

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF PURCHASE PUBLIC )  
SERVICE CORPORATION D/B/A CARDINAL )  
GROUP FOR A RATE ADJUSTMENT PURSUANT ) CASE NO. 95-081  
TO THE ALTERNATIVE RATE ADJUSTMENT )  
PROCEDURE FOR SMALL UTILITIES )

O R D E R

On March 2, 1995, Purchase Public Service Corporation d/b/a Cardinal Group ("Cardinal") filed its application for Commission approval of proposed sewer rates. Commission Staff, having performed a limited financial review of Cardinal's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 15 days from the date of this Order.

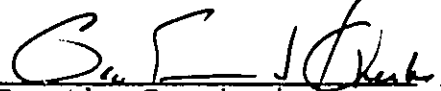
IT IS THEREFORE ORDERED that all parties shall have no more than 15 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 17th day of May, 1995.

ATTEST:

  
\_\_\_\_\_  
Executive Director

PUBLIC SERVICE COMMISSION

  
\_\_\_\_\_  
For the Commission

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AN APPLICATION OF PURCHASE PUBLIC )	
SERVICE CORPORATION D/B/A CARDINAL )	
GROUP FOR A RATE ADJUSTMENT )	CASE NO.
PURSUANT TO THE ALTERNATIVE RATE )	95-081
ADJUSTMENT PROCEDURE FOR SMALL )	
UTILITIES )	

STAFF REPORT

Prepared By: Mark C. Frost  
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Analyst, Chief  
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STAFF REPORT

ON

Purchase Public Service Corporation

d/b/a Cardinal Group

CASE NO. 95-081

A. Preface

On March 2, 1995 the Purchase Public Service Corporation d/b/a Cardinal Group ("Cardinal") submitted its application seeking to increase its rates pursuant to 807 KAR 5:076, the Alternative Rate Adjustment Procedure for Small Utilities. The proposed rates would produce an increase in annual sewer revenues of \$30,611, an increase of 67.34 percent over normalized test period sewer revenues of \$45,458.

Cardinal requested the assistance of Commission Staff ("Staff") in preparing its ARF application. In response, Staff performed a limited financial review of Cardinal's test period operations, the 1993 calendar year, prior to the filing of the application. Mark Frost of the Commission's Division of Financial Analysis performed the review on June 16 and 17, 1994.

Mr. Frost is responsible for the preparation of this Staff Report except for Section B, Operating Revenue; Section D, Rate Design; Appendix B; and Appendix C, which were prepared by Sam Reid of the Commission's Division of Rates and Research. Based on the findings contained in this report, Staff recommends that Cardinal be granted an increase in sewer revenues of \$30,418.

Scope

The scope of the review was limited to obtaining information as to whether the test-period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

Commentary

The Natural Resources and Environmental Protection Cabinet, Division of Water ("Division of Water") placed a tap-on-ban at Cardinal's Draffenville sewage treatment plant ("Draffenville") due to chronic inflow/infiltration problems, frequent "KPDES" permit limit violations, and the fact that the treatment plant had reached its maximum capacity.

Pursuant to an oral agreement with the Division of Water, Cardinal constructed a pump station and installed a 49,500 gallon per day extended aeration treatment plant to correct the problems at Draffenville. The construction was financed with a Farmers Home Administration ("FmHA") loan.

B. Analysis of Operating Revenues and Expenses

Operating Revenues

Cardinal proposed a pro forma level of sewer revenues of \$45,458,<sup>1</sup> an increase of \$574 above its 1993 reported level of \$44,884. This adjustment reflects the end-of-period customer level and Cardinal's current rate schedule. Staff is of the opinion that

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<sup>1</sup>      156 Res. Cust. x \$20.45 x 12 Months =      \$ 38,282  
         20 Com. Cust. x \$29.90 x 12 Months =      +    7,176  
         Normalized Sewer Revenues                      \$ 45,458

Cardinal's adjustment is correct and therefore, operating revenue has been increased by \$574.

Operating Expenses

In its application, Cardinal reported actual and pro forma test period operating expenses of \$67,792 and \$63,690, respectively. The following are Staff's recommended adjustments to Cardinal's actual test period operations and discussion of Cardinal's proposed pro forma adjustments:

Water: Cardinal proposed a pro forma level of water expense of \$921, a decrease of \$1,007 from its test period amount. A review of the invoices revealed that test period water expense had been overstated. Correcting this overstatement and recognizing the water purchased at the new meters installed at the Draffenville and Blandville West treatment plants, Cardinal arrived at its proposed level of test period water expense.

The rate-making criteria of "known and measurable" is used to evaluate pro forma adjustments. An adjustment based on documented increased cost or usage would constitute a known and measurable adjustment. Reflecting the cost of water purchased at the two new metered connections would meet that criteria.

The application showed that Blandville West's average water bill was \$42.50 monthly or \$510 annually. Staff analyzed its workpapers and determined that Blandville West's average water bill was actually \$28.34 per month or \$340 annually, \$170 less than the amount Cardinal calculated.

Based on its review of the test period invoices and correcting the Blandville West error, Staff arrived at a pro forma level of water expense of \$751.<sup>2</sup> Therefore, test period water expense has been decreased by \$1,177.

Testing: Cardinal proposed a pro forma level of testing expense of \$2,160, an increase of \$1,389 above its reported test period level of \$771. The Division of Water requires Cardinal to test the discharge monthly at three of its treatment plants and quarterly at the other plant. The testing frequency and the fee of \$54 per test are the basis for this adjustment.

Staff is of the opinion that the testing fee paid by Cardinal is reasonable. Furthermore, an adjustment based on that fee and the requirements of the Division of Water would meet the rate-making criteria of known and measurable. Accordingly, testing expense has been increased by \$1,389.

Purchased Power: Cardinal proposed to increase its test period purchased power expense of \$7,600 to \$8,019, an adjustment of \$419. Staff analyzed the test period invoices and determined Cardinal had understated its electric expense by \$419. Therefore, purchased power expense has been increased by that amount.

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<sup>2</sup>	Draffenville - New Meter No. 40222	\$ 102
	Blandville - New Meter	340
	Test Period Water Cost - Other Meters	<u>+ 309</u>
	Pro Forma Water Expense	<u>\$ 751</u>

Miscellaneous Supplies and Expense: Cardinal proposed a pro forma level of miscellaneous supplies and expense of \$14,680, a decrease of \$6,075 from its test period level of \$20,755.

The April and November electric payments of \$1,059 were misclassified as miscellaneous supplies and expense. Ordinarily, the incorrect classification of expenses would not effect the overall revenue requirement determination. However, these costs have been included in the calculation of pro forma purchased power. Accordingly, miscellaneous supplies and expense should be decreased by \$1,059.

Staff analyzed the test period invoices and determined that the following expenditures are capital in nature:

2 Barnes SGV20221 Pumps	\$ 2,050
3 LMI Pumps	\$ 702
2 Chlorine Tanks	\$ 1,064

After consulting with Bob Arnett of the Commission's Engineering Division, it was determined that these capital costs should be depreciated over 10 years. Therefore, miscellaneous supplies and expense has been decreased by \$3,816 and depreciation expense increased by \$381.

Upon further review of the invoices, Staff determined that Cardinal's KPDES permit fee of \$1,200 is a nonrecurring expenditure that should be amortized rather than expensed. The KPDES fee should be amortized over the life of the permit, which is 10 years. Therefore, miscellaneous supplies and expense has been decreased by \$1,200 and amortization expense increased by \$120.

Based on the above adjustments, miscellaneous supplies and expense has been decreased by \$6,075, depreciation expense increased by \$381, and amortization expense increased by \$120.

Routine Maintenance Fee: Prior to the test period, Cardinal did not incur a routine maintenance fee. However, during the test period Cardinal entered into an oral contract to pay a licensed operator a fee of \$265 per month or \$3,180 annually to provide the routine maintenance at the Blandville West treatment plant.

Based upon its knowledge of the routine maintenance fees paid by comparable sewer utilities, Staff considers a fee of \$265 per month to be within a range that is reasonable, and therefore, it should be reflected in test period operations. Staff recommends that test period operations be increased by \$3,180 to reflect the on-going level of the routine maintenance expense.

Supervision and Engineering: In 1994, Cardinal promoted an employee to replace its system manager. Therefore, Cardinal proposed to eliminate the previous manager's salary and fringe benefits of \$6,575 from its test period operations.

Given that the new manager's salary and fringe benefits are included in Cardinal's test period operations, the previous manager's compensation should be eliminated. Therefore, supervision and engineering expense has been decreased by \$6,575.

Depreciation: Cardinal proposed to include depreciation expense of \$4,066 in its test period operations. This adjustment



reflects depreciating Cardinal's Draffenville plant expansion over 20 years.

An adjustment for the plant expansion would meet the rate making criteria of known and measurable, and it should be reflected in test period operations. Upon consulting with Mr. Arnett, it was determined that Cardinal's construction cost and proposed depreciation life are reasonable. Accordingly, test period operations have been increased by \$4,066 to reflect Cardinal's pro forma depreciation expense.

#### Other Deductions

Interest: Cardinal proposed a pro forma level of interest expense of \$4,346. Cardinal's FmHA loan to finance the Draffenville construction is the basis for this adjustment.

Attached to the application is a copy of the November 30, 1993, FmHA loan in the amount of \$75,000. The FmHA loan has a 20 year term and an interest rate of 6 percent per annum.

Staff is of the opinion that an adjustment to reflect the cost to finance the construction would meet the rate-making criteria of known and measurable. Therefore, test period operations have been increased by \$4,346 to reflect Cardinal's interest expense.

#### Operations Summary

Based on the recommendations of Staff contained herein, Cardinal's operating statement would appear as set forth in Appendix A to this report.

C. Revenue Requirements Determination

The approach frequently used by this Commission to determine revenue requirements for small, privately-owned utilities is the operating ratio. This approach is used primarily when there is no basis for a rate-of-return determination or the cost of the utility has fully or largely been recovered through the receipt of contributions. Staff recommends the use of this approach in determining Cardinal's revenue requirement.

Cardinal requested an operating ratio of 88 percent. Staff is of the opinion that this would allow Cardinal sufficient revenues to cover its operating expenses, and to provide for reasonable equity growth. An 88 percent operating ratio results in a revenue requirement of \$76,528.<sup>3</sup> Therefore, Staff recommends Cardinal be granted a revenue increase of \$30,418.<sup>4</sup>

D. Rate Design

Cardinal currently has a separate rate for each of two customer classifications, residential and commercial. The present rate structure fails to consider the impact large users have on the system. Cardinal proposed to modify its present rate design by billing its commercial customers on a residential equivalent

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<sup>3</sup>	Staff's Pro Forma Operating Exp.	\$ 63,520
	Operating Ratio	+ 88%
	Subtotal	\$ 72,182
	Interest Expense	+ 4,346
	Recommended Revenue Requirement	<u>\$ 76,528</u>
<sup>4</sup>	Recommended Revenue Requirement	\$ 76,528
	Normalized Operating Revenue	- 46,110
	Recommended Revenue Increase	<u>\$ 30,418</u>

method. Staff agrees that this method reduces the present subsidization, resulting in a more equitable distribution of cost.

The Division of Water allocates 12,000 gallons per month for a single family residential customer to determine plant capacity. The residential equivalent for Cardinal's commercial customers was calculated using water from the commercial customers supplier, North Marshall. Actual water usage of each commercial customer was averaged from the past three years to establish a representative annual usage, when applicable. Variations particular to individual customers were taken into consideration and adjustments were made. The average annual usage was divided by 12,000 gallons to determine the annual residential equivalent. The annual residential equivalent divided by 12 results in the monthly residential equivalent. The calculations establishing the residential equivalent for Cardinal's commercial customers and monthly bills are set out in Appendix C. The commercial customers residential equivalent should be recalculated, at a minimum, on an annual basis. The rates contained in Appendix B will achieve Staff's recommended level of revenue.

Signatures



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Prepared By: Mark C. Frost  
Public Utility Financial  
Analyst, Chief  
Water and Sewer Revenue  
Requirements Branch  
Financial Analysis Division



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Prepared By: Sam Reid, Jr.  
Public Utility Rate Analyst  
Communications, Water and  
Sewer Rate Design Branch  
Rates and Research Division

APPENDIX A

TO THE STAFF REPORT IN CASE NO. 95-081

	<u>1993 Annual Report</u>	<u>Staff's Pro Forma Adjustments</u>	<u>Staff's Pro Forma Operations</u>
Operating Revenues:			
Flat Rate Sewer	\$ 44,884	\$ 574	\$ 45,458
Forfeited Discounts	<u>652</u>	<u>-0-</u>	<u>652</u>
Total Operating Revenues	<u>\$ 45,536</u>	<u>\$ 574</u>	<u>\$ 46,110</u>
Operating Expenses:			
Sludge Hauling	\$ 1,605	\$ -0-	\$ 1,605
Utility Service - Water	1,928	( 1,177)	751
Testing	771	1,389	2,160
Purchased Power	7,600	419	8,019
Miscellaneous Supplies	20,755	( 6,075)	14,680
Routine Maintenance	-0-	3,180	3,180
Supervision & Engineering	28,473	( 6,575)	21,898
Uncollectible	1,603	-0-	1,603
Outside Services	3,837	-0-	3,837
Insurance	790	-0-	790
Regulatory Commission Exp.	430	-0-	430
Depreciation	-0-	4,447	4,447
Amortization	<u>-0-</u>	<u>120</u>	<u>120</u>
Total Operating Expenses	<u>\$ 67,792</u>	<u>\$ ( 4,272)</u>	<u>\$ 63,520</u>
Net Operating Income	\$( 22,256)	\$ 4,846	\$( 17,410)
Other Deductions:			
Interest Expense	<u>-0-</u>	<u>4,346</u>	<u>4,346</u>
Net Income	<u>\$( 22,256)</u>	<u>\$ 500</u>	<u>\$( 21,756)</u>

APPENDIX B

TO THE STAFF REPORT IN CASE NO. 95-081

Residential Customers

\$29.25 Per Month

Commercial Customers

\$29.25 Residential Equivalent\*

- Commercial customers are billed at the residential rate for each residential equivalent, or 12,000 gallons. For example, a commercial customer who used 26,000 gallons would be billed at a rate of 2.17 times the residential rate.

APPENDIX C

TO THE STAFF REPORT IN CASE NO. 95-081

ANNUAL REVENUE REQUIREMENT	\$75,876
DIVIDE BY CUSTOMERS	216.2
(RESIDENTIAL 156 PLUS COMMERCIAL R.E. 60.2)	-----
ANNUAL BILL	\$350.95
DIVIDE BY 12 MONTHS	12
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RESIDENTIAL MONTHLY RATE	\$29.25

COMMERCIAL CUSTOMER	1992	USAGE 1993	1994	AVERAGE	R.E. GALLONS	ANNUAL R.E.	MTHLY R.E.	MTHLY BILL
NAPA AUTO PARTS	27,100	26,700	28,300	27,367	/12000	2.28	1	\$29.25
MAJESTIC HOUSE	557,900	743,100	809,000	703,333	/12000	58.61	4.8	140.40
* BANK OF BENTON	47,300	30,300	90,000	38,800	/12000	3.23	1	29.25
** RODNEY'S IGA	156,300	70,200	278,600	217,450	/12000	18.12	1.5	43.88
*** MR. GATTIES	425,600	540,800	43,800	483,200	/12000	40.27	3.3	96.53
PRO EQUIPMENT	59,200	105,300	125,200	96,567	/12000	8.05	1	29.25
TWIN LAKES	81,100	78,200	86,500	81,933	/12000	6.83	1	29.25
DAIRY QUEEN BRAIZER	1,859,100	1,664,500	2,086,000	1,869,867	/12000	155.82	12.9	377.33
HARDEES	1,451,600	1,563,300	1,661,100	1,558,667	/12000	129.89	10.8	315.90
BENTON SERV OIL	194,200	191,600	247,100	210,967	/12000	17.58	1.4	40.95
**** CHAMBER OF COMMERCE	38,900	71,500	39,000	38,950	/12000	3.25	1	29.25
***** GARNER FAM INVEST	182,400	168,800	65,500	12,000	/12000	1.00	1	29.25
GATEWAY SHOPORAMA	105,200	116,500	191,100	137,600	/12000	11.47	1	29.25
R BARBA & CO.	34,800	11,600	12,800	19,733	/12000	1.64	1	29.25
PORTS PETROLEUM	436,300	629,500	524,200	530,000	/12000	44.17	3.6	105.30
WESTLAKE INDUSTRY	N/A	12,000	15,800	13,900	/12000	1.16	1	29.25
HARBROV'S CHEVRON	131,100	129,900	113,700	124,900	/12000	10.41	1	29.25
***** CENTRAL ELEMENTARY	139,200	1,114,000	2,674,500	1,114,000	/12000	92.83	7.7	225.23
DRAFFENVILLE LAUNDRY	338,300	476,200	610,100	474,867	/12000	39.57	3.2	93.60
LEO SCHUBB	162,600	73,000	127,800	121,133	/12000	10.09	1	29.25
						656.27	60.20	\$1,760.85
								X 12 MO.
								-----
								COMMERCIAL REVENUE
								\$21,130.20

\* 1994 usage not used due to leak  
 \*\* 1993 usage not used due to fire  
 \*\*\* 1994 usage not used business closed  
 \*\*\*\* 1993 usage not used due to leak  
 \*\*\*\*\* Business closed now being used as a warehouse  
 \*\*\*\*\* 1993 most representative of normal usage

RESIDENTIAL REVENUE  
 (156 CUSTOMERS X \$29.25) X 12 MO. = \$54,756.00  
 -----  
 ANNUAL REVENUE \$75,886.20