COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF HENDERSON-UNION RURAL ELECTRIC COOPERATIVE CORPORATION TO PROVIDE ADEQUATE REVENUES FOR ITS OPERATION) CASE NO. 8397

O R D E R

On December 4, 1981, Henderson-Union Rural Electric Cooperative Corporation ("Henderson-Union") filed an application with this Commission giving notice of an adjustment of rates to become effective January 15, 1982. The proposed rates would produce additional revenue of approximately $1,010,302 annually, an increase of 1.1 percent based on normalized test year revenue derived from total system sales. The total increase was applicable to rural systems sales which would increase by 7.2 percent annually. By Commission Order, the effective date of the proposed tariffs was suspended until June 15, 1982, pursuant to the provisions of KRS 278.190. Based on the determination herein the revenues of Henderson-Union will increase by $569,805 annually, an increase of 4.1 percent to rural system consumers.

On December 9, 1981, the Consumer Protection Division of the Attorney General's Office filed a motion to intervene in this proceeding, which was sustained. A hearing was held at the Commission's offices in Frankfort, Kentucky, on March 10, 1982.

On May 4, 1982, Henderson-Union informed the Commission that one of its large consumers, Anaconda Company, ("Anaconda") had reduced its load requirements by one-third effective May 2, 1982. Henderson-Union seeks incorporation of the effects on net margin of this reduction in sales in this case. A further discussion of this issue is contained in a subsequent section of the Order.

Commentary

Henderson-Union is a consumer-owned rural electric cooperative engaged in the distribution and sale of electric energy to approximately 14,288 member-consumers in the western Kentucky counties of Caldwell, Crittenden, Henderson, Hopkins, Lyon, Union and Webster. Henderson-Union purchases all of its power from Big Rivers Electric Corporation.

Test Period

Henderson-Union proposed and the Commission has adopted the 12-month period ending September 30, 1981, as the test period for determining the reasonableness of the proposed rates. In utilizing the historical test period, the Commission has given full consideration to appropriate known and measurable changes.

Valuation

Net Investment

Henderson-Union proposed on page 12 of its application a net investment rate base of $20,780,356. The Commission concurs with this proposal with the following exceptions:

Henderson-Union adjusted plant in service and accumulated depreciation to reflect changes subsequent to the test period. The Commission will allow only the test year-end levels for these components of the rate base. However, the Commission has adjusted accumulated depreciation to reflect the pro forma adjustment allowed herein to depreciation expense.

In addition, Henderson-Union proposed to include working capital based on 45 days of operation and maintenance expenses (excluding purchased power) plus 15 days of the cost of purchased power, excluding that portion required for large industrial customers. The Commission finds that the evidence of record is not persuasive and presents no substantive reasons for a departure from existing policy. Therefore, one-eighth of out-of-pocket operation and maintenance expenses in order to reflect more current operating conditions has been used to establish the allowance for working capital.

The Commission has adjusted materials and supplies, as well as prepayments, to reflect 13-month averages rather than the year-end levels presented by Henderson-Union. The rate base has been reduced by $87,737 to eliminate the balance in customer advances for construction at the end of the test period. The Commission is of the opinion that these advances are the equivalent of contributions of capital until their final disposition and should be treated as such for rate-making purposes.

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

Net Investment

Utility Plant in Service	$22,769,364
Construction Work in Progress	139,225
Total Utility Plant	$22,908,589
Add:	
Materials and Supplies	912,830
Prepayments	41,485
Working Capital	325,764
Subtotal	$ 1,280,079
Deduct:	
Depreciation Reserve	4,480,091
Customer Advances for Construction	87,737
Subtotal	$ 4,567,828
Net Investment	$19,620,840

Capital Structure

The Commission finds that Henderson-Union's capital structure at the end of the test period was $20,218,828 and consisted of $3,427,808 in equity and $16,791,020 in long-term debt. In the determination of this capital structure the Commission has excluded accumulated capital credit assignments from Henderson-Union's wholesale supplier in the amount of $5,582,220. In conformity with past policy, the Commission has not allowed Henderson-Union's adjustment to increase equity as a result of the request for increased rates. In addition, the Commission has not allowed the adjustment to increase long-term debt for the proposed construction project authorized in Case No. 8446.

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

Henderson-Union proposed on page 4 of its application several adjustments to revenues and expenses to reflect more current and anticipated operating conditions. Subsequent to the hearing, Henderson-Union filed revised adjustments to salaries and wage expense and employment tax expense, and normalization adjustments for the shutdown by Anaconda. The Commission finds the proposed adjustments are generally acceptable for rate-making purposes with the following modifications:

Revenue Normalization

Henderson-Union proposed to reduce normalized revenue by $16,880,013 to reflect the reduction in Anaconda's sales as a result of the shutdown of an aluminum potline at the Sebree reduction plant. Anaconda expected its peak load to be reduced to 216 megawatts as of May 2, 1982, and then to remain constant for a period of approximately 1 year. Henderson-Union used a 98 percent load factor for the reduced peak demand of 216 megawatts to determine its level of projected energy sales for

Anaconda. The Commission is of the opinion that the actual load factor experienced during the test year of 97 percent is more appropriate. Therefore, the Commission has reduced Henderson-Union's normalized revenue by $17,001,146 to reflect the reduction in sales based on a 97 percent load factor.

Purchased Power Expense

Henderson-Union proposed to reduce normalized purchased power expense by $16,790,250 to reflect the reduction in power costs from Anaconda based upon the reduced load. Henderson-Union proposed the basis for determining power costs used in its revenue adjustment discussed in the preceding section of this Order. The Commission has reduced normalized purchased power costs by $16,910,719 to reflect the reduced level of energy sales.

Capital Credits

Henderson-Union proposed to adjust other income by $20,009 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.

Charitable Contributions

The Commission has reduced Henderson-Union's annual operating expenses by $3,233 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.

Interest Expense

Henderson-Union proposed an adjustment to increase interest expense on long-term debt by $160,805 to reflect long-term debt outstanding at the end of the test period as well as 50 percent of the additional debt to be issued in connection with Henderson-Union's proposed construction project in Case No. 8446. The construction project involves a 2-year work plan which was approved on March 16, 1982, by this Commission. However, the dates that the debt will be drawn down are uncertain at this time. Therefore, the Commission has adhered to its established policy of reflecting the annualization of interest expense based on long-term debt outstanding at the end of the test year and additional long-term debt drawn down through the course of these proceedings. Since Henderson-Union has not drawn down any additional loan funds subsequent to the test period, the Commission has adjusted interest expense by $57,026 to reflect interest on the debt outstanding at the end of the test year.

Depreciation Expense

Henderson-Union proposed an adjustment to increase depreciation expense by $99,847 to reflect the annual depreciation expense based on the level of plant in service at the end of the test year and to reflect the additional depreciation on plant additions included in the 1982-1983 work plan.

The Commission will allow $49,835 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 revenue as well as expenses. The Commission, therefore, finds that in the absence of adjustments to reflect other revenues and expenses associated with plant additions made subsequent to the test year, the additional depreciation expense should not be considered for rate-making purposes.

Fringe Benefits Expense

Henderson-Union proposed an adjustment of $16,884 to increase fringe benefits expense. The adjustment was based on notification by Blue Cross-Blue Shield of an anticipated 15 percent increase in rates for medical benefits. However, the actual 1982 contract with Blue Cross-Blue Shield reflected an overall increase of less than 15 percent. Therefore, the Commission has increased the test year fringe benefit expense by $16,195 to reflect the actual 1982 Blue Cross-Blue Shield premium rates.

Tax Assessment

Henderson-Union proposed to increase test year tax expense by $14,300 to reflect the Public Service Commission assessment of July 1981. Since the assessment was based on gross operating revenue for the test year, the Commission has increased Henderson-Union's test year tax expense by $14,703 to reflect the level of revenue allowed herein and the rate in effect during the test year.

Professional Fees Expense

The Commission has decreased Henderson-Union's test period professional fees expense by $2,489 for prior period engineering services. Henderson-Union stated that these services were incurred several years ago and it had not been billed for the services until the test period.[1] Since the test period (exclusive of these engineering services) represents a normalized level of professional expenses, the Commission has not allowed the fees for these services herein for rate-making purposes.

Property Tax Expense

Henderson-Union proposed an adjustment of $17,939 to reflect the property tax rates in effect based on the level of assessable property at the end of the test year and for 50 percent of the plant additions in the 1982-1983 work plan. For the reasons discussed herein, the Commission has not allowed adjustments based on plant additions to be made subsequent to the end of the test period. Therefore, the Commission has reduced Henderson-Union's proposed adjustment by $10,002 for rate-making purposes.

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

1/ Transcript of Evidence, March 10, 1982, page 33.

	Actual Test Period	Pro Forma Adjustments	Adjusted Test Period
Operating Revenues	$86,455,217	$(13,225,789)	$73,229,428
Operating Expenses	85,469,341	(13,416,239)	72,053,102
Operating Income	985,876	190,450	1,176,326
Interest on Long-Term Debt	782,491	57,026	839,517
Other Income and (Deductions) - Net	129,547	3,233	132,780
Net Income	$ 332,932	$ 136,657	$ 469,589

Revenue Requirements

Henderson-Union proposed to base its requested increase in revenues on a Times Interest Earned Ratio ("TIER") of 2.5. However, Henderson-Union submitted in its application another approach to determining revenue requirements. In this approach, Henderson-Union included $89,944,329 for the normalized cost of electric service, $645,120 for working capital, and $1,337,972 for normalized capital expenditures. Thus, Henderson-Union proposed a total revenue requirement of $91,927,421, the end result of which would be a TIER of 3.2. However, Henderson-Union offered no support for inclusion of the revenue requirements approach. Mr. Byrne, a rate consultant for Henderson-Union, stated that the determining factor on the amount of the additional revenue requirements was a TIER of 2.5 and the revenue requirements approach included on the schedules on pages 16 and 17 were for informational purposes only.[2/]

2/ Transcript of Evidence, March 10, 1982, page 83.

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 Henderson-Union. The most significant business risk faced by Henderson-Union is a sudden increase in the cost of purchased power or a reduction in contract industrial sales. Henderson-Union is allowed to recover fully any increase in power 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 Henderson-Union's expenses to reflect known increases.

The Commission concludes that no justification exists to deviate from its past policy. Therefore, the revenue requirements approach has not been used by the Commission to determine the revenue requirements in this case.

The actual rate of return on Henderson-Union's net investment rate base established herein for the test year was 5.02 percent. After taking into consideration the pro forma adjustments Henderson-Union would realize a rate of return of 5.99 percent. The Commission is of the opinion that the adjusted rate of return is inadequate and a more reasonable rate of return would be 8.95 percent. In order to achieve this rate of return Henderson-Union should be allowed to increase its annual revenue by $569,805, which would result in a TIER of 2.25. The revenue allowed herein will provide net income of $1,049,396 which should be sufficient to meet the requirements in Henderson-Union's mortgages securing its long-term debt.

Sales to Anaconda

Henderson-Union will realize a loss in net margin of $87,605 as a result of the reduction in load to Anaconda as follows:

Reduced Revenue	$17,001,146
Less:	
Reduced Purchased Power Costs	16,910,719
Reduced PSC Assessment	2,822
Subtotal	$16,907,897
Net reduction in margin	$ 87,605

On May 4, 1982, Mr. West, Manager, Henderson-Union, filed a letter from Anaconda dated April 26, 1982, which indicated that the reduction in load by Anaconda will remain in effect for approximately 1 year. However, in the same letter, Anaconda authorizes Big Rivers Electric Corporation, Henderson-Union's wholesale power supplier, to attempt to sell its allotted capacity only on a monthly basis. It is apparent to the

Commission that there is a measure of uncertainty as to the expected duration of the reduction in load requirements by Anaconda. In determining the revenue requirements in this case the Commission has recognized the effect of the reduction in sales to Anaconda based on a 12-month period. If the duration of the reduced load is less than the anticipated 12 months, Henderson-Union will realize additional net margins based on the amount of additional sales. Therefore, the Commission finds that Henderson-Union should notify the Commission immediately of the resumption of normal sales to Anaconda and apply for a reduction in rates to offset the additional margin generated from the sales to Anaconda.

Revenue Allocation and Rate Design

Henderson-Union did not propose to increase rate schedules for large power users, security lights, and street lights. Approximately equal percentage increases were requested for the remaining residential and commercial rate schedules. Mr. West stated that a survey of surrounding utilities had shown Henderson-Union's charges for large power users to be relatively high.[3/] For example, Anaconda pays 0.1 mills per kilowatt hour above the wholesale cost of power. A comparable company, National Southwire Aluminum, which is served by Green River Electric Corporation, now pays 0.08 mills per kilowatt hour above the wholesale cost of power. Therefore, the Commission finds the proposed revenue allocation reasonable.

3/ Transcript of Evidence, March 10, 1982, page 23.

Henderson-Union proposed no changes in types of charges. It requested relatively larger increases for facility charges and smaller increases for demand charges. Mr. West testified that the increased facility charges were intended to increase revenue from customers with seasonal use, reducing the subsidy these customers currently receive.[4/] Henderson-Union's current facility charges are higher than those of the majority of other electric utilities in Kentucky. The Commission finds the proposed increase in demand charges and approximately equal percentage increases in energy and facility charges reasonable.

The Commission notes that in this case Henderson-Union did not address the question of the relative risk associated with serving different classes of customers. It did not attempt to quantify this risk nor offer suggestions as to how the Commission might do so. The Commission believes this question must be addressed in any method which attempts to assign revenue requirements to customer class based on cost of service.

This case offers a classic example of that risk being realized. On May 4, 1982, Henderson-Union notified the Commission that Anaconda was reducing its load for approximately 12 months. This load reduction results in lost margin to Henderson-Union of $87,605. Thus, the Commission is putting Henderson-Union and all other utilities subject to its jurisdiction on notice that rate design based on cost studies which

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4/ Transcript of Evidence, March 10, 1982, page 60.

do not reflect the relative risk of serving each customer class will not be acceptable in the future.

Summary

The Commission, after consideration of the evidence of record, finds that:

(1) The rates in Appendix A are the fair, just and reasonable rates to be charged in that they will allow Henderson-Union to pay its operating expenses, service its debt and provide a reasonable surplus to equity growth.

(2) The rates proposed by Henderson-Union would produce revenue in excess of that found reasonable herein and, therefore, should be denied upon application of KRS 278.030.

IT IS THEREFORE ORDERED that the rates in Appendix A be and they hereby are approved for electric service rendered by Henderson-Union on and after June 15, 1982.

IT IS FURTHER ORDERED that the rates proposed by Henderson-Union be and they hereby are denied.

IT IS FURTHER ORDERED that within 30 days of the date of this Order Henderson-Union shall file its revised tariff sheets setting forth the rates approved herein.

Done at Frankfort, Kentucky, this 15th day of June, 1982.

PUBLIC SERVICE COMMISSION

Marlin M. Volz
Chairman

Katherine Randall
Vice Chairman

Wm Carregan
Commissioner

ATTEST:

Secretary

APPENDIX "A"

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE
COMMISSION IN CASE NO. 8397 DATED

The following rates and charges are prescribed for the customers in the area served by Henderson-Union Rural Electric Cooperative 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 the date of this Order.

Monthly Rates:

Schedule A - Farm, Residential and Public Buildings*

Customer Charge per delivery point	$ 6.45
Energy Charge per KWH	0.048000

Schedule B - Farm, Government or Commercial (50 KW or less)*

Customer Charge per delivery point	$ 11.50
Energy Charge per KWH	0.052100

Schedule B-1 - Farm or Commercial (51 KW to 350 KW)*

Customer Charge per delivery point	$ 11.50
Demand Charge per KW	3.50
Energy Charge per KWH	0.046202

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