

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF TAYLOR COUNTY RURAL )  
ELECTRIC COOPERATIVE CORPORATION ) CASE NO. 9536  
FOR AN ADJUSTMENT OF RATES )

O R D E R

Taylor County Rural Electric Cooperative Corporation ("Taylor") filed an application on May 9, 1986, for an adjustment of rates to increase its annual revenue.

Taylor is a consumer-owned rural electric cooperative engaged in the distribution and sale of electric energy to approximately 16,022 customers in Adair, Casey, Green and Taylor counties.

No requests for formal intervention were received, and after timely notice, a hearing was held on August 28, 1986.

Taylor requested additional annual revenue of \$896,247 or 7.60 percent over normalized test-year operating revenue as determined herein. It stated that the additional revenue was necessary because the existing rate structure is inadequate to provide both for the orderly amortization of loan proceeds drawn and utilized since its last general rate increase, and its regular service requirements. Based upon the adjustments, modifications and determination herein, Taylor has been granted an increase of \$534,679 or 4.54 percent.

### TEST PERIOD

Taylor proposed and the Commission has accepted as a test period for determining revenue and rates the 12-month period ending February 28, 1986. To make this historical test period more reflective of expected future needs, the Commission has given consideration to appropriate known and measurable changes.

### VALUATION

#### Net Investment

Taylor proposed a net investment rate base of \$13,075,996. The following modifications have been made:

The Commission has used a 13-month average to determine the level of materials and supplies and prepayments to be included in net investment, and the actual end-of-test-period balances of accumulated depreciation and construction work in progress.

Taylor proposed to include in its calculation of working capital an allowance for 12 days of the cost of purchased power. The Commission has adjusted the provision for working capital to include only one-eighth of adjusted test-year operating and maintenance expenses, exclusive of depreciation, taxes, other deductions and any portion of the purchased power costs. No persuasive evidence was submitted in support of this allowance and Taylor stated that it was aware that purchased power costs had been excluded from the working capital provision in its past rate cases. Therefore, in the absence of any persuasive evidence to the contrary, the Commission is of the opinion that a departure from its normal practice is unwarranted and will allow the one-

eighth of out-of-pocket operation and maintenance expenses, exclusive of purchased power.

Additionally, Taylor's rate base has been adjusted to exclude customer advances for construction in the amount of \$116,509, as these advances are the equivalent of contributions of capital. As such, they should be excluded from the rate base.

Based on these adjustments, Taylor's net investment rate base for rate-making purposes is as follows:

Utility Plant-in-Service	\$15,779,138
Construction Work In Progress	20,840
Total Utility Plant	<u>\$15,799,978</u>
ADD:	
Materials and Supplies	\$ 242,906
Prepayments	8,547
Working Capital	213,382
Subtotal	<u>\$ 464,835</u>
DEDUCT:	
Accumulated Depreciation	\$ 3,453,112
Customer Advances for Construction	116,509
Subtotal	<u>\$ 3,569,621</u>
NET INVESTMENT	<u><u>\$12,695,192</u></u>

### Capital Structure

The Commission finds, from the evidence of record, that Taylor's capital structure at test year-end for rate-making purposes was \$13,759,180 and consisted of \$6,794,605 in equity and \$6,964,575 in long-term debt. In this determination of the capital structure, the Commission has excluded generation and transmission capital credits ("GTCCs") in the amount of \$1,893,911.

## REVENUES AND EXPENSES

Taylor proposed several adjustments to revenues and expenses to reflect current and anticipated operating conditions. The Commission finds the proposed adjustments are generally proper and acceptable for rate-making purposes, with the following modifications:

### Salaries and Wages

Taylor proposed an adjustment to increase the total payroll expense by \$63,365 to normalize salary and wage increases effective in December 1985, and to reflect increases to become effective December 1, 1986. Taylor did not propose an adjustment to reflect any growth in sales to occur after the test year. By utilizing an adjusted historical test period, the Commission is careful to consider both revenue and expense adjustments to factors affecting margins. The effects of inflation may sometimes be reflected through a proposed wage increase; however, if an adjustment such as this is to be included in operating expenses, an adjustment should have been made to reflect growth in revenues affected for the same reasons. The Commission is of the opinion that this adjustment to reflect wage increases that will occur 9 months after the test year is not consistent with the concept of matching of historical test year earnings with rate base and capital. Therefore, we have recalculated the adjustment to wages and salaries by normalizing only the wage rates in effect at test year-end, and have increased test-year salary and wage expense by only \$27,027.

### Payroll Taxes

Taylor proposed an adjustment of \$4,323 for increased payroll taxes associated with the increase in salaries and wages occurring in December 1985, and December 1986. The Commission has recalculated the adjustment based upon the salaries and wages included herein. Therefore, the Commission has increased the test-year payroll expense by \$1,727.

### Employee Pension and Benefit Expense

Taylor proposed an adjustment to increase the level of employee pension and benefit expense by \$14,044, the net result of an adjustment to retirement costs of \$6,121 and to hospitalization insurance of \$7,923. The Commission has determined that the hospitalization increase is proper but has recalculated the adjustment to retirement costs.

Taylor contributes 10 percent of each employee's straight-time earnings to the retirement funds. We calculated Taylor's straight time or base payroll, based on the level of salaries and wages found reasonable herein, applied the 10 percent contribution rate, and determined the increase in retirement costs to be \$3,677.

Therefore, the Commission has increased test-year employee pension and benefit expense by \$11,600.

### Depreciation

Taylor, using REA Bulletin 183-1 as its Depreciation Guide, has requested that the composite depreciation rate for distribution plant be raised to 3 percent. The data filed by Taylor shows that it has been below the minimum curve recommended by REA and

the trend, with present depreciation rates, will continue downward. Therefore the requested increase to a composite 3 percent rate should be approved.

On that basis, the Commission concurs with Taylor's proposed increase to depreciation expense of \$103,792 and to clearing accounts expense of \$6,460, as they are consistent with the Commission's usual treatment of depreciation expense for rate-making purposes, and has included these adjustments herein.

#### Interest Expense

Taylor proposed an increase to test-year interest expense of \$97,845 to reflect annual interest expense on the balance of long-term debt outstanding at test year-end. Taylor calculated interest on \$5,214,430 debt due the Rural Electrification Administration ("REA") and on \$1,046,892 due the Louisville Bank for Cooperatives ("LBC") by applying the interest rates in effect at the test year-end. However, Taylor determined the interest on an additional \$700,000 due LBC by applying a rate of 9.5 percent for the period from March 1, 1986, through May 1, 1986, and by applying a rate of 11.95 percent for the period from May 2, 1986, through February 28, 1987.

In response to Commission Information Requests, Taylor stated that the cooperative was able to fix \$700,000 of the LBC loan funds at the 9.5 percent interest rate on November 1, 1985, from that date through May 1, 1986, and was able to roll over the \$700,000 at a rate of 8.15 percent through November 2, 1986. At that time, the \$700,000 will revert to a variable rate unless another fixed rate is offered. The variable rate, subject to

change monthly, was 11.95 percent at test year-end and 10.75 percent<sup>1</sup> on the date of the hearing. Additionally, in response to the Commission's Information Request in Case No. 9632,<sup>2</sup> Taylor stated that, on September 2, 1986, LBC will offer a fixed rate for existing term loans for a 2- to 4-year period at a projected rate between 8.80 and 9.15 percent.

The Commission is encouraged by Taylor's attempts to minimize interest expense and encourages Taylor's further efforts in this area. However, the Commission is of the opinion that, since Taylor has fixed the \$700,000 LBC loan fund at 8.15 percent through November 1, 1986, the method employed to project the interest associated with the \$700,000 LBC loan funds is inconsistent with the action taken by Taylor, with the conditions in existence at the time the application was filed, and is improper for rate-making purposes. Therefore, the Commission has included in its determination of revenue requirements the annual interest expense on the balance of long-term debt at the end of the test period utilizing the interest rates in effect at that time. This

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<sup>1</sup> Hearing Transcript, August 28, 1986, page 37.

<sup>2</sup> Case No. 9632, Application of Taylor County Rural Electric Cooperative Corporation to Borrow an Additional Sum of \$1,349,000 from the United States of America and to Execute a Note for Said Amount and to Concurrently Borrow from the Louisville Bank for Cooperatives the Sum of \$578,000 and to Execute its Note Therefor to be Secured by an Existing Common Mortgage Heretofore Executed and for a Certificate of Convenience and Necessity Authorizing it to Construct and Make Additional Improvements and Extensions to its Existing System, Final Order dated September 16, 1986.

results in an increase of \$83,559 to the actual test period expense.

Miscellaneous General Expenses

The Commission has excluded from test year expenses \$3,422 paid after an Internal Revenue Service audit of Taylor's calendar years 1983 and 1984. The assessment was for additional taxes plus interest due to Taylor's failure to withhold taxes on employee use of company vehicles, employee Christmas gifts and directors' hospitalization insurance in those years. The expense of this assessment should not be included for rate-making purposes in the test year.

Additionally, the Commission has excluded \$1,810 for expenses of directors' spouses and \$2,250 for attendance of directors at meetings other than regular or special board meetings. The Commission recognizes that non-profit cooperatives must have dedicated and competent directors, but no showing has been made that per diem payments or fees in excess of actual out-of-pocket for attendance at meetings other than board meetings, and expenses for spouse attendance at meetings should be allowed for rate-making purposes.

The result of these adjustments is a decrease in miscellaneous general expenses of \$7,482.

Outside Services

During the test year, Taylor paid \$4,751 in legal fees for services rendered prior to the test year. The amounts are detailed as follows:

<u>Voucher No.</u>	<u>Voucher Date</u>	<u>Payee</u>	<u>Amount</u>
59060	4-18-85	Brown, Todd and Heyburn	\$1,264
59710	7-25-85	Brown, Todd and Heyburn	40
59178	5-1-85	Spragens, Smith and Higdon	2,079 <sup>3</sup>
59386	6-3-85	Spragens, Smith and Higdon	<u>1,368</u>
		TOTAL	<u>\$4,751</u>

Taylor was invoiced and paid for these services during the test year; however, these services were rendered prior to the beginning of the test year. For example, Voucher No. 59386 in the amount of \$1,368 was for an invoice dated May 1, 1985, but was for services rendered from July 25, 1983, through August 15, 1984, a period ending 6 months prior to the beginning of the test year. The Commission is of the opinion that these expenses, incurred so far prior to the test year, should not be included for rate-making purposes.

Additionally, the Commission has determined that, for rate-making purposes, \$14,001 paid for legal services rendered during contract negotiations should be amortized over the life of the

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<sup>3</sup> Response to Commission's Information Request No. 3, dated August 27, 1986, Item No. 10. From February 20, 1984, through January 25, 1985, 34.65 hours X \$60 per hour = \$2,079.

contract. The collective bargaining agreement is for a 3-year period ending in 1988. The Commission has included \$4,667 in the test year, thereby decreasing this expense by \$9,334.

The effect of these two adjustments reduces the expense for outside services by \$14,085.

The effect of the accepted pro forma adjustments and modifications of Taylor's net income is as follows:

	<u>Actual Test Year</u>	<u>Pro Forma Adjustments</u>	<u>Adjusted Test Year</u>
Operating Revenues	\$11,678,485	\$ 107,195	\$11,785,680
Operating Expenses	<u>11,227,849</u>	<u>277,344</u>	<u>11,505,193</u>
Operating Income	\$ 450,636	\$ <170,149>	\$ 280,487
Interest on Long-Term Debt	353,533	83,559	437,092
Other Income/Deductions Net	<u>300,978</u>	<u>&lt;241,960&gt;</u>	<u>59,018</u>
NET INCOME	<u>\$ 398,081</u>	<u>\$ &lt;495,668&gt;</u>	<u>\$ &lt;97,587&gt;</u>

#### REVENUE REQUIREMENTS

The actual rate of return earned on Taylor's net investment rate base established herein for the test period was 3.55 percent. In the application, Taylor requested rates that would result in a Times Interest Earned Ratio ("TIER") of 2.57X and a rate of return of 8.69 percent. Taylor stated that these earnings levels were necessary to maintain financial stability and in order to continue to meet the needs of its membership in the service area.

Taylor's actual TIER for the test year was 1.44X and was 2.21X and 1.26X for the calendar years 1984 and 1985, respectively. After taking into consideration the pro forma adjustments in this case, Taylor would achieve a .78X TIER without an increase

in revenues. Taylor's equity to total asset ratio is 49.39 percent based on the capital structure approved herein. Taylor's Debt Service Coverage for the test year and calendar years 1984 and 1985 was 1.57X, 1.86X and 1.43X, respectively. All of these ratios are based on the earnings of Taylor, exclusive of the GTCCs assigned by Taylor's wholesale supplier, East Kentucky Power Cooperative, Inc. ("EKP").

In 1981, Taylor was granted a rate of return of 5.3 percent which provided a TIER of 2.25X. Recognizing the lowering of interest rates and the overall improvement in economic conditions from those that existed in 1981, the Commission has lowered the rates of return in certain cases involving other utilities under its jurisdiction. Recent decisions involving electric cooperatives have resulted in allowed TIER levels of 2.00X reflecting that rates of return and TIER should be reduced.

Evidence was offered by Taylor in favor of the TIER requested. At the public hearing, Taylor testified that a TIER higher than 2.00X was needed to maintain the present equity level. Further, Taylor stated that approval had been received from REA and LBC for a loan in connection with a new 2-year work plan and that with the additional interest expense, a 2.00X TIER will soon be outdated whereas a 2.50X TIER will allow some flexibility.

Additional testimony was presented by Arthur Norman DeLong of Patterson and DeWar Engineers, Inc., who performed a retail rate analysis<sup>4</sup> for Taylor. As part of that analysis, Mr. DeLong

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<sup>4</sup> Application, Exhibit JJ, Retail Rate Analysis, filed May 23, 1986.

calculated net investment rate base and revenue requirements and determined Taylor's optimum equity level based on calendar year 1985 operations. At the hearing, Mr. DeLong stated that the optimum equity level shown on page 33 of the analysis at 47 percent was a typographical error and should actually be 58.68 percent. However, Mr. DeLong further stated that Taylor's optimum equity level would be in the neighborhood of 55 percent and that he did not think Taylor will ever reach that level.

The Commission has determined that 58.68 percent was the actual equity level at December 31, 1985, and that the actual equity level at test year-end was 55.52 percent. These equity levels include the GTCCs assigned by EKP as do the levels provided by Mr. DeLong. Therefore, Taylor is presently at the 55 percent optimum equity level as calculated by Mr. DeLong.

Taylor stated that a 2.00X TIER level will be outdated as construction under a new 2-year workplan is started and loan funds are advanced, and that a 2.50X TIER will allow some flexibility. However, that contention does not consider any cost savings or additional revenues that will result from that construction. By utilizing an adjusted historical test period, the Commission includes in the determination of revenue requirements projected operating expenses allowing for known and measurable increases to operation and maintenance expenses. Thus, the pro forma operating expenses should be representative of expected future operating costs. The Commission also allows a return which is expressed by the TIER in this case. Taylor did not provide sufficient evidence to support the 2.57X TIER requested. Therefore, the Commission

finds that the contentions of Taylor in support of a 2.50X are not persuasive and that a TIER of 2.00X should provide a sufficient level of cash flow to achieve Taylor's requirements for normal expansion and improvements and maintain its present equity.

Based on the evidence of record and the reasons cited herein, the Commission has determined that rates calculated to produce a TIER of 2.00X should be granted in this case. In order to achieve this TIER, Taylor should be allowed to increase its annual revenue by \$534,679, for a rate of return of 6.42 percent. This additional revenue should produce net income of \$437,092 which should be sufficient to meet the requirements in Taylor's mortgages securing its long-term debt.

#### COST OF SERVICE

Taylor introduced its Retail Rate Analysis through its witness Mr. Delong. The analysis was based on a fully allocated embedded cost of service study. The purpose of filing the study in this proceeding was to develop rates which "...incorporated additional expenses estimated for 1986 and to increase the operating margin to provide an adequate tier."<sup>5</sup> The study was used to recommend changes and justify rates for Taylor's various customer classes of service.

The Commission has serious reservations about Taylor's proposed Retail Rate Analysis because of the underlying cost of service study. As the Commission has stated in recent Orders in

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<sup>5</sup> Ibid., page 4.

RECC rate cases,<sup>6</sup> it is concerned with the allocation of distribution plant costs between customer and demand cost classifications. In the proposed study Taylor did not use either the zero intercept or the minimum mile methodology as recommended by the NARUC Cost Allocation Manual but instead chose to allocate all expenses with exception of power costs between customer charge and energy charge based on "...a guideline from the NRECA."<sup>7</sup> It is the Commission's opinion that the selection of such allocator is arbitrary, not consistent with NARUC Cost Allocation Manual guidelines and that the resulting costs allocation violates the principle of cost causation.

Another major concern is that allocation of demand related costs between customer classes has not been based on statistically acceptable load research. Taylor is currently served under EKP's wholesale tariff where at least a portion of its power costs are billed based on its coincident demand.<sup>8</sup> In this study Taylor has neither classified demand related expenses nor has it allocated demand related costs between customer classes based on coincident demand. Instead Taylor has relied on energy consumption to allocate all non-customer related costs.<sup>9</sup> It is the Commission's

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<sup>6</sup> Licking Valley RECC Rate Case No. 9475, Final Order dated August 15, 1986, page 15.

<sup>7</sup> Hearing Transcript, August 28, 1986, page 21.

<sup>8</sup> East Kentucky Power Wholesale Power Tariff, dated June 1, 1985.

<sup>9</sup> Response to Commission's Information Request No. 2, Item No. 29.

opinion that there are costs related to demand and that it is appropriate to allocate some of these costs according to coincident demand. The failure to use a coincident demand allocation violates the principle of cost causation and thus the resulting cost allocations are improper.

Therefore the Commission rejects Taylor's Retail Rate Analysis Study for purposes of designing retail rates. The Commission does emphasize that it does not require but does encourage Taylor to file cost of service studies in future rate cases. However if Taylor does file cost of service studies the Commission will expect it to follow methodologies specified in the NARUC Cost Allocation Manual. In addition the Commission will expect Taylor to use statistically acceptable load research data in its future studies.

#### REVENUE ALLOCATION

Taylor proposed to charge rates and allocate the revenue increase based on the cost of service study. Since we have rejected the cost of service study, we have allocated the revenue increase to each customer class by the percentage of revenue increase methodology.

Taylor proposed to transfer 15 customers from the GP-2 classification to the GP-1 classification and the Commission is in agreement with this change.

Taylor proposed to implement a customer charge for the large power classification of \$44.68. The Commission agrees there should be a customer charge and has set the rate at \$31.85. This rate was arrived at by first computing the pro forma revenue for

this customer classification. The revenue applicable to the demand and energy charges was subtracted from the pro forma revenue, leaving a balance applicable to the customer charge. The rate was computed by dividing the balance of the revenue by the number of customer billings.

The Commission has allowed the proposed fee increases for regular and overtime service, returned check, meter reading, meter test, collection of delinquent accounts and regular and overtime reconnections. These fees are included in the Appendix A to this Order.

Taylor also proposed an increase in its cable television's attachment tariff. The computation by Taylor of the annual carrying charge was incorrect in that it included a factor for long-term interest expense. The correct fees are included in Appendix A to this Order.

#### SUMMARY

The Commission, after consideration of 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 Taylor and will provide net income sufficient to meet the requirements in Taylor's mortgages securing its long-term debt.
2. The rates and charges proposed by Taylor differ from those found reasonable herein and should be denied upon application of KRS 278.030.
3. Taylor's proposed tariffs are not fair, just and reasonable and should be rejected.

4. Taylor's proposed Retail Rate Analysis is not based on NARUC Cost Allocation Manual guidelines and should be rejected.

IT IS THEREFORE ORDERED that:

1. The rates in Appendix A be and they hereby are approved for service rendered on and after the date of this Order.

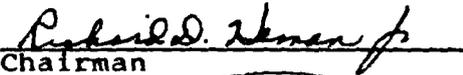
2. The rates proposed by Taylor be and they hereby are denied.

3. Within 30 days from the date of this Order, Taylor shall file with this Commission its revised tariff sheets setting out the rates approved herein.

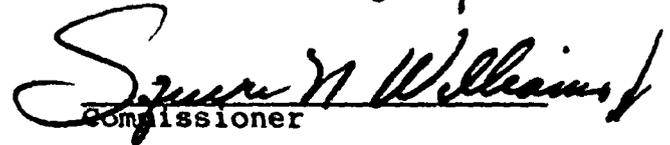
4. The tariffs proposed by Taylor be and they hereby are denied.

Done at Frankfort, Kentucky, this 30th day of October, 1986.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Wice Chairman

  
Commissioner

ATTEST:

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Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 9536 DATED 10/30/86

The following rates and charges are prescribed for the customers in the area served by Taylor County Rural Electric Cooperative 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.

SCHEDULE A  
FARM AND HOME SERVICE

Monthly Rates:

Customer Charge	\$4.35 Per Month
All KWH Per Month	.05743 Per KWH

SCHEDULE GP-1  
GENERAL PURPOSE SERVICE

Monthly Rates:

Customer Charge	\$5.40 Per Meter/Month
All KWH Per Month	.06214 Per KWH

SCHEDULE GP-2  
GENERAL PURPOSE SERVICE

Monthly Rates:

Customer Charge	\$31.85 Per Meter Per Month
Demand Charge	\$4.13 Per KW of Billing Demand
All KWH Per Month	\$.04029 Per KWH

CATV: Sheet No. 41

Pole:	
Two-Party	.1400
Three-Party	.1308
Anchor:	
Two-Party	.1258
Three-Party	.0842
Ground	.0592

Charges:

The following charges are listed in the rules and regulations of Taylor County RECC:

Service:	Sheet No. 5	
Regular		\$15.00
Overtime		25.00
Return Check	Sheet No. 26	10.00
Meter Reading	Sheet No. 12	18.00
Meter Test	Sheet No. 14	10.00
Collection:	Sheet No. 25	
Regular		15.00
Overtime		25.00
Reconnect:	Sheet No. 25	
Regular		30.00
Overtime		40.00