### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE GREEN-TAYLOR )
WATER DISTRICT OF GREEN AND TAYLOR )
COUNTIES, KENTUCKY, FOR APPROVAL OF ) CASE NO. 9871
CONSTRUCTION, FINANCING AND )
INCREASED WATER RATES )

### ORDER

On February 24, 1987, Green-Taylor Water District ("Green-Taylor") filed a Motion to reopen Case No. 9557, which had previously been dismissed due to the expiration of the 10-month statutory period required by KRS 278.190(3). In response to Green-Taylor's Motion the Commission redocketed the matter as the instant case and incorporated the entire record of Case No. 9557 herein by reference.

By Interim Order dated March 30, 1987, the Commission approved Green-Taylor's proposed construction and financing. This Order addresses Green-Taylor's proposed increase in rates which would produce additional annual revenues of \$315,780, an increase of 112 percent.

A hearing in this matter was held in the Commission's offices on May 13, 1987.

The rates requested by Green-Taylor will produce additional revenues of \$315,780 on an annual basis. In this Order, the Commission has approved an increase of \$208,819.

## TEST PERIOD

Green-Taylor proposed and the Commission has accepted the 12-month period ending December 31, 1985, as the test period in this matter. Although this test period is approximately 18 months old, it compares favorably with the 12 months ended December 31, 1986, and appears to be representative of Green-Taylor's current operations.

# REVENUE REQUIREMENTS

Green-Taylor requested additional annual revenue of \$315,780. The Commission has reviewed Green-Taylor's test year revenues and expenses and its proposed adjustments and has made adjustments thereto consistent with the evidence of record and the Commission's established rate-making practices.

# Revenue Normalization

Green-Taylor in its application reported test year operating revenues from water sales in the amount of \$281,369. On December 20, 1985, Green-Taylor was granted an increase of approximately \$5,208 through the purchased water adjustment procedure. Greeninstant included revenue Taylor the case and adjustments for the 460 new users to be added to the system. Based on the rates granted in the purchased water adjustment and including the 460 new users the Commission has determined that normalized test year operating revenue from water sales is \$369,803.

## Purchased Water Expense

Green-Taylor's proposed expense for water purchases of \$124,945 reflected its test period level of water lost and

unaccounted for of approximately 18 percent. The Commission has a long-standing practice of limiting lost and unaccounted for water to 15 percent for rate-making purposes and no persuasive reasons for inconsistent treatment were presented in this proceeding. Therefore, the Commission has made an adjustment to reduce Green-Taylor's proposed expense by \$4,216, to \$120,729, for rate-making purposes.

## Customer Accounts Expense

Green-Taylor proposed an adjustment to increase Customer Accounts Expense by \$127 based on the increase in customers associated with the current construction project. However, the proposed adjustment did not adequately reflect the full estimated increase in customers.

During the test year, with 1,480 customers, Green-Taylor's Customer Accounts Expense was \$3,675. Based on the estimated increase to 1,931 customers the Commission has calculated a prorata increase of \$1,114 for an adjusted expense level of \$4,789.

# Maintenance Expense

During the test year Green-Taylor incurred transmission and distribution maintenance expense of \$26,688. In its application Green-Taylor proposed an adjustment to increase this expense by \$25,450, to \$52,138, in proportion to the increase in its plant in service caused by the new construction.<sup>2</sup> In a subsequent response

Water Loss: 25,161,700 Gallons/Water Purchased: 137,612,000 Gallons = 18.3%

Green-Taylor Water District Rate Study, Exhibit 6.

to a data request from the Commission staff, Green-Taylor provided another calculation for this adjustment based on the increases in inch-miles of pipe and the number of service connections. Under this approach the increase was \$30,884 resulting in an adjusted expense of \$57,572.

The Commission recognizes that Green-Taylor's expense, in all likelihood, will increase due to the expansion of its utility plant. However, the Commission is not persuaded that either of the methods presented by Green-Taylor accurately projects the increase. The test year expense was incurred for repairs to a system that has been in operation for several years and consists largely of asbestos cement water lines. The construction project is for a new system consisting of plastic "PVC" distribution lines which are higher quality and subject to less frequent repairs. Therefore, while logic dictates that maintenance expense will increase, an increase of the magnitude projected by Green-Taylor is questionable.

Faced with these circumstances, the Commission could deny any adjustment citing flaws in the methodology; however, such denial would be shortsighted. Therefore, the Commission will allow an adjustment of \$14,084 which increases the expense to \$40,772, the mid-point between the test year expense and the average of the two adjustments proposed by Green-Taylor. Admittedly, this is a compromise but it is one the Commission finds more acceptable and equitable than denial of any adjustment or acceptance of either of Green-Taylor's proposals.

## Interest Expense

For the test year Green-Taylor reported interest expense of \$46,929 based on its existing long-term debt. Green-Taylor proposed an adjustment to increase interest expense by \$123,845 based on an interest rate of 7.75 percent for its new Farmers Home Administration ("FmHA") loan of \$1,598,000. The interest rate of 7.75 percent was the rate in effect at the time of the loan approval. Under current FmHA loan provisions, Green-Taylor is allowed, at the time of loan closing, to take the lower of the approved rate or the current rate being offered by FmHA. current intermediate rate, for which Green-Taylor qualifies, is 5.75 percent. Based on this rate, Green-Taylor's interest on long-term debt will increase by \$91,885, to \$138,814, as a result of its current construction project. This is the level of interest the Commission has included herein for rate-making purposes.

# Depreciation Expense

Green-Taylor proposed an adjustment to increase depreciation expense by \$19,298, to \$55,402, to reflect depreciation on non-contributed property for both its existing plant and its plant currently under construction. This adjustment was in accordance with the Commission's long-standing practice of excluding depreciation on contributed property as an expense for rate-making purposes.

The rate for the second calendar quarter of 1987.

A recent decision of the Supreme Court of Kentucky, Public Service Commission of Kentucky v. Dewitt Water District, Ky., 720 S.W.2d 725(1986), requires that the Commission depreciation expense on contributed property as an expense for rate-making purposes. Based on Green-Taylor's adjusted plant in service, including new construction, its total annual depreciation In a written response to the staff's expense is \$91,091. questions on this matter, Green-Taylor indicated it now sought rate recovery of this additional depreciation expense.

Based on these adjustments, Green-Taylor's adjusted test period operations are as follows:

	Applicant's	Commission	Adjusted
	Pro Forma	Adjustments	Pro Forma
Operating Revenues	\$ 285,262	\$ 88,434	\$ 373,696
Operating Expenses	388,745	21,094	409,839
Operating Income	\$<103,483>	\$ 67,340	\$ <36,143>
Interest Income	23,826	-0-	23,826
Interest Expense	170,774	<31,960>	138,814
Net Income	\$<250,431>	\$ 99,300	\$<151,131>

With the recognition of its new loan at an interest rate of 5.75 percent Green-Taylor's average annual debt service is \$163,752. The Commission is of the opinion that Green-Taylor's adjusted debt service coverage ("DSC") of <.07X> is inadequate and that a DSC within a range of 1.0X to 1.2X is required in order for Green-Taylor to meet its operating expenses, service its debt, and provide for reasonable equity growth. In order to achieve a DSC of 1.2X, the upper end of this range which the Commission finds

reasonable, Green-Taylor will need to generate total annual revenues of \$606,341 which requires an increase of \$208,819.

## RATE DESIGN

Green-Taylor's present rate structure is a declining block schedule which consists of six steps with the first step being a minimum usage allowance. Green-Taylor stated at the hearing that it had no objection to a possible restructuring of its present rate design.

After reviewing Green-Taylor's present and proposed rates and its customers usage patterns it was determined that the third and fourth increments and the fifth and sixth increments should be combined. The usage patterns shown in the billing analysis do not justify the six current rate increments, but rather support combining the last four steps into two steps. This reduction in the number of rate increments will ensure that the bottom increment will cover the cost of water and will allow for a more equitable distribution of costs among Green-Taylor's customers.

### FINDINGS AND ORDERS

The Commission, after consideration of the evidence of record and being advised, is of the opinion and finds that:

Operating Expenses
Debt Service Plus .2X
Total Revenue Required
Less:
Adjusted Operating Revenues
Interest Income

Required Increase

\$409,839
196,502
\$606,341
23,826

- 1. The rates proposed by Green-Taylor would produce revenues in excess of the revenues found reasonable herein and should be denied pursuant to KRS 278.030.
- 2. The rates in Appendix A are fair, just and reasonable for Green-Taylor and should produce gross annual revenues of \$606.341.

IT IS THEREFORE ORDERED that:

- 1. The rates in Appendix A be and they hereby are approved for service rendered by Green-Taylor on and after the date of this Order.
- 2. Within 30 days from the date of this Order Green-Taylor shall file with the Commission its revised tariff sheets setting out the rates approved herein.
- 3. If, on the date of its loan closing, Green-Taylor accepts an interest rate other than the intermediate rate of 5.75 percent currently in effect, then it shall file the following with the Commission within 30 days of the date of closing: (1) the FmHA notification of the changed interest rate and copies of all correspondence of the interest rate accepted from FmHA; (2) a statement of the interest rate accepted from FmHA; (3) amended pages to its bond resolution and an amended amortization schedule based on the different interest rate if a different rate is accepted; (4) full documentation of the impact of the different rate showing the changes in annual debt service costs.

Done at Frankfort, Kentucky, this 10th day of June, 1987.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

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ATTEST:

Executive Director

### APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9871 DATED June 10, 1987.

The following rates and charges are prescribed for the customers in the area served by Green-Taylor Water District. 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 effective date of this Order.

RATES: Monthly

# 5/8 X 3/4-Inch Connections

Over 40,000 gallons

First 2,000 gallons	\$11.60 Minimum Bill
Next 4,000 gallons	4.35 per 1,000 gallons
Next 19,000 gallons	3.15 per 1,000 gallons
Over 25,000 gallons	1.60 per 1,000 gallons
3/4-Inch Connections	
First 6,000 gallons	\$29.00 Minimum Bill
Next 19,000 gallons	3.15 per 1,000 gallons
Over 25,000 gallons	1.60 per 1,000 gallons
1-Inch Connections	
First 10,000 gallons	\$41.60 Minimum Bill
Next 15,000 gallons	3.15 per 1,000 gallons
Over 25,000 gallons	1.60 per 1,000 gallons
1 1/2-Inch Connections	
First 25,000 gallons	\$88.85 Minimum Bill
Over 25,000 gallons	1.60 per 1,000 gallons
2-Inch Connections	
First 40,000 gallons	\$112.85 Minimum Bill

1.60 per 1,000 gallons