COMMONWEALTH OF KENTUCKY

BEFORE THE ENERGY REGULATORY COMMISSION

IN THE MATTER OF:

NOTICE OF BIG RIVERS ELECTRIC CORPORATION	))	CASE NO. 7917

NOTICE OF BIG RIVERS ELECTRIC CORPORATION PURSUANT TO KRS 278.180, 278.190 AND RELATED STATUTES AND 807 KAR 50:005, SECTION 9, AND RELATED SECTIONS, 807 KAR 50:025, SECTIONS 5 THROUGH 8, AND RELATED SECTIONS, AND 807 KAR 50:075, SECTION 1(2) AND (12) AND RELATED SECTIONS, THAT ON AUGUST 21, 1980, IT WILL:

(1) CHANGE ITS RATES FOR ELECTRIC SERVICE:

(2) REVISE ITS FUEL ADJUSTMENT CLAUSE BASE: AND

(3) DELETE ITS PURCHASED POWER ADJUSTMENT CLAUSE.

O R D E R

On August 1, 1980 Big Rivers Electric Corporation (hereinafter Applicant or Big Rivers) filed an application with this Commission to increase its rates for electric service; revise its fuel adjustment clause base; and to delete its purchased power adjustment clause. The proposed adjustment in rates would increase Applicant's revenue by $29,411,387 on an annual basis, an increase of 20.42% based on the actual test year sales. Big Rivers proposed to place the new rates into effect on August 21, 1980 or upon commercialization of its Green generating station unit 2. Applicant stated that the primary reason for the rate adjustment was the increased costs associated with the commercialization of its Green Unit 2 which is a 242 megawatt coal fired steam generation unit.

On August 12, 1980 the Commission issued an order suspending the proposed rate adjustment for a period of five (5) months on and after August 21, 1980. The Commission issued a further order on September 4, 1980 scheduling a hearing for September 30, 1980 and ordering that statutory notice of the proposed rate increase and the scheduled hearing be provided to Applicant's consumers. Thereafter, after Applicant having prefiled prepared testimony, the hearing scheduled for September 30, 1980 was cancelled.

On October 7, 1980 the Commission issued an order scheduling the hearings for cross examination of Applicant's witnesses and the witnesses of the intervenors for November 19, 1980 and December 11, 1980 respectively.

Those formally intervening in these proceedings included the Consumer Intervention Division in the Department of Law; Anaconda Aluminum Company, a Division of the Anaconda Company (Anaconda); and National-Southwire Aluminum Company (NSA). These intervenors were present and participated in the public hearings which were conducted as scheduled at the Commission's offices in Frankfort, Kentucky. On October 21, 1980 the Commission issued an order sustaining the Motion of a consumer of Green River Electric Corporation to intervene in this matter. Although the Motion was sustained said intervenor did not participate in any manner in these proceedings.

Post hearing briefs were submitted by the Applicant, Anaconda Aluminum Company and National-Southwire Aluminum Company and the matter is now before the Commission for final determination.

COMMENTARY

Big Rivers Electric Corporation is a member owned Rural Electric Cooperative organized under Chapter 279 of the Kentucky Revised Statutes and supplies the total energy requirements of its four distribution cooperative members. Three of these members, Henderson-Union Rural Electric Cooperative Corporation, Meade County Rural Electric Cooperative Corporation, and Green River Electric Corporation are served directly by Big Rivers. Jackson Purchase Electric Cooperative Corporation is presently served through a power supply contract with Kentucky Utilities Company. These distribution cooperatives provide service to approximately 68,500 consumers in the Western Kentucky counties of Ballard, Breckinridge, Caldwell, Carlisle, Crittenden, Daviess, Graves, Grayson, Hancock, Hardin, Henderson, Hopkins, Livingston, Lyon, Marshall, McLean, McCracken, Meade, Muhlenberg, Ohio, Union and Webster.

The three distribution cooperatives served directly by Big Rivers have all filed applications with this Commission to pass any increase granted Big Rivers in this matter on to their consumers.

Applicant presently has under construction the second unit of its Green generating station. A major portion of the rate increase requested herein is based on the anticipated cost of operation and the fixed costs associated with this unit and the first unit which began commercial operation on December 1, 1979. With the addition of these new generating units, Big Rivers will achieve a more favorable energy supply situation with a reduction in its dependence on other utilities. Prior to the addition of this new generating station Applicant was required to purchase approximately 45% of its energy requirements.

TEST YEAR

Big Rivers proposed, and the Commission has accepted the twelve month period ending December 31, 1979, as the test period herein. In utilizing the historic test period the Commission has given due consideration to adjustments for known and measurable changes where found reasonable. Applicant testified that the test year was a representative twelve month period and that no extraordinary or non-reoccurring charges, that have not been adjusted for, were included in this period.

VALUATION

On Exhibit 9, Big Rivers proposed a net investment rate base at December 31, 1979 of $410,974,440 and an adjusted rate base of $467,631,812. The adjusted rate base included additional plant in service and construction work in progress to reflect the addition of the Green Unit 2. The depreciation reserve and working capital were adjusted to include the proposed adjustments to depreciation expense and other operating expenses in conformity with Commission policy. Applicant also adjusted fuel stock and materials and supplies.

The Commission is of the opinion that the proposed adjustments are generally acceptable with the exception of the adjustment to working capital which we have adjusted to reflect only the allowed pro-forma adjustments and the adjustment to materials and supplies and fuel stock. The Commission finds no support in the record for the proposed adjustment to materials and supplies and fuel stock; therefore, these adjustments have not been accepted.

Based on the aforesaid modifications Big Rivers adjusted net investment rate base would appear as follows:

Total Plant in Service	$464,091,566
Construction Work in Progress	4,160,304
Fuel Stock	21,462,980
Materials and Supplies	4,135,505
Prepayments	299,086
Working Capital	14,235,780
Sub-Total	508,385,221
Less: Depreciation Reserve	44,024,967
Net Investment	$464,360,254

In allowing the pro-forma net investment rate base the Commission is giving full recognition to the addition of the revenue producing item for which most of the rate increase herein is sought. The Commission also recognizes that the actual balances in plant in service and construction work in progress, based on the most recent monthly report submitted by Big Rivers, exceed the adjusted amounts included herein.

The Commission has determined that the capital structure of Applicant at the end of the test period was $413,068,948 and consisted of $11,303,007 in long term debt and $401,765,941 in margins and equities. After taking into consideration the additional long term debt to be acquired for the addition of the Green Unit 2, Big Rivers' capital structure would be $486,513,404 and consist of $475,210,397 in long term debt and $11,303,007 in margins and equities.

The Commission has given consideration to these and other elements of value in determining the reasonableness of the proposed rates and charges.

REVENUES AND EXPENSES

Big Rivers proposed twenty-three adjustments to revenues and expenses as reflected on Exhibit 5 to the application. After a thorough examination of the proposed adjustments the Commission finds that they are generally acceptable for rate making purposes and will include all of the adjustments with these modifications:

(1) On Entry 3 and 7 Big Rivers made adjustments to reflect the additional revenue and power costs based on the anticipated generation after the commercialization of the Green Unit 2. However, in determining the projected fuel cost on Entry 7 Big Rivers failed to consider the power generated by the Reid Station combustion turbine generator and the actual generation of Green Unit 1 during the test year. The effect of these omissions causes a decrease in pro-forma fuel expense of $376,020 which reduces the average cost of fuel per kilowatt hour from 11.130 mills to 10.889 mills per KWH. By reducing the average cost per KWH generation the pro-forma adjustment to normalize revenue based on the increased fuel cost reflected on Entry 3 would also be reduced by $319,920.

(2) On Entry 16 Big Rivers proposed a pro-forma adjustment of $6,860 to operation and maintenance expense to reflect the 1979 Energy Regulatory Commission assessment rate of 1.21 mills and the test year intrastate revenue. Based on the 1980 assessment rate of .8398 mills the test year assessment expense should be reduced by $38,788. A similar adjustment was proposed by Applicant on Entry 23 to reflect the additional cost based on the proposed increase in revenues. The Commission is of the opinion that the assessment rate of .8398 mills is the current rate for this assessment and the pro-forma expenses should be adjusted accordingly.

(3) On entry 8 Big Rivers proposed a pro-forma adjustment of $7,031,356 to reflect the increased cost of production plant maintenance expense. In determining the pro-forma production maintenance cost, Big Rivers used the 1978 maintenance expense as a basis, and adjusted the actual cost by 10% to allow for inflation. This adjusted cost was then used to determine an average cost per Kilowatt (name plate rating) for the generating capacity in service for that period. The average cost per kilowatt was then applied to the name plate capacity available after the addition of Green Units 1 and 2. Big Rivers stated that the rationale for using the 1978 actual maintenance cost, escalated for inflation was that the test year cost was not representative of normal costs due to delays in the scheduled generator overhauls, pending the completion of Green Unit 2.

The witness for an Intervenor, National Southwire Aluminum Company, proposed a reduction of $1,973,000 in this pro-forma adjustment. The Intervenor's position was based on a modification of Big Rivers' calculation using the actual production maintenance cost for the first nine months of 1980 with an allowance for Green Unit 2 based on the 1980 actual Green Unit 1 cost. This amount was annualized and escalated by 5% for inflation. The net result would be a reduction of the proposed adjustment by $1,973,000.

The primary objective of this adjustment is to arrive at a reasonable level of production maintenance expense based on historical costs and to estimate the cost associated with the addition of Green Units 1 and 2 for which there was no historical experience to extrapolate. The methods proposed by Applicant and the Intervenor both assume that the cost of maintenance of the Green Units 1 and 2 will be the same as the maintenance costs of the other steam generating units.

The Commission is of the opinion that this methodology is not adequately supported by Applicant and that the maintenance expense adjustment should be reduced by $2,491,925. In making this determination the Commission has utilized the most recent information available as a basis to project the production maintenance expense. The REA Form 12 for the twelve month period ending November 30, 1980 reflects a total production maintenance expense of $11,556,961. This twelve month period contains a full year's operation of Green Unit 1. In determining the projected maintenance cost the Commission has utilized the actual maintenance expense for this twelve month period plus an allowance for the Green Unit 2 equal to the actual cost incurred at the Green Unit 1. This approach assumes that the maintenance cost for both Green units for the first year of operations will be essentially the same. The Commission is of the opinion that although this approach to projecting the production plant maintenance expense is also somewhat speculative, it should be more accurate than the approach taken by Applicant.

(4) The Commission has adjusted operation and maintenance expense by $1,675, and Other Income Deductions by $22,500 to exclude a portion of the dues and all charitable contributions for the test year. The Commission is of the opinion that these costs are not essential to the operation of an electric utility and should not be borne by the rate payers.

Based on these adjustments Applicant's Actual and Adjusted Statement of Operation would appear as follows:

	Actual 12-31-79	Adjustments	Adjusted Test Year
Operating Revenues	$124,077,992	$43,672,593	$167,750,585
Operating Expenses	112,213,166	36,809,793	149,022,959
Net Operating Margins	11,864,826	6,862,800	18,727,626
Income Deductions:			
Interest on Long Term Debt	20,348,370	15,952,883	36,301,253
Interest During Construction	(15,360,157)	15,326,052	(34,105)
Net Interest Expense	4,988,213	31,278,935	36,267,148
Other Deduction	23,017	(22,500)	517
Other Income	1,219,271	(598,822)	620,449
Net Margins	$ 8,072,867	$(24,992,457)	$(16,919,590)

REVENUE REQUIREMENTS

Big Rivers had actual Net Operating Income, based on the test period ending December 31, 1979, of $8,072,867. After taking into consideration the accepted pro-forma adjustments Applicant's Net Income would reflect a deficit of $16,919,590.

Big Rivers proposed to increase its annual revenues to the extent that they would realize a Times Interest Earned Ratio (TIER) of 1.30 based on the adjusted test year. Applicant stated, and we concur, that the rate of return on the adjusted Net Investment Rate Base should not be the paramount criteria used in determining the revenue requirements herein. However, the Commission is of the opinion that the TIER ratio proposed by Applicant is in excess of the amount required to maintain Applicant's financial integrity. Furthermore, the earnings of Big Rivers recently have been at levels well in excess of those required by its principal lenders. The Commission is of the Opinion and so finds that a Times Interest Earned Ratio of 1.225 is adequate in this instance and should be granted. In order to achieve this earnings level the Net Income allowed should be approximately $8,167,782. In order to achieve this level of Net Income, Applicant should be allowed to increase its rates by $24,109,533 based on 1979 KWH sales. The rates set out in the attached Appendix "A" are designed to provide sufficient revenue when applied to projected annual sales to produce gross annual revenues from sales of approximately $179,426,088.

Based on the additional revenue granted herein, Applicant's rate of return on the adjusted Net Investment is 6.55% which is fair, just and reasonable and will allow Applicant to meet the requirements of its primary lenders.

In allowing the Times Interest Earned Ratio of 1.225 the Commission has recognized the low level of Equity exhibited by Big Rivers and the potential savings available to Big Rivers by securing alternate sources of capital. Big Rivers has shown a substantial improvement in its financial condition over the past four fiscal years which should enhance its ability to secure private financing. In fact, Big Rivers has been able to achieve actual earnings well in excess of those found reasonable by this Commission. These favorable earnings of Big Rivers have not been admonished by the Commission in the past due to the extraordinary circumstances which have caused the higher returns and the necessity to improve its equity position. The Commission is concerned, however, that with the addition of its new generating stations, the potential exists for Big Rivers to realize earnings greater than those found reasonable herein. The record reflects that although the additional generating capacity is available to Big Rivers no additional benefits will accrue to Big Rivers due to its inability to sell any additional purchased power on an intersystem basis. If this assertion is correct and the actual operations of the utility are reasonably within the pro forma operating statement, Big Rivers should earn very close to the allowed TIER. If however, Big Rivers should be able to generate and sell additional amounts of power, its earnings could be considerably more. Therefore, the Commission will closely monitor the financial condition of Big Rivers to assure that excessive earnings are not perpetually achieved.

RATE DESIGN AND REVENUE ALLOCATION

Big Rivers proposed to maintain the current rate design consisting of flat rate energy and demand charges. Intervenor National-Southwire asked that the Commission give favorable consideration to a rate design "providing incentives for more efficient use of the generating capacity of Big Rivers" (NSA brief, p.14.). National-Southwire's witness Mr. Honaker presented an alternative rate design including step rates in energy and demand charges. The Commission is of the opinion that the evidence of record does not justify any change in rate design.

Big Rivers proposed allocating revenues according to the rate design analysis in Exhibit 6 of the application. None of the intervenors filing briefs in this case objected to Big Rivers' proposed allocation. The Commission will utilize Big Rivers' proposed revenue allocation.

Big Rivers proposed adjusting the base factor in its Fuel Adjustment Clause to reflect fuel costs at the end of the test year. The cost of fuel for system sales, as adjusted in the Commission's modification of Entries 3 and 7 of Big Rivers' Exhibit 5, was $.010974 per kilowatt hour at the end of the test year. The Commission is of the opinion that the roll-in of fuel costs should be allowed in this case.

The record reflects that the commercialization of Green Unit 2 will reduce Big Rivers' need for purchased power. Therefore, Big Rivers proposed deleting the Purchased Power Adjustment Clause. The Commission is of the opinion that the purchased power clause should be deleted in this case.

SUMMARY

The Commission, after consideration of the evidence of record and being fully advised is of the opinion and so finds that the negative margins reflected in the pro-forma Operating Statement are clearly inadequate and should be increased by $24,109,535 annually.

The Commission is further of the opinion that the rates and charges proposed by Applicant are unfair, unjust and unreasonable in that they provide revenue in excess of that deemed reasonable herein.

IT IS THEREFORE ORDERED, that the rates and charges set out in Appendix "A" attached hereto and made a part hereof are approved for service rendered on and after the date of this Order.

IT IS FURTHER ORDERED, that the rates and charges proposed by Big Rivers Electric Corporation are unfair, unjust, and unreasonable and are hereby denied.

IT IS FURTHER ORDERED, that Big Rivers Electric Corporation shall file with the Commission within thirty (30) days from the date of this Order its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 21st day of January, 1981.

ENERGY REGULATORY COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Secretary

APPENDIX "A"

APPENDIX TO AN ORDER OF THE ENERGY REGULATORY COMMISSION IN CASE NO. 7917 DATED JANUARY 21, 1981

The following rates and charges are prescribed for the customers in the area served by Big Rivers Electric Corporation. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

RATE SCHEDULE:

A. Monthly Delivery Point Rate:

(1) Demand charge of:

All KW of billing demand at $6.25 per kilowatt.

(2) Plus an energy charge of:

(a) All Kwh per month at $.015219 per KWH plus an additional charge of $.000322 per KWH for the specific purpose of amortizing the ten-year loan from the Louisville Bank for Cooperatives, this additional $.000322 per KWH to continue until the said debt is paid. The total energy charge will be $.015541 per KWH until such debt is paid and $.015219 per KWH thereafter.

B. Fuel Clause:

The energy charge shall be increased or decreased by a fuel adjustment factor as follows:

$$\frac{F}{S} \quad - \quad \$.010974$$