

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF REIDLAND WATER)
AND SEWER DISTRICT FOR (1) A)
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY, AUTHORIZING)
APPLICANT TO CONSTRUCT A)
WASTEWATER TREATMENT PLANT; (2))
APPROVAL OF FINANCING THE)
PROPOSED CONSTRUCTION THROUGH) CASE NO. 96-314
THE KENTUCKY INFRASTRUCTURE)
AUTHORITY TO INCUR AN)
INDEBTEDNESS; AND (3) APPROVAL OF)
THE PROPOSED ADJUSTMENT OF RATES)
NECESSARY TO PAY THE INDEBTEDNESS)
INCURRED)

O R D E R

On July 31, 1996, the Reidland Water and Sewer District ("Reidland") filed an application on behalf of its Sewer Division ("Reidland Sewer") for a Certificate of Public Convenience and Necessity to construct a wastewater treatment plant, for approval of financing, and for an increase in sewer rates. Commission Staff, having performed a limited financial review of Reidland Sewer'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:

1. 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.
2. If an informal conference is requested, it will be held March 11, 1997 at 1 p.m., Eastern Standard Time, in Conference Room 2 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky.
3. If a hearing is requested, it will be held on March 27, 1997 at 10:00 a.m., Eastern Standard Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky.
4. If the hearing is to be held:
 - a. Reidland shall publish notice of the hearing on or before March 21, 1996, in accordance with KRS 424.300 and 807 KAR 5:001, Section 10(5).
 - b. Requests for information from a party shall be filed on or before March 13, 1997.
 - c. Responses to requests for information shall be filed on or before March 20, 1997.
 - d. Each party shall, on or before March 24, 1997, serve upon all other parties a written summary of the testimony of the witnesses which are expected to be called at the hearing, copies of all exhibits which will be used at the hearing regardless of whether they are to be introduced, and all preliminary motions and objections, except objections to exhibits. All exhibits shall be appropriately marked.


e. Copies of all documents served upon any party shall be simultaneously filed with the Commission.

Done at Frankfort, Kentucky, this 18th day of February, 1997.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF REIDLAND WATER AND)
SEWER DISTRICT FOR (1) A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY,)
AUTHORIZING APPLICANT TO CONSTRUCT)
A WASTEWATER TREATMENT PLANT; (2))
APPROVAL OF FINANCING THE PROPOSED) CASE NO. 96-314
CONSTRUCTION THROUGH THE KENTUCKY)
INFRASTRUCTURE AUTHORITY TO INCUR)
AN INDEBTEDNESS; AND (3) APPROVAL OF)
THE PROPOSED ADJUSTMENT OF RATES)
NECESSARY TO PAY THE INDEBTEDNESS)
INCURRED)

STAFF REPORT

Prepared by: Mark C. Frost
Public Utility Financial
Analyst, Chief
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Public Utility Rate
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STAFF REPORT
ON
REIDLAND WATER AND SEWER DISTRICT
CASE NO. 96-314

A. Preface

On July 3, 1996, the Reidland Water and Sewer District ("Reidland") submitted an application on behalf of its Sewer Division ("Reidland Sewer"), for a Certificate of Convenience and Necessity ("Certificate") to construct a \$3,736,199 wastewater treatment plant, for approval of financing, and for an increase in sewer rates. However, due to filing deficiencies, Reidland Sewer's application was not considered filed until July 31, 1996. Reidland Sewer's proposed rates would produce additional annual sewer revenues of \$421,830, an increase of 124.8 percent over Commission Staff's normalized test period revenues of \$340,730.

In order to evaluate the requested sewer rate increase, Staff performed a limited financial review of Reidland Sewer's test-period operations for the 1995 calendar year. Mark Frost of the Commission's Division of Financial Analysis and Sam Reid of the Commission's Division of Rates and Research performed the limited review on November 13 and 14, 1996.

Mr. Frost is responsible for the preparation of this Staff Report except for the determination of Operating Revenue; Rate Design; Appendix A, Billing Analysis; Appendix B, Cost of Service Study - Allowing Constuction;and Appendix C, Cost of Service Study - Not Allowing Construction, which were prepared by Sam Reid. Based on the findings contained in this report, Staff recommends that if Reidland Sewer is granted a Certificate

then it should be granted an increase in sewer revenues of \$ 409,161. However, if a Certificate is not granted then Reidland Sewer should be granted an increase in sewer revenues of \$46,312.

Scope

The scope of the review was limited to obtaining information to determine whether the 1995 operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

B. Analysis of Operating Revenues and Expenses

Operating Revenues

Staff performed a billing analysis from Reidland's billing records for the twelve month period ending December 31, 1995 (Appendix A). From that analysis normalized operating revenue was determined to be \$340,730.

Operating Expenses

In its Supplemental Application, Reidland Sewer reported actual and pro forma test-period operating expenses of \$302,445 and \$405,206, respectively. The following are Staff's recommended adjustments to Reidland Sewer's actual test-period operations and discussions of Reidland Sewer's pro forma adjustments.

Salaries & Wages: Reidland Sewer proposed to increase its test-period salaries & wages expense of \$93,250,¹ by \$20,215.² Pursuant to an Agreed Order with the

¹ \$50,044 (Maintenance) + \$43,206 (Administrative) = \$93,250.

Natural Resources and Environmental Protection Cabinet ("Natural Resources") Reidland Sewer is obligated to construct a new sewage treatment plant, which will require it to hire a new maintenance employee. Because the new employee will be assigned 50 percent of the time to the sewer division, Reidland Sewer will be allocated 50 percent of the salary. Reidland Sewer's proposed adjustment reflects the allocation of the new employee's salary and a projected 3.5 percent cost of living increase for the existing employees.

During the course of the field review, Staff advised Reidland Sewer that the rate-making criteria of "known and measurable" are used to evaluate all proposed adjustments. An adjustment based on documented increased cost or usage would constitute a known and measurable adjustment. In this instance, Reidland Sewer was unable to provide Staff with a definite date the new employee will be hired or at what level of pay. For these reasons Staff is of the opinion that this adjustment fails to meet the known and measurable criteria and therefore, recommends that it be denied.

In the test period, Reidland employed a general manager, 2 full-time office employees, and 5 full-time maintenance employees. In 1996 Reidland Sewer replaced its general manager and lost a full-time maintenance employee. Because of the loss of the employee, the time each maintenance employee spends at the water and sewer

² \$14,950 (New Employee) + \$5,265 (3.5% Pay Raise) = \$20,215.

divisions changed, which resulted in corresponding changes to the salary allocations. Also, in 1996 Reidland Sewer granted pay increases to all of its employees.

An adjustment to salaries and wages expense based on the current staff level, the revised salary allocations, and the 1996 wage increases would meet the rate-making criteria of known and measurable. Using this information, Staff has determined that salaries & wages expense should be decreased by \$2,408 to arrive at its pro forma expense level of \$91,202.

Testing: Reidland Sewer proposed a pro forma level of testing expense of \$1,500, a decrease of \$753 from its test period level of \$2,253. This adjustment reflects Reidland Sewer's belief that Natural Resources will decrease the KPDES testing requirements when the new wastewater treatment plant is installed.

Reidland Sewer failed to provide documentation to show that Natural Resources will allow it to revert to monthly KPDES testing once the new treatment plant is operational. Therefore, Reidland Sewer's proposed adjustment fails to meet the rate-making criteria of known and measurable and Staff recommends that this adjustment be denied.

In 1996, Natural Resources increased Reidland Sewer's KPDES testing requirement from monthly to weekly. The KPDES testing is performed by Analytical Industries Inc. for \$88 per test, a fee which Staff finds reasonable. Furthermore, an adjustment based on the \$88 testing fee and the current Natural Resources weekly

testing requirements would meet the rate-making criteria of known and measurable. Accordingly, testing expense has been increased by \$2,323.

Chemicals: Reidland Sewer proposed to reduce test-period operations by \$562 to reflect the elimination of chemical expense, because its proposed treatment plant will use an ultraviolet disinfection system rather than chemicals. Since the chemical cost is not expected to occur in the future, Staff recommends that Reidland Sewer's proposed adjustment be accepted.

Maintenance: Reidland Sewer reported a test-period maintenance expense of \$29,059. Staff analyzed the test-period invoices and determined that the following expenditures are capital in nature and therefore should be depreciated rather than expensed:

6 Manhole Protectors	\$ 214
Manhole Lids, Frames, & Rings	\$ 685
Hour Meter Installation	\$ 963

After consulting with Ben Muncy of the Commission's Engineering Division, it was determined that the manhole protectors, lids, frames, and rings should be depreciated over 20 years and the hour meter installation should be depreciated over 10 years. Therefore, maintenance expense has been decreased by \$1,862 and depreciation expense increased by \$141.

Upon further review of the invoices, Staff determined that the following expenditures are nonrecurring costs that should be amortized rather than expensed:

Heater Repair	\$ 1,282
Pump Parts - Rebuilt Pump	\$ 2,918
Installed Voltguard & Repaired Wiring	\$ 843
Repaired Pump	\$ 1,183
Clean up Diesel Fuel Spill	\$ 6,016

Reidland stated that it expected that a diesel fuel spill would not occur for another 10 years. After consulting with Mr. Muncy it was determined that a 10-year amortization period for the cost to clean up the diesel fuel was appropriate and that the remaining nonrecurring costs should be amortized over 3 years. Therefore, maintenance expense has been decreased by an additional \$12,242 and amortization expense increased by \$2,667.

Fuel & Power: Reidland Sewer proposed a pro forma level of fuel & power expense of \$41,008, an increase of \$28,000 above its test-period level of \$13,008. This adjustment reflects the estimated electric cost that will result from the installation of the proposed wastewater treatment plant.

Reidland Sewer estimates that replacing the wastewater treatment plant will result in a net increase to the system's electric demand of 430,750 KWH per year. According to Reidland Sewer, the magnitude of its increased electric consumption is attributable to the mechanical aeration and aerobic digestion systems that will be used at the new wastewater treatment plant. Reidland Sewer applied an assumed average electric cost of \$0.065 per KWH to the estimated electric usage to arrive at the proposed \$28,000 adjustment.

After consulting with Mr. Muncy, it was determined that Reidland Sewer's estimate of the increase in KWH caused by the new wastewater treatment plant is reasonable. However, upon reviewing the test-period electric invoices, Staff determined that the average test-period KWH electric cost was \$0.0537 rather than the \$0.065 used by Reidland Sewer in its proposed adjustment.

Using Reidland Sewer's estimated KWH increase of 430,750 and the actual average KWH cost of \$0.0537, Staff determined that the new wastewater treatment plant will result in additional electric cost of \$23,131.

Upon further review of the test-period invoices, Staff determined that test-period electric expense at the lift stations was understated by \$85. Therefore, fuel and power expense has been increased by a total of \$23,216 to reflect the usage of the proposed wastewater treatment plant and to correct for the cost understatement.

Customer Records & Collection: Reidland Sewer proposed a pro forma level of customer records and collection expense of \$5,602, an increase of \$137 above its test-period level of \$5,465. This adjustment reflects a 2.5 percent inflation factor. Staff is of the opinion that an adjustment to reflect an estimated inflation factor fails to meet the rate-making criteria of being known and measurable and therefore, recommends this adjustment be denied.

Customer records & collection expense includes allocated postage expense of \$2,642. Using the test-period number of bills for combined sewer and water service of

18,154, the current postage rate of \$0.19, and an allocation factor of 50 percent, Staff has calculated a pro forma postage expense of \$1,725,³ \$917 less than Reidland Sewer's reported amount. Therefore, customer collection and record expense has been reduced by that amount.

Outside Services: Reidland Sewer reported test-period outside services expense of \$11,567, which includes legal fees of \$5,982. Upon review of the test-period invoices, Staff determined that the legal fees were for a pending civil action and are considered to be nonrecurring costs that should be amortized rather than expensed. In similar instances nonrecurring legal fees have been amortized over 3 years. Therefore, Staff recommends that outside services be decreased by \$5,982 and amortization expense increased by \$1,994 to reflect amortizing Reidland Sewer's nonrecurring legal fees over 3 years.

Insurance: Reidland Sewer reported test-period insurance expense of \$8,432, which represents the general liability and workers compensation premiums. Upon review of Reidland Sewer's 1996 insurance invoices, Staff noted that the insurance premiums had increased. Since the 1996 premiums represent Reidland Sewer's on-going insurance cost, Staff is of the opinion that they should be reflected in test-period operations. Based on the 1996 insurance premiums and the pro forma salaries and

³ 18,154 (Bills) x \$0.19 (Rate) = \$3,449 (Total Postage Cost).
\$3,449 (Total Postage Cost) x 50% (Allocation Factor) = \$1,725.

wages recommended herein, Staff has calculated a pro forma insurance expense of \$8,643. Accordingly, insurance expense has been increased by \$211.

Employee Pensions & Benefits: Reidland Sewer reported test-period employee pensions & benefits expense of \$12,001, which represents the allocation of the employee health and life insurance premiums. The change in the salaries & wages allocation factors has a corresponding impact on the health & life insurance allocation factors. Using the revised allocation factors and the 1996 health and life insurance premiums, Staff has calculated a pro forma level of employee pensions & benefits expense of \$11,532, \$469 less than the test period amount. Accordingly, employee pensions & benefits expense has been decreased by that amount.

Miscellaneous: Reidland Sewer reported a test-period level of miscellaneous expense of \$2,756, which represents the debt service fee paid to the Kentucky Infrastructure Authority ("KIA"). The KIA requires Reidland Sewer to pay a loan servicing fee of 0.2 percent on the annual outstanding balance of each KIA Loan. Using the projected outstanding balances of the existing and proposed KIA loans, Staff has arrived at an average debt service fee of \$9,212, as shown in Appendix D. Therefore, miscellaneous expense has been increased by \$6,456 to reflect the average KIA debt service fee.

Depreciation: Reidland Sewer proposed a pro forma level of depreciation expense of \$149,094, an increase of \$55,724 above the test-period level of \$93,370.

This adjustment reflects depreciating Reidland Sewer's proposed wastewater treatment plant and eliminating the depreciation associated with the retirement of the existing plant.

Upon review of the depreciation calculation, Staff noted that Reidland Sewer only depreciated the actual cost to construct the new wastewater treatment plant but failed to include the overhead costs, which totaled \$478,840. Overhead costs are classified in the Uniform System of Accounts for Sewer Utilities as a cost of construction that should be recorded in the appropriate utility plant account and depreciated.

Allocating the overhead costs between the structures/buildings and equipment/machinery results in a pro forma increase to depreciation expense of \$68,587, a difference of \$12,863 above the amount proposed by Reidland Sewer. Reidland Sewer's proposed depreciation adjustment revised to include the overhead construction costs, would meet the rate-making criteria of known and measurable and it should be reflected in test-period operations. Therefore, depreciation expense has been increased by \$68,587, which when coupled with the previously mentioned adjustment of \$141 related to capital expenditures, results in a total pro forma adjustment of \$68,728.

FICA Tax: Reidland Sewer reported test-period taxes other than income tax expense of \$7,559, which includes FICA expense of \$6,943. Staff's recommended pro forma salaries and wages expense, results in a pro forma FICA expense of \$6,977, an increase of \$34 above the amount reported by Reidland Sewer. Therefore, Staff recommends that taxes other than income tax expense be increased by \$34.

Other Income

Interest Income: Reidland Sewer proposed a pro forma level of interest income of \$2,647, a decrease of \$11,000 from its test -period level of \$13,647. Reidland Sewer will contribute \$218,561 of the cost to construct its proposed wastewater treatment plant. This adjustment reflects the estimated lost interest that will result from the capital contribution to the construction.

In its application, Reidland Sewer stated that the \$218,561 will be derived from existing cash deposits and projected revenues in excess of projected expenses during the period the proposed rates are effective and the wastewater treatment plant is constructed. However, Reidland's 1995 Audit Report shows that Reidland Sewer has only \$151,915 in its depreciation fund and \$33,123 in its operation and maintenance fund, for a total cash investment of \$185,038. The 1995 cash investments are insufficient to cover the amount of contribution required to fund the construction project.

Reidland Sewer failed to document the amount of the capital contribution that will come from its existing cash investments. Furthermore, given the level of net cash flow that will result from the rate increase granted herein, Staff is of the opinion that Reidland Sewer will have the financial ability to replace any cash used from its existing investments in a timely manner. For these reasons, Reidland Sewer's proposed adjustment should be denied.

Operations Summary

Based on Staff's recommendations contained in this report, Reidland Sewer's operating statement would appear as set forth in Appendix D to this report.

C. Revenue Requirement Determination

An approach frequently used by this Commission to determine revenue requirements for "non-profit" water utilities is debt service coverage ("DSC"). Staff recommends the use of this approach in determining Reidland Sewer's revenue requirement. Based on the existing and proposed KIA loans Reidland Sewer's annual debt service will be \$ 347,442⁴.

Using a 1.01x DSC, Reidland Sewer determined that its pro forma operations support a revenue requirement of \$759,189, an increase in its revenue from rates of \$420,087. Staff is of the opinion that a DSC of 1.01x is insufficient to allow Reidland Sewer to collect the amount of revenues necessary for it to meet future operating expenses and to service its debt obligations.

Normally the loan commitment will require a minimum DSC; however, the KIA loan commitment is silent concerning any DSC requirement. Therefore, Staff is of the opinion that a 1.1x DSC will provide a sufficient level of revenue for Reidland Sewer to meet all of its future expense and debt obligations.

⁴ \$106,608 (Existing Loan) + \$240,834 (Proposed Loan) = \$ 347,442.

If Reidland Sewer is granted a Certificate, a 1.1x DSC will result in a revenue requirement of \$749,891,⁵ for an increase in sewer revenues of \$409,161⁶ and a net cash flow of \$187,785.⁷ However, if Reidland is not granted a Certificate, a DSC of 1.1x will result in a revenue requirement of \$387,042,⁸ for an increase in sewer revenues of \$46,312⁹ and a net cash flow of \$108,843.¹⁰

⁵	Debt Service	\$ 347,442
	Add: Coverage 0.1 x \$ 347,442	34,744
	Pro Forma Operating Expenses	<u>+ 381,433</u>
	Total Revenue Requirement	\$ 763,619
	Less: Non-Operating Income	- 13,728
	Revenue Requirement from Rates	<u>\$ 749,891</u>
⁶	Revenue Requirement from Rates	\$ 749,891
	Less: Normalized Operating Revenue	- 340,730
	Revenue Increase	<u>\$ 409,161</u>
⁷	Total Revenue Requirement	\$ 749,891
	Less: Operating Expenses	381,433
	Debt Service	- 347,442
	Subtotal	\$ 21,016
	Add: Depreciation	162,098
	Amortization	+ 4,671
	Net Cash Flow	<u>\$ 187,785</u>
⁸	Debt Service	\$ 106,608
	Add: Coverage 0.1 x \$ 106,608	10,661
	Pro Forma Operating Expenses	<u>+ 283,501</u>
	Total Revenue Requirement	\$ 400,770
	Less: Non-Operating Income	- 13,728
	Revenue Requirement from Rates	<u>\$ 387,042</u>
⁹	Revenue Requirement from Rates	\$ 387,042
	Less: Normalized Operating Revenue	- 340,730
	Revenue Increase	<u>\$ 46,312</u>

D. Rate Design

Reidland Sewer proposed a sewer user charge based on a method established by the U.S. Environmental Protection Agency (EPA). The proposed method produces sewer rates based on 100% of the customers monthly water consumption. Reidland Sewer proposed to revise it's current rate design by lessening the minimum usage allowance from 3,000 gallons to 2,000 gallons.

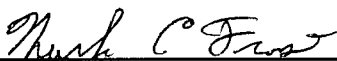
Staff performed a limited Cost of Service Study from Reidland Sewer's records. The objective of a Cost of Service Study is to properly allocate costs so that these costs may be recovered through a rate structure which is not unduly discriminatory to any one class or group of customers. Simply stated, costs were separated into two categories- fixed costs and variable costs. Fixed costs are the perpetual cost of providing sewer service to the district, regardless of the actual wastewater contribution, such as billing and collecting. The recovery of fixed costs will be most fairly achieved by spreading the annual amount of fixed cost equally among all customers. Variable costs are the costs which tend to change almost directly with quantity. The recovery of variable costs will

¹⁰	Total Revenue Requirement	\$ 400,770
	Less: Operating Expenses	283,501
	Debt Service	- 106,608
	Subtotal	\$ 10,661
	Add: Depreciaition	93,511
	Amortization	+ 4,671
	Net Cash Flow	<u>\$ 108,843</u>

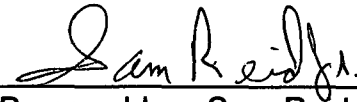
most fairly be achieved by dividing the annual amount of variable costs equally by the total annual volume.

Staff agrees with Reidland Sewer that reducing the minimum use will reduce the impact of the required rate increase for those customers which typically use less than 2,000 gallons per month. If the proposed construction is approved by the Commission, the rates proposed by Reidland Sewer would place an undue burden on the larger users. Since the construction is needed to correct an infiltration problem the majority of the costs should not be paid by the larger users. Staff recommends the rates established by the cost of service study(Appendix B) be implemented to recover the revenue requirement from rates for Reidland Sewer provided the construction is approved. In the event the proposed construction is not allowed, Staff recommends the rates established by the cost of service study(Appendix C) be implemented to recover the revenue requirement from rates for Reidland Sewer.

E. Signatures


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

Staff Report
Case No. 96-314
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Prepared by: Sam Reid, Jr.
Public Utility Rate
Analyst, Principal
Communications , Water and
Sewer Rate Design Branch
Rates and Research Division

REIDLAND WATER
AND SEWER DISTRICT

CASE NO. 96-314

BILLING ANALYSIS

APPENDIX A

BILLING ANALYSIS FOR: REIDLAND WATER & SEWER				
TEST PERIOD FROM JANUARY 1995 TO DECEMBER 1995				
		USAGE TABLE		
		SEWER		
			FIRST	OVER
USAGE	BILLS	GALLONS	3,000	3,000
FIRST 3,000	4,018	7,149,198	7,149,198	
OVER 3,000	14,136	116,976,516	42,408,000	74,568,516
TOTAL	18,154	124,125,714	49,557,198	74,568,516
		REVENUE TABLE		
		REVENUE BY RATE INCREMENT		
	BILLS	GALLONS	RATE	REVENUE
FIRST 3,000	18,154	49,557,198	\$8.50	\$154,309.00
OVER 3,000		74,568,516	2.50	186,421.29
TOTAL	18,154	124,125,714		\$340,730.29

REIDLAND WATER
AND SEWER DISTRICT

CASE NO. 96-314

COST OF SERVICE STUDY
ALLOWING CONSTRUCTION

APPENDIX B

ALLOCATION OF PLANT VALUE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
LAND AND				
STRUCTURES	\$44,016		\$44,016	
COLLECTION PLANT	2,505,508		2,505,508	
PUMPING PLANT	108,379		108,379	
TREATMENT AND				
DISPOSAL PLANT	171,299		171,299	
GENERAL PLANT	101,147			101,147
TOTAL	\$2,930,349		\$2,829,202	\$101,147
PERCENTAGE			97%	3%

ALLOCATION OF OPERATION AND MAINTENANCE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
SALARIES & WAGES	\$49,249		\$49,249	
CONSTRUCTION SERVICE				
Customer	611			\$611
TESTING & ANALYSIS	4,576			4,576
MAINTENANCE				
Collection line	5,281		5,281	
Lift station	3,391		3,391	
Treatment plant	6,283		6,283	
FUEL & POWER				
Treatment Plant	28,638	28,638		
Lift stations	7,585	7,585		
CUSTOMER RECORDS				
& COLLECTION	4,548			4,548
UNCOLLECTABLE ACCOUNTS	21			21
OFFICE SUPPLIES AND EXPENSES	3,495			3,495
OUTSIDE SERVICES				
ACCOUNTING	5,585			5,585
EMPLOYEE PENSIONS &				
BENEFITS	6,227		6,227	
KIA DEPT SERVICE FEE	9,212			9,212
TOTAL	134,702	36,223	70,431	28,048
TOTAL LESS COMMODITY	98,479			
PERCENTAGE	100%		72%	28%
SALARIES & WAGES				
ADMIN. & GENERAL	41,953		30,004	11,949
INSURANCE	8,174		5,846	2,328
TRANSPORTATION	5,988		4,283	1,705
MISCELLANEOUS	10,949		7,831	3,118
EMPLOYEE PENSIONS &				
BENEFITS	5,305		3,794	1,511
TOTAL	\$207,071	\$36,223	\$122,189	\$48,659

ALLOCATION OF COST OF SERVICE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
PLANT VALUE	\$2,930,349		\$2,829,202	\$101,147
PERCENTAGE			97%	3%
OPERATION & MAINT.	\$207,071	\$36,223	\$122,189	\$48,659
DEPRECIATION	162,098		152,372	9,726
AMORTIZATION	4,671		4,531	140
TAXES	7,593		5,695	1,898
DEBT SERVICE	382,186		370,720	11,466
TOTAL	\$763,619	\$36,223	\$655,507	\$71,889
LESS OTHER INCOME	13,728			13,728
REQUIRED REVENUE	\$749,891	\$36,223	\$655,507	\$58,161

ALLOCATION OF COSTS TO RATES

	TOTAL	FIRST	OVER
		2,000	2,000
ACTUAL SALES	124,125,714	34,352,298	89,773,416
PERCENTAGE	100%	28%	72%
WEIGHTED SALES	158,478,012	68,704,596	89,773,416
PERCENTAGE	100%	43%	57%
COMMODITY	\$36,223	\$10,025	\$26,198
DEMAND	655,507	284,180	371,327
TOTAL	\$691,730	\$294,205	\$397,525
RATE PER THOUSAND		\$16.21	\$4.43
CUSTOMER	\$58,161		
CUSTOMER CHARGE		\$3.20	
RATES		\$19.41	\$4.43

VERIFICATION OF RATES

			FIRST	OVER
USAGE	BILLS	GALLONS	2,000	2,000
FIRST 2,000	2,152	2,348,298	2,348,298	
OVER 2,000	16,002	121,777,416	32,004,000	89,773,416
TOTAL	18,154	124,125,714	34,352,298	89,773,416
REVENUE TABLE				
REVENUE BY RATE INCREMENT				
	BILLS	GALLONS	RATE	REVENUE
FIRST 2,000	18,154	34,352,298	\$19.40	\$352,187.60
OVER 2,000		89,773,416	4.44	398,593.97
TOTAL	18,154	124,125,714		\$750,781.57

REIDLAND WATER
AND SEWER DISTRICT

CASE NO. 96-314

COST OF SERVICE STUDY
NOT ALLOWING CONSTRUCTION

APPENDIX C

ALLOCATION OF PLANT VALUE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
LAND AND				
STRUCTURE	\$44,016		\$44,016	
COLLECTION PLAN	2,505,508		2,505,508	
PUMPING PLANT	108,379		108,379	
TREATMENT AND				
DISPOSAL PLAN	171,299		171,299	
GENERAL PLANT	101,147			101,147
TOTAL	\$2,930,349		\$2,829,202	\$101,147
PERCENTAGE			97%	3%

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
SALARIES & WAGES	\$49,249		\$49,249	
CONSTRUCTION SERVICE				
Customer	611			611
TESTING & ANALYSIS	4,576			4,576
MAINTENANCE				
Collection line	5,281		5,281	
Lift station	3,391		3,391	
Treatment plant	6,283		6,283	
FUEL & POWER				
Treatment Plant	5,507	5,507		
Lift stations	7,585	7,585		
CHEMICALS	562			562
CUSTOMER RECORDS				
& COLLECTION	4,548			4,548
UNCOLLECTABLE ACCOUNTS	21			21
OFFICE SUPPLIES AND EXPENSE	3,495			3,495
OUTSIDE SERVICES				
Accounting	5,585			5,585
EMPLOYEE PENSIONS &				
BENEFITS	6,227		6,227	
KIA DEPT SERVICE FEE	2,436			2,436
TOTAL	\$105,357	\$13,092	\$70,431	\$21,834
TOTAL LESS COMMODITY	92,265			
PERCENTAGE	100%		76%	24%
SALARIES & WAGES				
ADMIN. AND GEN.	41,953		32,025	9,928
INSURANCE	8,174		6,240	1,934
TRANSPORTATION	5,988		4,571	1,417
MISCELLANEOUS	10,949		8,358	2,591
EMPLOYEE PENSIONS &				
BENEFITS	5,305		4,049	1,255
TOTAL	\$177,726	\$13,092	\$125,674	\$38,960

ALLOCATION OF COST OF SERVICE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
PLANT VALUE	\$2,930,349		\$2,829,202	\$101,147
PERCENTAGE			97%	3%
OPERATION & MAINT.	\$177,726	\$13,092	\$125,674	\$38,960
DEPRECIATION	93,511		87,900	5,611
AMORTIZATION	4,671		4,531	140
TAXES	7,593		5,695	1,898
DEBT SERVICE	117,269		113,751	3,518
TOTAL	\$400,770	\$13,092	\$337,551	\$50,127
LESS OTHER INCOME	13,728			13,728
REQUIRED REVENUE	\$387,042	\$13,092	\$337,551	\$36,399

ALLOCATION OF COST TO RATES

	TOTAL	FIRST	OVER
		2,000	2,000
ACTUAL SALES	124,125,714	34,352,298	89,773,416
PERCENTAGE	100%	28%	72%
WEIGHTED SALES	158,478,012	68,704,596	89,773,416
PERCENTAGE	100%	43%	57%
COMMODITY	\$13,092	\$3,623	\$9,469
DEMAND	337,551	146,338	191,213
TOTAL	\$350,643	\$149,961	\$200,682
RATE PER THOUSAND		\$8.26	\$2.24
CUSTOMER	\$36,399		
CUSTOMER CHARGE		\$2.01	
RATES		\$10.27	\$2.24

VERIFICATION OF RATES

			FIRST	OVER
USAGE	BILLS	GALLONS	2,000	2,000
FIRST 2,000	2,152	2,348,298	2,348,298	
OVER 2,000	16,002	121,777,416	32,004,000	89,773,416
TOTAL	18,154	124,125,714	34,352,298	89,773,416
REVENUE TABLE				
REVENUE BY RATE INCREMENT				
	BILLS	GALLONS	RATE	REVENUE
FIRST 2,000	18,154	34,352,298	\$10.20	\$185,170.80
OVER 2,000		89,773,416	2.25	201,990.19
TOTAL	18,154	124,125,714		\$387,160.99

REIDLAND WATER
AND SEWER DISTRICT

CASE NO. 96-314

STAFF'S RECOMMENDED
PRO FORMA OPERATIONS

APPENDIX D

**STAFF'S RECOMMENDED OPERATIONS IF A
CERTIFICATE IS GRANTED**

	Actual Operations	Pro Forma Adjustments	Pro Forma Operations
Operating Revenue:			
Measured Sewer Revenue	\$339,102	\$1,628	\$340,730
Operating Expenses:			
Operation & Maintenance:			
Salaries & Wages - Emp	\$93,250	(\$2,048)	\$91,202
Construction Service - Cust.	611	0	611
Testing & Analysis	2,253	2,323	4,576
Maintenance	29,059	(14,104)	14,955
Fuel & Power	13,007	23,216	36,223
Chemicals	562	(562)	0
Customer Records & Collection	5,465	(917)	4,548
Uncollectible Accounts	21	0	21
Office Supplies & Other Exp.	3,495	0	3,495
Outside Services	11,567	(5,982)	5,585
Insurance	8,432	(258)	8,174
Employee Pensions & Benefits	12,001	(469)	11,532
KIA Debt Service Fee	2,756	6,456	9,212
Transportation	5,988	0	5,988
Miscellaneous	13,049	(2,100)	10,949
Total Operation & Maintenance	\$201,516	\$5,555	\$207,071
Depreciation	93,370	68,728	162,098
Amortization	0	4,671	4,671
Taxes Other Than Income	7,559	34	7,593
Total Operating Expenses	\$302,445	\$78,988	\$381,433
Net Operating Income	\$36,657	(\$77,360)	(\$40,703)
Other Income:			
Interest & Dividend Income	\$13,647	\$0	\$13,647
Miscellaneous Nonoperating	81	0	81
Total Other Income	\$13,728	\$0	\$13,728
Net Income Available for Operations	\$50,385	(\$77,360)	(\$26,975)

**STAFF'S RECOMMENDED OPERATIONS IF A
CERTIFICATE IS NOT GRANTED**

	Actual Operations	Pro Forma Adjustments	Pro Forma Operations
Operating Revenue:			
Measured Sewer Revenue	\$339,102	\$1,628	\$340,730
Operating Expenses:			
Operation & Maintenance:			
Salaries & Wages - Emp	\$93,250	(\$2,048)	\$91,202
Construction Service - Cust.	611	0	611
Testing & Analysis	2,253	2,323	4,576
Maintenance	29,059	(14,104)	14,955
Fuel & Power	13,007	85	13,092
Chemicals	562	0	562
Customer Records & Collection	5,465	(917)	4,548
Uncollectible Accounts	21	0	21
Office Supplies & Other Exp.	3,495	0	3,495
Outside Services	11,567	(5,982)	5,585
Insurance	8,432	(258)	8,174
Employee Pensions & Benefits	12,001	(469)	11,532
KIA Debt Service Fee	2,756	(320)	2,436
Transportation	5,988	0	5,988
Miscellaneous	13,049	(2,100)	10,949
Total Operation & Maintenance	\$201,516	(\$23,790)	\$177,726
Depreciation	93,370	141	93,511
Amortization	0	4,671	4,671
Taxes Other Than Income	7,559	34	7,593
Total Operating Expenses	\$302,445	(\$18,944)	\$283,501
Net Operating Income	\$36,657	\$20,572	\$57,229
Other Income:			
Interest & Dividend Income	\$13,647	\$0	\$13,647
Miscellaneous Nonoperating	81	0	81
Total Other Income	\$13,728	\$0	\$13,728
Net Income Available for Operations	\$50,385	\$20,572	\$70,957

The only pro forma adjustments affected by the construction of the wastewater treatment plant are fuel and power and depreciation. Therefore, the increase in electric usage caused by the new plant and the associated depreciation has been eliminated from the pro forma operations.