's end. A large portion of this earth moving was for the construction of 7,000 feet of dike to protect the plant island from possible flooding. Water settling basins and a pump structure were also virtually complete by the end of the year, as well as much of the right-of-way clearing and preparation for the railroad spur, which may be used to supply coal to the plant.

Prior to the groundbreaking, almost two years of intensive efforts by Big Rivers' personnel and consultants were invested in meeting stringent State and Federal environmental and permitting requirements before earth could be turned. During the final weeks prior to June 20, the final Environmental Impact Statement was approved by all State and Federal agencies, the Rural Electrification Administration approved the \$1,110,740,000 loan, the Kentucky Energy Regulatory Commission granted Big Rivers a Certificate of Convenience and Necessity and a Certificate of Environmental Compatibility to build

the plant, and all State and Federal construction permitting requirements were fulfilled.

The first unit is scheduled to begin operation in mid-1984, and the second unit should begin operating in early 1986. Approximately twelve hundred construction personnel will be employed during peak construction times, expected to be in 1983 and '84. Approximately two hundred thirty-five Big Rivers permanent employees will operate the plant.

No residences or farms are being displaced by the plant, with nearly all the 2,200 acres of land needed for the project being purchased from Peabody Coal Company. The plant is expected to burn approximately 1.7 million tons of local coal annually, to be purchased on a competitive bid basis.

Electrostatic precipitators, which are expected to remove 99.77% of the particulate matter, and sulfur dioxide scrubbers which will remove 90% of the sulfur dioxide from the stack gases, and other pollution control facilities, will cost nearly \$225,000,000 of the total one-billion dollar cost of the Wilson plant.

### Ground-breaking for D. B. Wilson Power Station

Top left: D. B. Wilson

Top right:

D. B. Wilson and Morton Henshaw

#### Bottom:

From left are Texal Brooks, William Briscoe, D. B. Wilson, Morton Henshaw, John C. Burnett, Edward F. Johnson, William Seaton, Edwin L. Reid, Harvey Sanders, Stanley Jones, C. G. Truitt.









### **Energy Supply**

During 1980 Big Rivers delivered 7,529,341,175 kWh to its four distribution cooperatives. The demand for electric energy by the distribution cooperatives during 1980 was the largest demand experienced during the history of Big Rivers and reflected an increase of 7.1 percent from 1979. The increase of kWh sales to the distribution cooperatives was mostly attributable to the increased demands by Henderson-Union Rural Electric Cooperative Corporation to serve The Anaconda Company's third potline at the Sebree Aluminum Reduction Plant.

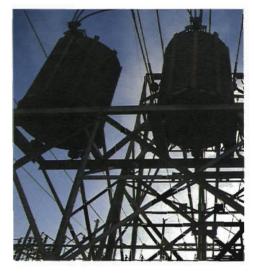
In addition to the energy delivered to the four member distribution cooperatives, Big Rivers delivered 475,357,000 kWh as intersystem sales to interconnected electric utilities.

On July 16, 1980 at 4:00 p.m., a new system coincidental peak of 943 MW was reached as compared to a system peak in 1979 of 910 MW. This new system peak was primarily a result of the increased air conditioning requirements of the consumers of the distribution cooperatives.

Big Rivers has contracts with the Southeastern Power Administration (SEPA) for the Corporation to purchase 40,000 kW of peaking capacity, and 100,000 kW of standby capacity. In addition, the Corporation has interconnection agreements with; Henderson Municipal Power and Light, Southern Illinois Power Cooperative, East Kentucky

Power Cooperative, Louisville Gas & Electric Company, Southern Indiana Gas & Electric Company, and Hoosier Energy Division of Indiana Statewide REC, Inc., as well as contracts with the Tennessee Valley Authority (TVA) for the sale of surplus energy and for wheeling power through their system. Big Rivers also maintains an interconnection with Kentucky Utilities Company.

The new economic dispatch system will be in service during the first quarter of 1981 which will enhance Big Rivers' ability to monitor its generation costs and control the production of electricity by fully utilizing the most economical generation available. This system will also enable Big Rivers Electric Corporation to maximize sales of power as well as wheeling power through its system for resale.



Big Rivers Board of Directors (Three from each Cooperative)

### Henderson-Union Rural Electric Cooperative Corporation

William Briscoe C. G. Truitt Morton Henshaw

### Meade County Rural Electric Cooperative Corporation

William Seaton John C. Burnett D. B. Wilson

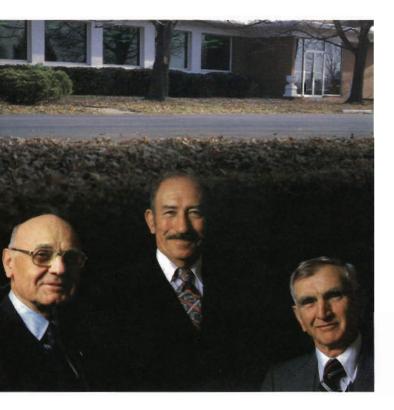
#### Jackson Purchase Electric Cooperative Corporation

Edwin L. Reid Harvey Sanders Stanley Jones

#### **Green River Electric Corporation**

Edward F. Johnson Texal Brooks J. Edward Delker

# **Distribution Cooperatives**









### **Transmission**

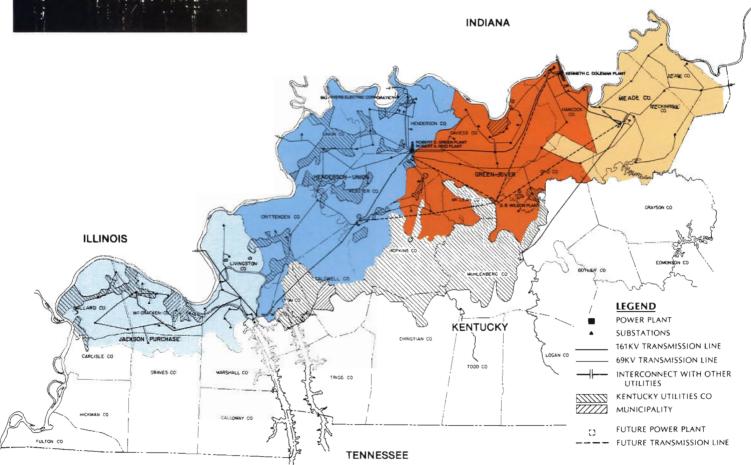


As of December 31, 1980, Big Rivers had in service 577.9 miles of 69 kV transmission lines, 244.9 miles of 161 kV transmission lines and 15.4 miles of 138 kV transmission lines, with \$17,169,850 invested in lines and \$28,671,944 invested in station equipment.

In preparation for serving Jackson Purchase Electric Cooperative Corporation on January 1, 1984, 41 percent of right-of-way easements required to construct approximately 36 miles of 161 kV transmission lines and approximately 20 percent of the right-of-way easements for 57 miles of 69 kV lines have been acquired.

A Certificate of Convenience and Necessity was obtained from the Kentucky Energy Regulatory Commission for the construction of approximately 64 miles of 345 kV and 86 miles of 161 kV transmission lines and associated substation facilities, all of which is estimated to cost \$49,843,000. These facilities will connect the D. B. Wilson Power Plant into Big Rivers' existing system.

In addition, a new power requirements study was started, approximately 1,000 acres of transmission right-of-way were cleared and sprayed, and other preventive maintenance was continued during 1980.



### **Personnel**

Employees continue to be Big Rivers most important resource. Total employment continued its steady growth in 1980 with an increase to 632, a 14 percent increase over the 1979 year-end total of 555.

The addition of the new D. B. Wilson Power Plant offers current and prospective employees promising growth opportunities.

At year-end, negotiations were initiated on a new labor contract. The present labor agreement between the Corporation and Local Union 1701 of the I.B.E.W. covering bargaining unit

employees became effective September 12,1977, and expires March 17,1981.

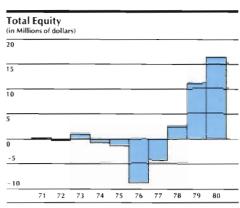
The Corporation continues to emphasize employee development in all areas of operations to further upgrade the quality of our service. A wide range of training programs is provided to stress personal growth and technical training for improved job skills.

Big Rivers believes in employee self-development and provides financial assistance for job related courses of study at universities, colleges and vocational schools.

In addition to on-going management and supervisory training, the Corporation has purchased a control room simulator and a pre-programmed maintenance training program to update the skills of production workers.



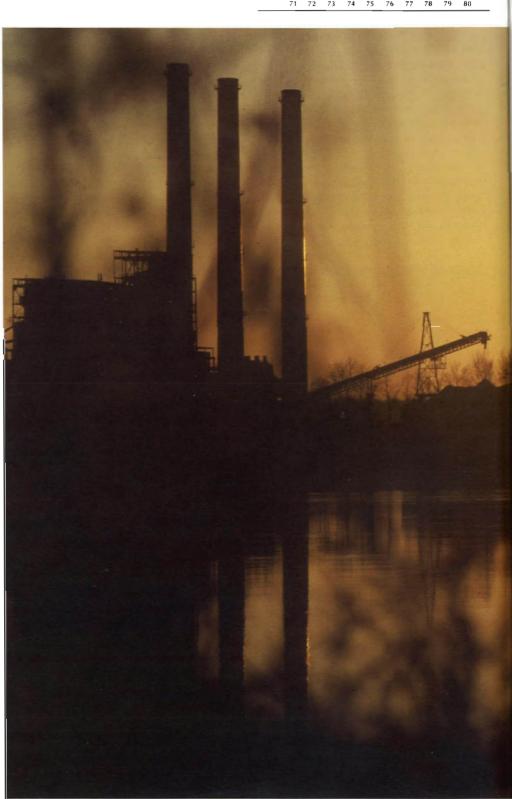
### **Environmental**

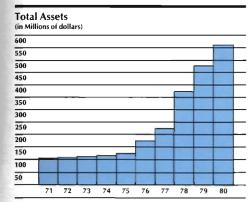


The promulgation of new environmental rules and regulations developed to implement recently passed State and Federal laws continues to pose new problems in the construction of plants and the production of electric power. Big Rivers maintains that consumers' needs can be met with minimal degradation of the environment.

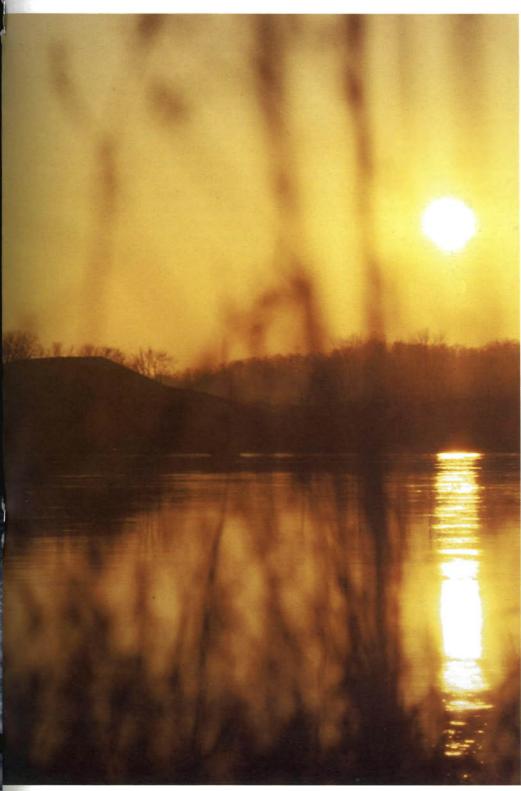
Most of the Corporation's efforts in this area during 1980 were expended on the D. B. Wilson Plant's final Environmental Impact Statement, which was published in May. This paved the way for obtaining construction permits, and the groundbreaking was held in June.

Other environmental concerns during the year were; new and updated environmental reports for transmission facilities, finalizing environmental reports for extensive rework of the Reid plant ash systems, stack testing at the Green plant, and extensive data gathering for new and renewal permits.





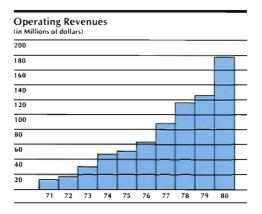
### Regulatory Reorganization

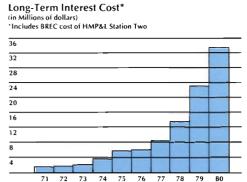


The Kentucky Energy Regulatory Commission, which regulates electric and gas utilities, will be replaced with a three-member, full-time Public Service Commission on March 1, 1981. On November 21, 1980, Governor John Y. Brown, Jr., issued an Executive order abolishing the E.R.C. and the Utility Regulatory Commission, which regulates telephone, water, and sewer utilities. Beginning March 1, all utilities will be under the jurisdiction of the new PSC.

The Governor said the change was made to "promote governmental economy . . . guarantee consistency in the regulatory process and fundamental fairness in all decisions . . . ". The three full-time commissioners will be appointed by the Governor, with the advice and consent of the Kentucky Senate. Their terms shall be for four years except that the members appointed in 1981 shall serve staggered terms ending March 1, 1982, 1983, and 1984. The Governor will also designate the chairman and vice-chairman among the commissioners. No changes were made in staff positions, responsibilities, or functions. Jurisdiction over any proceeding which is pending before either the Energy or Utility Regulatory Commission on the effective date of the order "shall be ceded to the Public Service Commission, which shall include the power to render any decision authorized by statute."

### **Rates**







State statutes and administrative regulations require a utility to give its consumers and the State Regulatory Commission a twenty (20) days notice stating plainly the rate changes to be made and the time the changes will go into effect. The Commission may, on its own motion or upon complaint, suspend the effective date for a period of five (5) months and order a hearing regarding the reasonableness of the proposed rates. If the Commission at any time during the five (5) months suspension period finds that an emergency exists, or the utility's credit or operations will materially be impaired by lack of adequate rates, the Commission may, after any hearing, permit all or a portion of the proposed rates to become effective. If hearings have not been completed or an order issued upon the expiration of five (5) months and 20 days, the

utility seeking an adjustment in rates may, upon written notice to the Commission, place the proposed rates in effect, subject to refund.

At any hearing involving the rate or charge sought, the burden of proof to show that the proposed rates are just and reasonable is the responsibility of the utility. The Commission is required, by statute, to give preference to the hearing and decision regarding rate matters over other questions pending before it and provide a decision as soon as possible, and in any event, not later than ten (10) months after the filing by the utility.

In addition to statutes and regulations providing that all rates received by an electrical utility be fair, just and reasonable, they further provide for an automatic fuel adjustment clause by which electric utilities may immediately recover increases in fuel costs, subject to later scrutiny by the Energy Regulatory Commission. The mechanics of the fuel adjustment clause permit the recovery of the cost of fuel used in generation, utilizing the weighted average inventory cost, and the recovery of the actual identifiable cost of fuel associated with energy purchased.

Monthly, the utility files a report with the commission giving data of its fuel costs and after ten (10) days may adjust its charges for any change in fuel costs. Each six (6) months the commission conducts hearings on the utility's past monthly fuel adjustments and every two (2) years, conducts hearings for the purpose of adjusting base rates to incorporate the current fuel costs.

On March 26, 1979, Big Rivers filed a notice with the Commission that it intended to increase its rates to provide additional annual revenues of \$17,981,270, an increase of 17.1 percent. Effective December 1, 1979, an increase of \$12,650,000 was granted. On December 20, a petition for rehearing was filed. The rehearing was granted and held on January 30, 1980. Effective June 4, 1980, the Commission granted an ad-

ditional increase of \$3,625,000 which resulted in an increase of \$16,275,000 as compared to the \$17,981,270 originally requested.

On August 1, a notice was filed that the Corporation proposed to increase its rates by 20.4 percent, an annual increase of \$29,411,387 based on 1979 sales.

The increased revenues requested were primarily to pay for increased fixed costs associated with the commercialization of Green Generating Plant Unit No. 2, and a margin level equal to 1.30 Times Interest Earned Ratio (TIER). The Commission, on January 21, 1981, granted an increase of \$24,109,533 based on 1979 kWh sales and a TIER of 1.225.

# **Statements of Revenues** and Expenses Big Rivers Electric Corporation

For the years ended December 31, 1980 and 1979

(Dollars in Thousands)

	1980	1979
Operating revenues (notes 5 and 9)	\$179,430	124,078
Operating expenses:		
Operations:  Fuel for electric generation	68.021	40,016
Power purchased and interchanged, net	52,947	52,238
Other production expenses	7,984	3,248
Transmission	689	512
Administrative and general	4,688	3,446
Maintenance:		
Production	9,183	5,527
Transmission	5 <i>77</i> 91	421 48
Depreciation	10,240	4,663
Amortization of Panama Mine abandonment (note 4)	1,277	1,313
Taxes	1,441	781
Total operating expenses	157,138	112,213
Electric operating margin	22,292	11,865
Interest and other deductions:		
Interest	31,655	20,348
Interest charged to construction	(13,126)	(15,360)
	56	23
Total interest and other deductions	18,585	5,011
Operating margin	3,707	6,854
Nonoperating margin, primarily interest	1,080	1,219
Net margins	\$	8,073

### **Statements of Equities**

(Dollars in Thousands)

			Other	equities
			Donated	Consumers'
	Total equities	Patronage capital	capital and memberships	contributions to debt service
Balance at December 31, 1978 Margins for 1979:	\$ 2,548	1,532	414	602
Operating	6,854	6,854		_
Nonoperating	1,219	1,219	_	_
Capital surcharge	682	_	81	601
Balance at December 31, 1979	11,303	9,605	495	1,203
Margins for 1980:				
Operating	3,707	3,707	-	-
Nonoperating	1,080	1,080	_	_
Capital surcharge	616	_	75	541
Balance at December 31, 1980	\$16,706	14,392	570	1,744

See accompanying notes to financial statements.

### **Balance Sheets**

Big Rivers Electric Corporation December 31, 1980 and 1979

(Dollars in Thousands)

		i inousanos)
Assets	1980	1979
Utility plant, net (note 3)	\$456,904	375,809
power contract (note 7)	37,500 1,725	27,800 1,280
Current assets:		
Operating funds: Cash Temporary investments Construction funds:	356 151	234 3,210
Cash	_6	31 16,748
Receivables	19,017	15,034
Inventories: Fuel for electric generation  Material and supplies  Other current assets  Total current assets	31,493 5,773 1,003 57,799	21,463 4,135 299 61,154
Deferred charges (note 4)	6,901 \$560,829	$\frac{14,774}{480,817}$
Equities and Liabilities		
Capitalization: Equities	\$ 16,706	11,303
maturities (note 5)	473,046 489,752	419,735 431,038
Current liabilities: Notes payable to banks (note 6)	20,500	_
liabilities (note 5)	7,812 38,675 3,716	9,830 36,549 3,082
Total current liabilities:	70,703	49,461
Deferred credits	374	318
-	\$560,829	480,817

See accompanying notes to financial statements.

# **Statements of Changes** in Financial Position

See accompanying notes to financial statements.

Big Rivers Electric Corporation For the years ended December 31, 1980 and 1979

	(Dollars in	n Thousands)
	1980	1979
Sources of working capital:  Net margins	\$ 4,787	8,073
Items which do not use (provide) working capital:  Depreciation of utility plant	10,240 1,277 3,842	4,663 1,313 724
Amortization of deferred credits Other amortization and depreciation Allowance for funds used during construction Working capital provided by	219 ( <u>13,126</u> )	(968) 122 (15,360)
(used in) operations	7,239	(1,433)
Long-term borrowings Increase in deferred credits	51,138 56	99,662 —
Additions to equities other than margins	616 24,597 \$ 83,646	682 24,041 122,952
Uses of working capital:		
Additions to utility plant, less allowance for funds used during construction	70,483 7,526	106,100 8,621
companies and other	445 5,192	231 7,749
Decrease in deferred credits	\$ 83,646	251 122,952
Changes in components of working capital: Increase (decrease) in current assets: Operating funds:		
Cash Temporary investments Construction funds:	122 (3,059)	99 (1,192)
Cash Temporary investments Receivables Inventories:	(25) (16,748) 3,983	(131) (26,186) 2,271
Fuel for electric generation	10,030 1,638	8,902 932
Other current assets	704 (3,355)	<u>258</u> (15,047)
Increase (decrease) in current liabilities:  Notes payable to banks	20,500	
Current maturities of long-term liabilities	(2,018) 2,126	714 9,416
Accrued expenses	634 21,242	(1,136) 8,994
Decrease in working capital	\$ 24,597	<u>24,041</u>

### **Notes to Financial Statements**

**Big Rivers Electric Corporation December 31, 1980 and 1979** 

### (1) Summary of Significant Accounting Policies

#### (a) General Information

Big Rivers Electric Corporation (Big Rivers) is a not-for-profit electric generation and transmission cooperative association engaged in supplying electric power to four electric distribution cooperatives (Members). The Members provide electric power and energy to industrial, residential and commercial customers located in portions of 22 western Kentucky counties. Big Rivers has entered into wholesale power contracts with each of its Members which require the Members to buy and receive from Big Rivers all their power and energy requirements and require Big Rivers to sell and deliver power and energy in satisfaction of such requirements. The wholesale power contracts with the Members extend to the vear 2017. National-Southwire Aluminum Company and The Anaconda Company purchase substantial amounts of electric energy sold under contracts with Members expiring in 1996 and 1998, respectively. Rates to its Members are set on a cost of service basis and are subject to approval by the Kentucky **Energy Regulatory Commission (KERC)** and the Rural Electrification Administration (REA).

The primary source of borrowed funds for Big Rivers is the REA guaranteed and insured loan program, under which the REA exercises broad supervisory review over the operation and financing of Big Rivers. At December 31, 1980, the REA has issued conditional loan guarantee commitments to finance the cost of approved utility plant expansion for the Wilson and Green stations. Big Rivers expects to utilize the REA guaranteed loan program to finance all of the planned expansion costs, except the costs of pollution control equipment which is being financed out of present or intended future borrowings.

#### (b) System of Accounts

Big Rivers maintains its accounts on an accrual basis and follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) as adopted by the United States Department of Agriculture, REA and KERC. The regulatory agencies retain 22

authority and at times issue orders on various accounting and rate-making matters.

#### (c) Utility Plant and Depreciation

Utility plant is stated at original cost, which includes the cost of contracted services, material, labor, overhead, and an allowance for all funds used during construction. Replacements of depreciable property units, except minor replacements, are charged to utility plant. Property units replaced or retired, including cost of removal net of any salvage, are charged to accumulated depreciation. Routine maintenance, repairs and minor replacement costs are charged to expense as incurred.

Depreciation of utility plant and unclassified plant in service is provided using the straight-line method over the estimated service lives of the depreciable assets. Depreciation rates were as follows for 1979 and 1980:

Production plant	3%-3.50%
Transmission plant	2.75%
Station equipment	2.75%
General plant	2%-21%
Unclassified plant	
in service	2.75%-3.50%

#### (d) Temporary Investments

Temporary investments consists primarily of U.S. Government securities and certificates of deposit which are carried at purchased cost and adjusted for accrued interest and discount or premium. The carrying value approximates market.

#### (e) Inventories

Inventories are valued at weighted average cost, which approximates the lower of cost or market. Fuel for electric generation is charged to expense as used.

#### (f) Patronage Capital

As provided in the bylaws, any excess of revenues over the sum of (a) operating costs and expenses properly chargeable against the furnishing of electric energy, and (b) amounts required to offset operating losses incurred during the current or any prior fiscal year shall be capital furnished by the patrons and credited to a capital account for each patron on a patronage basis. Nonoperating margins

shall first be used to offset any accumulated nonoperating deficits and, to the extent not needed for this purpose, used to offset any operating losses during the current or any prior fiscal year. If, after offsetting the nonoperating margins against accumulated nonoperating deficits, operating losses or accumulated deficits, there remains a balance, this balance shall be allocated to patrons on a patronage basis and any amount so allocated shall be included as a part of capital credited to the accounts of patrons. Neither operating nor nonoperating losses are allocated to the patrons.

### (g) Pension and Deferred Compensation Plans

Big Rivers has trusteed noncontributory and contributory retirement plans covering substantially all employees. Also, Big Rivers has executed deferred compensation agreements with certain key employees which provide for periodic payments upon retirement or to beneficiaries in event of death. Big Rivers' policy is to fund the annual pension and deferred compensation costs accrued. Pension expense includes current service costs and amortization of prior service costs over twenty-five years.

#### (h) Income Taxes

Big Rivers is a not-for-profit corporation under the laws of the Commonwealth of Kentucky and has been granted exemptions from Federal and state income taxes.

#### (i) Fiscal Policies

The Board of Directors of Big Rivers adopted in September, 1980 a series of fiscal policies which will serve as a guideline for future financial planning and current operations. The fiscal policies address a variety of factors including target coverage ratios, capital financing, annual net margin targets, equity accumulation, financial forecasts, reserves and capital credit rotation and allocation. These fiscal policy objectives are affected by periodic rate adjustment authorizations by REA and KERC.

(Continued)

#### (2) Rate Matters

#### (a) General Matters

Big Rivers is periodically granted rate increases based upon hearings and approval by KERC. Increases since January 1, 1979 are as follows:

	Amount of	
Effective	annual	
date	increase	Basis
Dec. 1, 1979	\$12,600,000	1978 kWh sales
June 4, 1980	3,600,000	1978 kWh sales
Jan. 21, 1981	24,100,000	1979 kWh sales

#### (b) Uniform Fuel Adjustment Clause

The rate structure includes a fuel adjustment clause. Prior to January 21, 1981, the clause provided that the fuel and certain purchased power costs in excess of 1978 base costs would be reflected in power billings as a fuel adjustment. With the revision of the fuel adjustment clause in 1978, KERC authorized Big Rivers to continue the use of a Purchased Power Adjustment Clause which permitted the recovery of purchased power costs, net of intersystem sales and amounts includable in the fuel adjustment clause.

Effective January 21, 1981, costs subject to the fuel adjustment clause are those fuel and certain purchased power costs in excess of 1979 annualized base period costs, and the purchased power adjustment clause is eliminated.

#### (c) Energy Surcharge

In June 1977, the KERC granted Big Rivers an energy surcharge of .322 mills per kWh for a period not to exceed ten years to provide for repayment of the cost of the Panama Mine settlement and for the repayment of \$3.7 million of loan proceeds from the Louisville Bank for Cooperatives and a required commitment to purchase \$526 thousand of its "Class C" stock. Present annual kWh sales are more than adequate to provide revenues necessary to meet these requirements.

#### (3) Utility Plant

The following summarizes the utility plant:

The following summarizes the utility plant:	(Dollars in	n Thousands)
In service:	1980	1979
Production plant	\$104,669	98,372
Transmission plant	19,978	17,267
Station equipment	20,054	1 <i>7,</i> 451
General plant	3,563	2,868
Intangible	67	67
	148,331	136,025
Unclassified plant in service	164,958	147,029
Electric plant held for future use	_	227
Construction in progress	186,458	125,428
	499,747	408,709
Less accumulated depreciation	42,843	32,900
	\$ <u>456,904</u>	375,809

Unclassified plant in service at December 31, 1980 and 1979 consists primarily of a 240 megawatt generating unit (Green 1) placed in service in December 1979, including \$1.4 million of unbilled contracted costs expected to be billed and paid in 1981. Unclassified plant in service at December 31, 1980 is expected to be unitized and reclassified to the appropriate in service classifications during 1981.

Construction in progress consists primarily of the following:

- A 240 megawatt generating unit (Green 2) which was placed into service in January 1981. Budgeted expenditures for the unit at December 31, 1980 are \$170 million. Big Rivers had expended \$155 million toward completion of this project at December 31, 1980.
- Two 440 megawatt generating units (Wilson 1 and 2) and related transmission facilities which are expected to be placed in service during 1984 and 1986 and currently expected to cost \$1.1 billion. In connection with this planned construction effort, Big Rivers has entered into various contracts for the delivery of equipment and services with expected costs totalling \$354 million at December 31, 1980. Costs totalling \$27 million have been incurred and are included in construction in progress at December 31, 1980.

At December 31, 1980, Big Rivers has unused conditional loan commitments from REA for additional long-term financing of approximately \$1.2 billion to meet approved construction projects.

#### (4) Deferred Charges

Deferred charges consists of the following:

	(Dollars in Thousands)	
	1980	1979
Panama Mine abandonment (a)	\$ 4,567	5,844
arbitration award (b)	719	4,561
investigation costs (c)	_	2,936
Boiler repair costs (d)	1,082	1,057
Other	533	376
	\$ 6,901	14,774

#### (a) Panama Mine Abandonment

Big Rivers entered into a contract in September 1972 with Peabody Coal Company (Peabody) to develop the Panama Coal Mine. The mine was beset with numerous problems from the outset and the project was abandoned in June 1976. In January 1977, Big Rivers entered into an agreement with Peabody to settle claims arising out of the abandonment. Big Rivers agreed to pay Peabody its costs incurred in the development and operation of the mine. The settlement is being paid based upon an additional charge per ton of coal received by Big Rivers under two other contracts with Peabody. The KERC has granted Big Rivers an energy surcharge to repay these costs (see note 2(c) on rate matters).

#### (b) Peabody Coal Company Arbitration Award

In September 1978, Peabody filed a demand for arbitration upon Big Rivers. The demand related to disputes that had arisen under two long-term contracts for the sale of coal by Peabody to Big Rivers. During 1979, in accordance with binding arbitration clauses contained in the contracts, Peabody was awarded a settlement of approximately \$9.6 million. The settlement related to both prior and future deliveries of coal. The payment of the settlement will be spread over tonnage remaining for delivery under the contracts and will be recovered through the Uniform Fuel Adjustment Clause (see note 2(b) on rate matters). The portion relating to deliveries prior to November 1979, is reflected in deferred charges and is being amortized as a charge to fuel for electric generation.

### (c) Preliminary Survey and Investigation Costs

Preliminary survey and investigation costs were incurred in connection with Big Rivers' planned utility plant expansion program (Wilson 1 and 2). The costs incurred were deferred pending approval by appropriate regulatory authorities and a final decision by Big Rivers.

At December 31, 1980, the planned expansion program has been approved and the preliminary survey and investigation costs have been transferred to construction in progress.

#### (d) Boiler Repair Costs

Big Rivers is a co-plaintiff in a legal action against an insurer to recover certain costs of repairs to a boiler. Costs incurred by Big Rivers to repair the boiler and related litigation expenses are being deferred. Management believes that the probability of recovery or settlement is excellent. These amounts are not being amortized pending final settlement of litigation.

(5) Long-term Liabilities

A summary of long-term liabilities follows:

(Dollars in Thousands)

A summary of fong term habilities follows.	(501147511	, , , , , , , , , , , , , , , , , , , ,
	1980	1979
Rural Electrification Administration		
(REA) — $2\%$ and $5\%$ mortgage notes		
payable, maturing from April 1998		
through May 2012	\$108,140	108,561
Federal Financing Bank (FFB) — 7.51%		
to 14.79% mortgage notes payable,		
maturing from January 1981 through		
December 2012	265,673	217,849
Louisville Bank for Cooperatives (LBC) —		
mortgage note with variable interest		1
rate, currently 11.6%, maturing		5 447
April 1987	5,576	5,417
County of Webster, Kentucky, promissory		1
note with variable interest rate not		
to exceed 8.5%, currently 8.5% due	61.000	61,000
January 1982	61,000	61,000
Other promissory notes with interest rate		
at 7%, maturing from January 1981	148	167
through January 1987	140	167
arbitration award (see note 4)	1,276	5,285
Obligation under Panama Mine abandonment	1,270	3,203
(see note 4)	1,545	3,486
Obligation under purchased power contract	1,545	3,400
(see note 7)	37,500	27,800
Total long-term liabilities		429,565
_	400,030	123,303
Less current maturities:	1 1 1 6	3,389
Long-term debtObligation under Peabody Coal	4,146	3,309
Company arbitration award	1,103	2,991
Obligation under Panama Mine	1,103	2,991
abandonment	1,063	2,050
Obligation under purchased	1,003	2,030
power contract	1,500	1,400
Total current maturities	7,812	9,830
Total carrent matarities	\$473,046	
	φ <u>4/3,046</u>	419,735

Included in mortgage notes payable to FFB are notes aggregating \$174.6 million which Big Rivers has the ability to and intends to refinance with long-term borrowings. Amounts due in 1981 and 1982 are \$91.5 and \$83.1 million, respectively.

In November 1978, the County of Webster, Kentucky, issued \$61 million of Pollution Control Interim Revenue Bonds, the proceeds of which were loaned to Big Rivers. Under the agreements, Big Rivers is required to repay the accumulated interest semiannually and to repay the principal within one year of completion of the project. The project

was completed in January 1981. The unused portion of the borrowed funds was shown in the financial statements under construction funds at December 31, 1979 and was used in 1980. Big Rivers has the ability to and intends to refinance this obligation with long-term borrowings.

Current maturities of long-term liabilities (excluding those borrowings to be refinanced) for the years 1982 through 1985 are \$7.2, \$7.3, \$7.1, and \$6.5 million, respectively.

All revenues and substantially all assets of Big Rivers are pledged as collateral under the various debt agreements.

(Continued)

#### **Big Rivers Electric Corporation Notes to Financial Statements**

#### (6) Notes Payable to Banks

Big Rivers has line-of-credit agreements with four banks permitting short-term borrowing for general corporate purposes totalling \$36 million. Rates for such borrowing are variable, with most being at the prevailing prime rate of interest.

Borrowings under these agreements during the year and at December 31, 1980 were \$20.5 million at a weighted average interest rate of 15%. There were no borrowings under this arrangement during 1979.

#### (7) Purchased Power

In 1970, Big Rivers entered into contracts with the City of Henderson, Kentucky, (City) to operate its 296 megawatt generating station (Station Two) and to purchase an allocated portion of the output. Big Rivers' portion of Station Two capacity for the period from January 1981 through the expiration of the contract in October 2003 is currently estimated to decrease from 86% in 1981 to 10% in 2003, a weighted average of approximately 57%, but this estimate could change. Big Rivers' allocated portion of Station Two output for the years ending December 31, 1981 through December 31, 1985 decreases from 86% to 81% and will average approximately 84%. If the City determines it has no power to allocate to Big Rivers, upon giving five years advance notice, the contract could be terminated.

Under the terms of the contracts with the City, Big Rivers has agreed to pay a proportionate share of the monthly fixed costs of Station Two (excluding depreciation) based on its allocated portion of the capacity of Station Two. The monthly fixed costs include debt service payments necessary to retire the principal and to pay interest on the City's bonds issued to finance the construction of Station Two. As of December 31, 1980, the City had outstanding 4.9% to 5.7% bonds of \$74.7 million. Big Rivers has recorded as a liability the portion of the principal payments it is obligated to pay as fixed costs under the contract based on the most recent estimates of its allocated portion of Station Two capacity and has recorded as an asset a like amount for the right to purchase its allocated portion of the output. The fixed costs are payable to the City 26

whether or not Station Two is operational or the operation thereof is interrupted, suspended or interfered with in whole or in part for any cause. The cost of power purchased under the contract for 1980 and 1979 was approximately \$33.0 and \$26.4 million, respectively. Such costs are treated in the rate-making process as power purchased and interchanged, net.

#### (8) Pension and Deferred **Compensation Plans**

Total expense related to the pension and deferred compensation plans was \$463 thousand and \$207 thousand in 1980 and 1979, respectively. A comparison of accumulated benefits and net assets for the pension plans is as follows:

(Dollars in Thousands) January 1

	1981	1980
Actuarially-computed present value of accumulated plan benefits:		
Vested	\$ 704	554
Nonvested	167	266
	\$ <u>871</u>	820
Net assets available		
for benefits	\$ <u>1,713</u>	1,073

The assumed rate of return used in determining the actuarially-computed present value of accumulated plan benefits was 6% in 1980 and 1979.

#### (9) Major Customers

The amount of energy sales to the four member distribution cooperatives was as follows:

(Dollars in Thousands)

	1980	1979
Green River Electric Corporation	\$ 86,155	65,041
Cooperative Corporation	69,219	44,270
Cooperative Corporation	5,218	3,909
Cooperative Corporation	9,914	9,571
	\$170,506	122,/91

### **Big Rivers Electric Corporation Notes to Financial Statements**

Sales to member distribution cooperatives for two customers (Green River Electric Corporation for National-Southwire Aluminum Corporation and Henderson-Union Rural Electric Cooperative Corporation for The Anaconda Company) were as follows:

(Dollars in Thousands)

#### Henderson-

(	Green River	Union	Combined	
	\$52,812	38,649	91,461	
1980	69,168	60,111	129,279	

On December 6, 1977, Jackson Purchase Electric Cooperative Corporation became the fourth member of Big Rivers' system. The membership agreement provides that Big Rivers will supply the power needs of Jackson Purchase through purchased power sources until such time that Big Rivers has adequate capacity to serve those needs, at which time Jackson Purchase will become an average system cost member.

#### (10) Litigation

At December 31, 1979, there were a number of legal actions pending against Big Rivers either as defendant or plaintiff and some of these sought substantial money damages. These legal actions, in general, included a judgment being sought by a coal supplier for management fees and penalties; a suit against an insurance carrier seeking to recover certain costs made for repairs to a boiler; and mechanics' and materialmen's liens filed against Big Rivers in regard to construction projects.

During 1980, Big Rivers reached an agreement with the coal supplier for management fees and penalties which provides for payment of the settlement amount based on a formula and spread over tonnage remaining for delivery under the contracts with the coal supplier.

Management believes that the outcome of all legal actions and claims will not have a material effect on Big Rivers' financial position or results of operations.

### Accountants' Report

The Board of Directors
Big Rivers Electric Corporation:

We have examined the balance sheets of Big Rivers Electric Corporation as of December 31, 1980 and 1979 and the related statements of revenues and expenses, equities and changes in financial position for the years then ended. Our examinations were 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Big Rivers Electric Corporation at December 31, 1980 and 1979 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

PEAT, MARWICK, MITCHELL & CO.

Louisville, Kentucky February 6, 1981

# **Comparative Statistical Analysis-**

	1980	1979	1978
Operating Revenue		124,077,992	117,873,040
Expenses:			117,075,010
Operation and Maintenance Purchased Power and	91,232,809	53,217,700	52,753,054
Interchanged, Net Depreciation and	52,947,305	52,238,507	49,559,041
Amortization	11,516,775	5,976,160	5,111,273
Taxes	1,441,297	780,799	712,919
Interest	18,528,992	4,988,213	3,808,979
Other	56,197	23,017	25,940
Total	175,723,375	117,224,396	111,971,206
Operating Margin (Loss)	3,706,216	6,853,596	5,901,834
Nonoperating Margin (Loss)	1,080,410	1,219,271	620,969
Net Margin (Loss)	\$ 4,786,626	8,072,867	6,522,803
Utility Plant at Cost		283,281,046	130,333,952
Construction Work in Progress	186,458,271	125,427,944	157,127,012
Total Electric Plant	499,747,535	408,708,990	287,460,964
Loce Accumulated		400,700,330	20/,400,904
Depreciation	42.843.216	32,900,415	28,361,983
Utility Plant Net	\$456,904,319	375,808,575	259,098,981
Total Assets			
Member Maximum	\$300,020,307	480,817,488	374,646,226
Demand — MW	943	910	819
Installed Generating		7.0	013
Capacity — Gross	911	911	669
Purchased Power — HMP&L			003
Station Two	256	255	262
Purchased Standby Power	100	100	100
KWh — Millions —			.00
Sales to Members	7,529.34	7,029.28	6,526.85
Sales to Non-Members	475.36	58.50	79.39
Generated	5,187.78	3,911.05	3,678.16
Purchased	3,	3,311.03	3,070.10
HMP&L Station Two	1,989.04	1,931.09	1,805.31
Other	966.38	1,387.12	1,253.09
System Load Factor — %	88.1	85.3	87.5
Employees at Year-End	632	555	488

# **Ten Year Summary**

1971	1972	1973	1974	1975	1976	1977
13,831,593	19,025,434	29,276,253	46,377,266	51,532,866	60,926,026	87,745,285
9,151,015	13,180,546	16,606,564	21,959,599	24,107,293	33,055,570	43,278,427
698,794	952,132	6,758,852	19,584,733	22,266,033	29,012,642	32,249,409
2,136,419	2,834,494	2,943,896	3,011,133	3,011,521	3,274,979	4,444,813
352,369	420,993	503,831	524,148	564,348	565,273	631,55 <i>7</i>
1,506,876	1,965,826	2,077,876	2,132,974	2,188,085	2,611,967	3,206,173
42,535	<u>29,464</u>	42,540	41,530	<u>35,950</u>	31,733	5,290
13,888,008	19,383,455	28,933,559	47,254,117	52,173,230	68,552,164	83,815,669
(56,415)	(358,021)	342,694	(876,851)	(640,364)	(7,626,138)	3,929,616
<u>194,</u> 024	107,987	178,094	152,872	<u>(48,483)</u>	<u>(171,552</u> )	144,720
137,609	(250,034)	520,788	(723,979)	(688,847)	(7,797,690)	4,074,336
79,723,381	107,986,098	108,435,060	110,330,152	112,031,490	122,471,149	124,665,252
26,642,571	1,367,304	3,561,570	2,512,887	10,734,956	12,343,345	57,229,121
106,365,952	109,353,402	111,996,630	112,843,039	122,766,446	134,814,494	181,894,373
6,467,776	9,342,964	12,246,142	15,004,180	17,766,620	21,008,189	24,534,449
99,898,176	100,010,438	99,750,488	97,838,859	104,999,826	113,806,305	157,359,924
105,190,683	107,506,853	111,280,099	113,833,594	120,326,021	174,716,621	226,712,745
370	502	722	737	748	790	820
430	603	603	603	669	669	669
		162	283	271	269	262
100	100	100	100	100	100	100
2,744.13	3,761.48	4,873.24	5,778.23	5,703.45	5,920.81	6,189.32
48.04	2.37	106.90	219.70	129.17	3.87	59.54
2,717.90	3,672.05	3,800.29	3,834.79	3,644.96	3,215.64	3,711.16
		837.33	1,904.61	1,675.03	1,736.04	1,855.88
157.77	177.53	449.84	367.85	614.44	1,092.25	814.89
87.2	87.5	78.7	91.2	88.9	87.3	87.7
156	182	221	239	246	346	401

### **Synthetic Fuels Development**

Kentucky is the leading coal producing state in the nation. The western Kentucky coal field contains one-half of the state's coal reserves and is predominantly in the Big Rivers' service area. The leading coal producing counties of the western Kentucky coal field are Union, Webster, Henderson, Daviess, Muhlenberg, and Hopkins. The coal in this field is bituminous with high sulfur and ash content. The vast coal supply in Big Rivers' service area is attracting the interest of industries considering the construction of synthetic fuel facilities. Currently Big Rivers and its distribution cooperatives have the potential of serving five such facilities as follows:

The Solvent Refined Coal (SRC-1) demonstration plant, to be located at Newman in Daviess County, will process 6,000 tons of coal per day into 1,000 tons of solid, clean burning boiler fuel; 10,000 barrels of heating oil; 600 tons of anode coke; and 190 tons of salable sulfur. The demonstration plant should start up in 1984, with additional units planned for a commercial sized plant to begin production in the late 1980's, totalling approximately five times the size of the original plant. The International Coal Refining Company formed by Air Products and Chemicals, Inc. and Wheelabrator -Frye, Inc. is the primary builder. Initially 500 people will be employed, with 1,000 to 1,500 permanent workers at the commercial facility.

W. R. Grace & Company plans to locate its indirect coal liquefaction plant at Baskett, in Henderson County. This \$4 billion facility, to be completed in 1987, will daily turn 29,000 tons of coal into 50,000 barrels of high octane unleaded gasoline, 8,500 barrels of propane and butane, and 1,000 tons of sulfur for Grace's phosphate plants. Permanent jobs will be provided for 1,200 to 1,500 people.

Texas Eastern Transmission Corporation and Texas Gas Transmission Corporation are planning a SASOL type operation to be located at Geneva, in Henderson County, at a cost of \$3.5 billion. Twenty-eight thousand six hundred tons of coal will be converted daily into pipeline quality synthetic natural gas, liquid transportation fuels, and various chemicals equivalent to 50,000 barrels of oil. Jobs will be provided for 2,300 to 3,000 persons.

A commercial size coal liquefaction plant near Cloverport in Breckinridge County is being studied by Ashland Synthetic Fuels, Inc. and Airco Energy, Inc. Providing approximately.1,500 permanent jobs, this \$2 + billion facility will turn 25,000 tons of run-of-mine coal a day into 37 million cubic feet of pipeline quality synthetic natural gas; 11,000 barrels of propane and butane; 16,000 barrels of gasoline; 21,000 barrels of middle distillate; 6,000 barrels of heavy distillate; 520 tons of sulfur; and 200 tons of ammonia. Start-up is expected in 1987.

Texas Gas Transmission Corporation is also proposing a \$600 million demonstration HyGAS gasification plant on the Green River in Webster County. No definite construction timetable has been revealed, but engineering and construction are estimated to take 4½ years. A work force of 500 would convert 7,300 tons of high sulfur coal into 80 million cubic feet a day of synthetic pipeline quality natural gas.

Although several meetings have been held regarding the potential power supply for these synfuel facilities, no contracts for power supply have been negotiated.

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