COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

GREEN RIVER ELECTRIC CORPORATION: (1) NOTICE THAT ON JUNE 28, 1981, IT WILL CHANGE ITS TARIFF RATES FOR ELECTRIC SERVICE (2) APPLICATION FOR AN ORDER CHANGING ITS RATES FOR ELECTRIC SERVICE TO NATIONAL SOUTHWIRE ALUMINUM COMPANY	)	CASE NO. 8252

O R D E R

On June 8, 1981, Green River Electric Corporation ("Green River") filed with this Commission its notice of a general adjustment of rates to become effective on June 28, 1981. The proposed rates would produce additional revenue of approximately $1,301,000 annually, an increase of 1.1 percent based on normalized test year revenue derived from total system sales. This amount included an increase of $1,141,997, or 6.35 percent, in rural system revenue and an increase of $158,961, or .19 percent, in revenue from sales to National Southwire Aluminum Company ("NSA"). Green River stated that the additional revenue was required to build and maintain cash reserves, to comply with its mortgage agreements, and to reverse the decline in equity experienced in recent years.

On June 9, 1981, the Commission issued an Order suspending the proposed increase in rates for a period of 5 months, until

November 28, 1981. On July 20, 1981, the Commission issued an Order scheduling a hearing on September 10, 1981, and directing Green River to provide statutory notice to its consumers of the proposed rate increase and the scheduled hearing.

On June 11, 1981, the Division of Consumer Protection in the Office of the Attorney General and NSA filed motions to intervene in this proceeding. These motions were sustained.

The hearing was conducted as scheduled at the Commission's offices in Frankfort, Kentucky. The Attorney General's Division of Consumer Protection did not participate in the public hearing.

COMMENTARY

Green River is a consumer-owned rural electric cooperative corporation organized under Chapter 279 of the Kentucky Revised Statutes. It distributes and sells electric energy to approximately 21,600 member-consumers in the Kentucky counties of Breckenridge, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio and Webster.

TEST PERIOD

Green River proposed and the Commission has accepted the 12-month period ending December 31, 1980, as the test period for determining the reasonableness of the proposed rates. In utilizing the historic test period, the Commission has given full consideration to known and measurable changes where appropriate.

VALUATION

Green River presented in its Exhibit 8 a net investment

rate base of $22,294,134 based on the value of plant in service and accumulated depreciation at the end of the test period and the 13-month average for materials and supplies and prepayments. In addition, Green River proposed to include working capital based on one-eighth of operation and maintenance expenses (excluding depreciation and purchased power) plus 21 days of the cost of purchased power, excluding that portion required for large industrial customers. Green River contended that 21 days is the average lag between the payment for purchased power and the receipt of revenue associated with that power. On a separate schedule, Green River presented another calculation of working capital which, in addition to these items, included an amount required to cover an average 60-day lag for the reimbursement of loan funds after construction is completed.[1/]

The Commission has analyzed the testimony and exhibits supporting Green River's claimed allowance for working capital. The lag in payment for purchased power by the customer net of the lag in payment for purchased power by Green River is only one factor to be considered in computing working capital if a lead-lag analysis is used. Green River has not provided any analysis of the net lag that exists between receipt of revenues and payment of expenses (i.e., interest, wages, taxes, etc.).

The Commission is of the opinion that departure from the formula method used in prior cases would require a detailed analysis of lag in payment of total cost of service by Green River and the lag in payment by the customer.

1/ Appendix to Stanley prefiled testimony, page 3.

The Commission finds that the evidence of record is not persuasive and presents no viable reasons for a departure from existing policy. Therefore, one-eighth of out-of-pocket operation and maintenance expenses has been used to establish the allowance for working capital. The Commission has used the adjusted operation and maintenance expenses approved herein in order to reflect more current operating conditions.

In establishing the reserve for accumulated depreciation the Commission has included the pro forma adjustment to depreciation expense. The Commission has also deducted customer advances for construction at the end of the test period inasmuch as these are the equivalent of contributions of capital until final disposition has occurred. The Commission will accept the other elements in the rate base as presented by Green River.

Based on the Commission's adjustments, Green River's net investment rate base for rate-making purposes is as follows:

Net Investment

Utility Plant in Service	$ 26,206,259
Construction Work in Progress	260,454
Total Utility Plant	$ 26,466,713
Add:	
Materials and Supplies	$ 333,152
Prepayments	135,390
Working Capital	403,617
Subtotal	$ 872,159
Deduct:	
Depreciation Reserve	$ 5,791,849
Customer Advances for Construction	3,098
Subtotal	$ 5,794,947
Net Investment	$ 21,543,925

Capital Structure

The Commission finds that Green River's capital structure at the end of the test period was $23,328,145 and consisted of $6,414,979 in equity and $16,913,166 in long-term debt. In the determination of this capital structure the Commission has excluded accumulated capital credit assignments from Green River's wholesale power supplier in the amount of $8,019,295.

The Commission has given due consideration to these and other elements of value in determining the reasonableness of the proposed rate increase.

REVENUES AND EXPENSES

On its Exhibit 6, Green River proposed several adjustments to revenues and expenses to reflect more current and anticipated operating conditions. The Commission finds that the proposed adjustments are generally acceptable for rate-making purposes with the following modifications:

The Commission has increased the proposed adjustment to purchased power expense by $43,291 to reflect the correction made by Green River in the prepared testimony of its accountant. The original adjustment proposed by Green River to reflect the additional power cost savings from load control erroneously included actual savings experienced during the test year. This resulted in a duplication of the test year cost savings and thereby overstated future power cost savings.

Green River proposed an adjustment of $109,580 to normalize salaries and wages. In determining the pro forma salaries and wages Green River used the number of employees and wage rates at April 1, 1981, to arrive at a base labor cost. To estimate the pro forma base overtime and part-time labor cost Green River used a 3-year average. The total pro forma labor cost was then allocated to expense accounts and capitalized labor based on the actual test year experience. The Commission is of the opinion that this methodology results in an overstatement of the pro forma salaries and wages. Green River did not justify the use of a 3-year average as a normal level of overtime and part-time wages and salaries. Moreover, to project additional costs for overtime and part-time labor above the test year level is inconsistent with Green River's contention that it has initiated a reduction in overtime and part-time labor as a cost saving measure. Therefore, the proposed adjustment has been reduced by $22,631 to reflect the actual test year level of overtime and part-time labor. Accordingly, the proposed adjustment for social security taxes has been reduced by $1,438 based on the reduced level of salaries and wages.

Green River proposed an adjustment to increase depreciation expense by $103,826 to reflect the level of plant in service at March 31, 1981, and microwave equipment which was under construction. The Commission will allow $81,805 of the proposed adjustment to include depreciation on plant in service at the end of the test year. The Commission is of the opinion that plant additions subsequent to the end of the test period should produce

additional revenues as well as expenses; however, Green River's proposed adjustment would reflect only an increase in one expense item. The Commission, therefore, finds that in the absence of adjustments to reflect other expenses and revenues associated with plant additions made subsequent to the test year, the additional depreciation expense should not be considered for rate-making purposes.

Green River proposed an adjustment of $8,344 to reflect increased postage expense based on the postal rates placed into effect on March 22, 1981. The Commission has increased this adjustment by $6,352, to $14,696, to reflect the additional increase in postal rates effective November 1, 1981.

Green River proposed an expense adjustment of $40,124 to reflect the increase in regulatory assessment expense resulting from the adjustment to normalize revenues. The Commission has increased the adjustment by $7,999, to $48,123, based on the current assessment rate set by the state Department of Finance.

Green River proposed an adjustment to increase interest expense on long-term debt by $449,664 to reflect long-term debt outstanding at the end of the test period as well as additional debt that would be drawn down through the end of 1982. The Commission will allow $248,877 of the proposed amount which includes interest on all debt advanced through November 1981.

Green River proposed an adjustment of $21,716 to eliminate interest on short-term debt, based on its request for revenues sufficient to eliminate the need for short-term borrowing. The Commission is of the opinion that the elimination of short-term

borrowing is not essential to allow Green River to operate on a sound financial basis. In fact, using short-term debt should result in a lower cost of service than requiring the customer to provide this capital through rates. Therefore, the Commission will not accept Green River's proposed adjustment to eliminate interest on short-term debt.

The Commission has reduced Green River's annual expenses by $21,430 to exclude social and community contributions. The Commission is of the opinion that these expenses have little or no benefit to consumers and should not be allowed for rate-making purposes.

Green River proposed to adjust other income by $23,850 to exclude capital credit assignments from associated organizations. It offered no evidence that the level of credits realized during the test year would not be realized prospectively. The Commission is of the opinion that these credits should be recognized as income in the year they are assigned. Therefore, the Commission concludes that the adjustment should not be accepted for rate-making purposes.

The effect on net income of the revised pro forma adjustments is as follows:

	Actual Test Period	Pro Forma Adjustments	Adjusted Test Period
Operating Revenues	$91,660,877	$26,319,061	$117,979,938
Operating Expenses	90,456,019	25,380,661	115,836,680
Operating Income	$ 1,204,858	$ 938,400	$ 2,143,258
Interest on Long-term Debt	829,488	248,877	1,078,365
Other Income and (Deductions) - Net	2,481,254	(2,442,780)	38,474
Net Income	$ 2,856,624	$(1,753,257)	$ 1,103,367

PROPOSED REVENUE REQUIREMENTS MODEL

Green River proposed to base its requested increase in revenue on what it termed a "revenue requirements model." The model is expressed by the following formula:

$$RR = OE + I + M$$

Where:

RR = Revenue Requirements
OE = Operating Expenses
I = Interest
M = Required Margin

The Commission has examined this model carefully. It is clear that this model does not differ from the approach consistently used by the Commission. The model requires a determination of a reasonable amount for operating expenses, interest and margin. In the foregoing pages of this Order, the Commission has addressed the proper amounts to be allowed for operating expenses and interest. The Commission will now address Green River's approach to arriving at margin.

In arriving at this component of revenue requirements, Green River included $752,000 for debt service requirements, $758,000 for construction expenditures, $121,000 for investment required by lending banks, and $560,526 for working capital. Thus, Green River proposed a margin of $2,191,526. It termed this the cash requirements approach to arriving at margin. The end result of this approach would be a Times Interest Earned Ratio ("TIER") of 2.71.

Rural electric cooperatives were created as an economical way to provide electric service to rural consumers. In the

cooperative structure, the customer is the owner. The capital of a cooperative belongs to and is contributed by the customer. Therefore, in the conventional rate-making formula there is no cost of equity. The cooperative has no common stock, its external long-term debt capital is currently obtained from the Rural Electrification Administration ("REA") and supplemental lenders, and its short-term needs are borrowed from banks. In theory the cost of providing service to customers is equal to operating expenses plus the margin needed to meet the coverage requirements of its principal lenders.

The cooperative faces business and financial risks which impede its ability to achieve the minimum coverage requirements contained in its mortgage agreements. This has been recognized in every decision involving cooperatives rendered by this Commission. In this case, Green River's principal lender is REA. This federally-funded organization was created to provide low cost money to utilities operating primarily in rural areas. Its mission is to make it possible for rural America to receive service at reasonable rates. REA has established certain financial criteria which must be met by its borrowers. A borrower must operate in a cost efficient manner, incurring only those operating expenses ordinary and necessary in its day-to-day operations. Further, the borrower must achieve a TIER of 1.5 for at least 2 of its most recent 3 years of operation.

In fixing rates for cooperatives, the Commission has consistently set the return on investment at a level which would permit the cooperative under efficient management an opportunity

to achieve a TIER of 2.25. Thus, in most cases the Commission has provided the cooperative with a margin of 1.25 times its annual interest cost as compensation for business and financial risks.

In determining whether a greater margin and thus a greater TIER is required, the Commission must assess the risks currently faced by Green River. The most significant business risk faced by Green River is a sudden increase in the cost of purchased power. Green River is allowed to recover fully any increase in this cost because of an increase in its supplier's fuel cost through a fuel adjustment clause. It has been allowed to track increases in power cost because of general rate increases filed by its supplier without delay. In this case, the Commission has adjusted Green River's expenses to reflect known increases.

The Commission also has reduced the risk facing Green River by allowing increased interest cost on debt drawn down through the month of November, without making an adjustment for revenues and expenses which will be generated by this capital. This results not only in allowing interest on this additional capital but also in providing the margin required for a 2.25 TIER.

Finally, the Commission's review of Green River's financial data for the 12 months ended August 1981 discloses a coverage ratio of 2.36. This coverage ratio is significantly above the requirements of Green River's lenders. The Commission concludes that Green River's risks have not increased significantly and that no justification exists for the 2.71 TIER Green River seeks under its cash requirements approach.

Moreover, the Commission believes Green River's approach to computing margin would result in requiring the customer to contribute capital for total debt service obligations, construction expenditures and investment in banks. It is obvious to the Commission that these needs have been met in the past through the allowed margin, depreciation and short-term borrowing. To the extent external capital is required, the Commission is convinced that the inclusion of interest expense in the cost of service is the most reasonable and equitable treatment for both Green River and its customers. In that regard, the Commission has included in the cost of service short-term interest of $21,716, which had been eliminated by Green River.

From its analysis of this issue, the Commission concludes that the cash requirements approach of computing margin requested by Green River should be denied.

RATE OF RETURN

The actual rate of return on Green River's net investment rate base established herein for the test year was 5.59 percent. After taking into consideration the pro forma adjustments Green River would realize a rate of return of 9.95 percent. The Commission is of the opinion that the adjusted rate of return is inadequate and a more reasonable rate of return would be 11.08 percent. In order to achieve this rate of return Green River should be allowed to increase its annual revenue by $244,589, which would result in a TIER of 2.25. This additional revenue will provide net income of $1,347,956 which should be sufficient to meet the requirements in Green River's mortgages securing its long-term debt.

OTHER ISSUES

Notice to Customers

As Exhibit 10 attached to its application, Green River submitted a copy of a letter dated June 5, 1981, which was sent to its consumers as notice of the rate increase proposed herein. As an explanation for the increase, Green River stated that its loan agreements required it to maintain a certain financial position and, as a practical matter, it was in violation of those agreements in 1979 and 1980. The Commission finds, based on the best 2 of 3 years' average utilized by the REA, that Green River was not in violation of either its TIER or Debt Service Coverage requirements during either 1979 or 1980. The Commission, therefore, is of the opinion and finds that Green River, in its letter to its consumers, inaccurately presented its status regarding the requirements of its mortgage agreements and that such statements should not be made in future publications to its members.

Revenue Allocation and Rate Design

Green River proposed to recover approximately $159,000 of the requested revenue increase from NSA by increasing the energy "adder" applicable to NSA from 0.05 mills per KWH to 0.10 mills per KWH. NSA opposed the increase, arguing that there is no adequate justification for the net revenues now received by Green River from rates charged to NSA.[2/] In the test year, the "adder"

[2/] NSA's Brief, page 1.

produced $159,000. From these revenues Green River pays its regulatory assessment and trade association dues of $85,000. The remaining $74,000 is available to cover additional expenses incurred by Green River in providing service to NSA. Green River did not provide any computations showing the level of these additional expenses. NSA argued further that all of Green River's expenses could be avoided if NSA were permitted to pay Big Rivers directly for energy received.[3/] The Commission is of the opinion that NSA should continue to be served by Green River and further that the current "adder" should not be increased.

Green River proposed to increase rates for residential and single phase service by 7.21 percent while increasing rates to other rural system customer classes by no more than 3.53 percent. Green River's witness, Mr. Jack Gaines, concluded that his cost of service study showed that residential service currently had a lower rate of return than other customer classes.[4/] In most instances Mr. Gaines used the most common size equipment to allocate distribution plant between customer and demand components.[5/] This method can overstate customer costs, over 98 percent of which are allocated to residential and single phase service. The Commission is of the opinion that although a somewhat higher percentage increase should be applied to residential

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3/ NSA's Brief, page 7.

4/ Gaines prefiled testimony, page 9.

5/ Transcript of Evidence, September 10, 1981, page 161.

service than to other customer classes in this case, the amount of additional increase requested is excessive.

For residential customers, Green River proposed to allocate a larger portion of the increase to the facilities charge to bring it closer to Mr. Gaines' cost of service. Green River has a declining block rate structure which recovers some customer costs in the first step.[6/] Green River's facilities charge has increased substantially in the past year and a half from $3.00 in June 1980 to $5.64 currently. The Commission is of the opinion that no further increase in the facilities charge is warranted at this time.

SUMMARY

The Commission, having considered the evidence of record and being advised, is of the opinion and finds that:

1. The rates in Appendix A are the fair, just and reasonable rates for Green River and will produce gross annual revenue sufficient to pay its operating expenes, service its debt and provide a reasonable surplus for equity growth.

2. The rates proposed by Green River would produce revenue in excess of that found to be reasonable herein and therefore should be denied upon application of KRS 278.030.

3. Green River should not increase the rate it currently charges NSA.

6/ Transcript of Evidence, September 10, 1981, page 160.

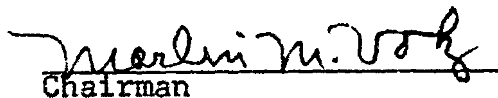
IT IS THEREFORE ORDERED that the rates in Appendix A, attached hereto and made a part hereof, are approved for service rendered by Green River on and after November 28, 1981.

IT IS FURTHER ORDERED that the rates proposed by Green River are hereby denied.

IT IS FURTHER ORDERED that Green River shall file with the Commission within 30 days from the date of this Order its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 30th day of November, 1981.

PUBLIC SERVICE COMMISSION


Chairman

Vice Chairman

Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 8252 DATED NOVEMBER 30, 1981

The following rates and charges are prescribed for the customers in the area served by Green River Electric Corporation. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to November 28, 1981.

Monthly Rates:

Residential Service (Single Phase & Three Phase) and All Other Single Phase Service*

Facilities Charge	$ 5.64
First 600 KWH	5.260¢
Next 400 KWH	4.415¢
All Over 1,000 KWH	3.883¢

Commercial, Large Power and Public Buildings - Three-Phase Demand*

Facilities Charge	$ 16.90
Plus Demand Charge of:	
Per KW of Billing Demand	$ 4.00
Plus Energy Charge of:	
Per KWH Consumed	3.888¢

Street and Individual Consumer Lighting*

175 Watt Mercury Vapor Lamps	$ 6.74
250 Watt Mercury Vapor Lamps	$ 7.76
400 Watt Mercury Vapor Lamps	$ 9.29

*The monthly kilowatt hour usage shall be subject to plus or minus an adjustment per KWH determined in accordance with the "Fuel Adjustment Clause."