

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE MORGAN COUNTY)
WATER DISTRICT FOR A RATE ADJUSTMENT) CASE NO.
PURSUANT TO THE ALTERNATIVE RATE) 2000-086
FILING PROCEDURE FOR SMALL UTILITIES)

ORDER

On February 25, 2000, the Morgan County Water District ("Morgan County") filed its application for Commission approval of the proposed water rates. Commission Staff ("Staff"), having performed a limited financial review of Morgan County's operations, has prepared the attached report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and submit any written comments on Staff's findings and recommendations or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall, no later than 10 days from the date of this Order, submit written comments, if any, regarding the attached Staff Report or request for hearing or informal conference. If no request for a hearing or informal conference is received by this date, this case shall stand submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 19th day of April, 2000.

ATTEST:

By the Commission


Executive Director

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|--------------------------------------|---|----------|
| THE APPLICATION OF THE MORGAN COUNTY |) | |
| WATER DISTRICT FOR A RATE ADJUSTMENT |) | CASE NO. |
| PURSUANT TO THE ALTERNATIVE RATE |) | 2000-086 |
| FILING PROCEDURE FOR SMALL UTILITIES |) | |

STAFF REPORT

Prepared by: Mark C. Frost
Public Utilities Financial Analyst
Water and Sewer Revenue
Requirements Branch
Division of Financial Analysis

Prepared by: Brent Kirtley
Public Utilities Rate Analyst
Communications, Water and
Sewer Rate Design Branch
Division of Financial Analysis

STAFF REPORT
ON
MORGAN COUNTY WATER DISTRICT
CASE NO. 2000-086

On February 25, 2000, the Morgan County Water District (“Morgan County”) filed its application seeking to increase its rates pursuant to 807 KAR 5:076. Since, Morgan County requested and received Commission Staff (“Staff”) assistance in preparing its rate application, Mark Frost and Brent Kirtley of the Commission’s Division of Financial Analysis performed the limited financial review of Morgan County’s test-period operations for the 1998 calendar year, prior to the filing of the application.

The scope of Staff’s 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. Mr. Frost is responsible for the preparation of this Staff Report except for the determination of normalized operating revenue, Attachment E, and Attachment F which were prepared by Mr. Kirtley.

Morgan County accepted the findings and recommendations of Staff’s limited financial review and included those as its pro forma operating statement in its application, which is included as Attachment A. Subsequent to the filing of the application, Staff noted that the Purchased Water Rates (“PWA”) were inadvertently excluded from its determination of normalized revenue. Correcting for the PWA rates does not impact either Staff’s optimum revenue requirement or proposed rates. Based upon Staff’s adjusted recommendations, Morgan County’s operating statement would

appear as set forth in Attachment B and Attachment C is Staff's discussions on its proposed pro forma adjustments.

Staff's recommended pro forma operations and a 1.2 Debt Service Coverage, results in an optimum revenue requirement from water sales of \$281,112, as shown in Attachment D. The optimum revenue requirement will allow Morgan County to meet its adjusted test-period operating expenses including depreciation expense and the minimum debt service requirements of its long-term debt instruments.

Attachment E is the discussion of Staff's cost of service study and Attachment F is Staff's recommended rates, which are the rates Morgan County requested. For this reason, Staff recommends that Morgan County's proposed rates be accepted.

Signatures

Prepared by: Mark C. Frost
Public Utilities Financial Analyst
Water and Sewer Revenue
Requirements Branch
Division of Financial Analysis

Prepared by: Brent Kirtley
Public Utilities Rate Analyst
Communications, Water and
Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
STAFF REPORT CASE NO. 2000-086
MORGAN COUNTY'S REQUESTED
PRO FORMA OPERATIONS

| | Test-Period Operations | Pro Forma Adjustments | Adj Ref | Pro Forma Operations |
|---------------------------------------|---------------------------|--------------------------|------------|-------------------------|
| Operating Revenues: | | | | |
| Revenue from Water Sales: | | | | |
| Residential & Com. Water Sales | \$ 205,588 | \$ 12,834 | a | \$ 218,422 |
| Bulk Water Sales | 11,162 | 0 | | 11,162 |
| | <u>\$ 216,750</u> | <u>\$ 12,834</u> | | <u>\$ 229,584</u> |
| Other Water Revenues | 11,055 | 0 | | 11,055 |
| | <u>\$ 227,805</u> | <u>\$ 12,834</u> | | <u>\$ 240,639</u> |
| Operating Expenses: | | | | |
| Operation & Maintenance: | | | | |
| Salaries & Wages | \$ 53,640 | \$ 29,560 | b | \$ 83,200 |
| Employee Benefits | 0 | 14,384 | c | 14,384 |
| Purchased Water | 82,165 | 4,667 | d | 86,832 |
| Purchased Power | 5,812 | 0 | | 5,812 |
| Materials & Supplies | 9,380 | (675) | e | 8,705 |
| Contractual Services - Other | 2,020 | (1,970) | f | 50 |
| Contractual Services - Acct. | 2,000 | 0 | | 2,000 |
| Insurance – General Liability | 9,718 | (7,057) | g | 2,661 |
| Insurance – Workers Comp. | 1,494 | 1,099 | h | 2,593 |
| Miscellaneous | 13,011 | 0 | | 13,011 |
| | <u>\$ 179,240</u> | <u>\$ 40,008</u> | | <u>\$ 219,248</u> |
| Total Operation & Maintenance | \$ 179,240 | \$ 40,008 | | \$ 219,248 |
| Depreciation | 14,080 | 117 | j | 14,197 |
| Amortization | 0 | 0 | | 0 |
| Taxes Other Than Income | 4,405 | 1,960 | k | 6,365 |
| | <u>\$ 197,725</u> | <u>\$ 42,085</u> | | <u>\$ 239,810</u> |
| Utility Operating Expenses | \$ 197,725 | \$ 42,085 | | \$ 239,810 |
| Net Utility Operating Income | \$ 30,080 | \$ (29,251) | | \$ 829 |
| Other Income & Deductions: | | | | |
| Interest Income | 1,255 | 0 | | 1,255 |
| Nonutility Income | 0 | 0 | | 0 |
| | <u>\$ 31,335</u> | <u>\$ (29,251)</u> | | <u>\$ 2,084</u> |
| Net Income Available for Debt Service | \$ 31,335 | \$ (29,251) | | \$ 2,084 |

ATTACHMENT B
STAFF REPORT CASE NO. 2000-086
STAFF'S RECOMMENDED
PRO FORMA OPERATIONS

| | <u>Test-Period Operations</u> | <u>Pro Forma Adjustments</u> | <u>Adj Ref</u> | <u>Pro Forma Operations</u> |
|---------------------------------------|-----------------------------------|----------------------------------|--------------------|---------------------------------|
| Operating Revenues: | | | | |
| Revenue from Water Sales: | | | | |
| Residential & Com. Water Sales | \$ 205,588 | \$ 14,541 | a | \$ 220,129 |
| Bulk Water Sales | 11,162 | 0 | | 11,162 |
| | <u>\$ 216,750</u> | <u>\$ 14,541</u> | | <u>\$ 231,291</u> |
| Other Water Revenues | 11,055 | 0 | | 11,055 |
| | <u>\$ 227,805</u> | <u>\$ 14,541</u> | | <u>\$ 242,346</u> |
| Operating Expenses: | | | | |
| Operation & Maintenance: | | | | |
| Salaries & Wages | \$ 53,640 | \$ 29,560 | b | \$ 83,200 |
| Employee Pension & Benefits | 0 | 14,384 | c | 14,384 |
| Purchased Water | 82,165 | 4,667 | d | 86,832 |
| Purchased Power | 5,812 | 0 | | 5,812 |
| Materials & Supplies | 9,380 | (675) | e | 8,705 |
| Contractual Services - Other | 2,020 | (1,970) | f | 50 |
| Contractual Services - Acct. | 2,000 | 0 | | 2,000 |
| Insurance - General Liability | 9,718 | (7,057) | g | 2,661 |
| Insurance - Workers Comp. | 1,494 | 1,099 | h | 2,593 |
| Miscellaneous | 13,011 | 0 | | 13,011 |
| | <u>\$ 179,240</u> | <u>\$ 40,008</u> | | <u>\$ 219,248</u> |
| Total Operation & Maintenance | \$ 179,240 | \$ 40,008 | | \$ 219,248 |
| Depreciation | 14,080 | 117 | j | 14,197 |
| Amortization | 0 | 0 | | 0 |
| Taxes Other Than Income | 4,405 | 1,960 | k | 6,365 |
| | <u>\$ 197,725</u> | <u>\$ 42,085</u> | | <u>\$ 239,810</u> |
| Utility Operating Expenses | \$ 197,725 | \$ 42,085 | | \$ 239,810 |
| Net Utility Operating Income | \$ 30,080 | \$ (27,544) | | \$ 2,536 |
| Other Income & Deductions: | | | | |
| Interest Income | 1,255 | 0 | | 1,255 |
| Nonutility Income | 0 | 0 | | 0 |
| | <u>0</u> | <u>0</u> | | <u>0</u> |
| Net Income Available for Debt Service | <u>\$ 31,335</u> | <u>\$ (27,544)</u> | | <u>\$ 3,791</u> |

ATTACHMENT C
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
PRO FORMA ADJUSTMENTS

(a) Operating Revenues – Water Sales. The 1998 annual report showed that Morgan County's annual revenue from residential and commercial water sales was \$205,588. Staff's billing analysis confirmed this amount to within 0.09%, which allowed the amount in the annual report to be accepted. Morgan County also collected \$11,162 from bulk water sales, and \$11,055 in other revenues, which amounts to \$227,805 in total operating revenues. Staff then adjusted revenues to reflect a purchased water adjustment that was implemented in 1999. A final adjustment was made to revenue of \$7,957 to account for the addition of 31 new customers. Therefore, for the purposes of this Staff Report, Morgan County's total normalized operating revenue shall be \$242,346.

(b) Salaries & Wages. Morgan County's test-period level of salaries and wages expense was \$53,640. Using Morgan County's current staff level of 4 employees and the effective wage rates, Staff determined that the pro forma annual payroll is \$83,200,¹ \$29,560 above the test-period level. In 2000, Morgan County hired a full-time manager, which accounts for the majority of the increase in payroll costs. Salaries and wages expense has been increased by \$29,560 to reflect the pro forma level.

(c) Employee Benefits. During the test-period, Morgan County provided health insurance coverage to its employees; however, the premiums were miss-classified in

| | | |
|-------------------------------|--------------------------------------|------------------|
| ¹ District Manager | \$14 (Hourly Rate) x 2,080 (Hours) = | \$ 29,120 |
| Office Manager | \$10 (Hourly Rate) x 2,080 (Hours) = | 20,800 |
| Service Foreman | \$ 9 (Hourly Rate) x 2,080 (Hours) = | 18,720 |
| Meter Reader | \$ 7 (Hourly Rate) x 2,080 (Hours) = | <u>+ 14,560</u> |
| Total Annual Payroll | | <u>\$ 83,200</u> |

ATTACHMENT C
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
PRO FORMA ADJUSTMENTS

the general liability insurance expense. Based upon its review of the invoices for 2000, Staff determined that Morgan County's current cost to provide its health insurance coverage is approximately \$694 per month or \$8,327 annually.

In lieu of providing its employees with wage increases in 2000, Morgan County agreed to contribute 7.28 percent of each employee's salary to a pension plan. Applying the 7.28 percent employer contribution rate to the recommended salaries and wages expense results in a pro forma pension contribution of \$6,057.²

The aforementioned health insurance premiums and employee pension plan contribution results in an employee benefit expense of \$14,384. Accordingly, pro forma operating expenses has been increased to reflect this level of expense.

(d) Purchased Water. Morgan County's test-period level of purchased water expense was \$82,165. The test period unaccounted for line loss was 19.3 percent, which exceeds the Commission's allowable limit of 15 percent.³ In 1999, the City of West Liberty increased its wholesale water rate to \$2.25 per 1,000 gallons and Morgan County added 31 new customers to its system.

Limiting line loss to 15 percent, increasing purchases to reflect the 31 new customers, and applying the City of West Liberty's increased wholesale water rate, Staff

² \$83,200 (Pro Forma Payroll) x 7.28% (Contribution Rate) = \$6,057.

³ 807 KAR 5:066, Section 6(3) limits line loss for rate purposes to 15%.

ATTACHMENT C
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
PRO FORMA ADJUSTMENTS

arrived at its pro forma level of purchased water expense of \$86,832.⁴ Accordingly, purchased water expense has been increased by \$4,667.

(e) Materials and Supplies. Morgan County reported a test-period level of materials and supplies expense of \$9,380. After reviewing the invoices, Staff determined that Morgan County had expensed the cost of a 3-inch hydrant meter in the amount of \$675. The purchase of a hydrant meter is a capital expenditure that should be depreciated rather than expensed. Therefore, the materials and supplies expense has been reduced by \$675 to eliminate this item from the test-period operations. A provision for the recovery of the capital expenditure is included in the depreciation expense adjustment.

(f) Contractual Services - Other. Morgan County reported a test-period level of contractual services – other expense of \$2,020, which includes \$1,970⁵ in road boring

| | | |
|---|--|------------------|
| 4 | Water Sales in Gallons– Billing Analysis | 32,803,220 |
| | Divided by: Line Loss Reciprocal (1-15%) | ÷ <u>85%</u> |
| | Allowable Water Purchases | 38,592,024 |
| | Multiplied by: Rate per Gallon | x <u>0.00225</u> |
| | Pro Forma Purchased Water | <u>\$ 86,832</u> |

| | | |
|---|--------------------------------|-----------------|
| 5 | <u>Vendor</u> | <u>Amount</u> |
| | Elam Utility Company | \$ 200 |
| | E. Risner Construction Company | 540 |
| | E. Risner Construction Company | 200 |
| | Elam Utility Company | 300 |
| | Elam Utility Company | 300 |
| | Elam Utility Company | 200 |
| | E. Risner Construction Company | + <u>230</u> |
| | Road Bore Cost | <u>\$ 1,970</u> |

ATTACHMENT C
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
PRO FORMA ADJUSTMENTS

costs. A road boar is made when a meter is installed on the opposite side of the road from the water supply main. For this reason the cost of the road boars should be capitalized and depreciated as a cost of the meter installation. The contractual services – other expense has been reduced by \$1,970 to eliminate the cost of the road boars from the test-period operations. A provision for the recovery of these capital expenditures is included in the depreciation expense adjustment.

(g) General Liability. Morgan County's test-period general liability insurance expense was \$9,718. As previously mentioned, Morgan County had miss-classified its employee health insurance premiums in this expense account. Upon its review of the current insurance premiums, Staff determined that the correct expense level is \$2,661, \$7,057 less than the reported level. Therefore, the general liability insurance expense has been decreased \$7,057 to the correct expense level.

(h) Workers Compensation. Morgan County's test-period workers compensation insurance expense was \$1,494. Using the recommended level of salary expense and the current workers compensation premiums, Staff determined that the pro forma level of this expense is \$2,593,⁶ an increase of \$1,099 above the test-period level. Accordingly, workers compensation insurance expense has been increased by that amount.

| | |
|---|-----------------|
| ⁶ \$83,200 (Pro Forma Payroll) x \$0.02830 (Rate per Dollar) = | \$ 2,355 |
| Experience Modifier (\$2,355 x 1.01%) | 24 |
| Tax Fund ((\$2,355 + \$24) = \$2,379 x 9%) | <u>+ 214</u> |
| Pro Forma Workers Compensation Premium | <u>\$ 2,593</u> |

ATTACHMENT C
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
PRO FORMA ADJUSTMENTS

(i) Depreciation Expense. Staff increased test-period depreciation by \$117 to reflect depreciating the items capitalized in the materials and supplies contractual services - other sections of this attachment over their estimated useful lives:

| <u>Description</u> | <u>Cost</u> | <u>Depreciation</u> | |
|--------------------|-------------|---------------------|----------------|
| | | <u>Lives</u> | <u>Expense</u> |
| 3" Hydrant Meter | \$ 675 | 10 Years | \$ 68 |
| Road Boars | \$ 1,970 | 40 Years | \$ 49 |

(j) Payroll Taxes. Morgan County's test-period payroll tax expense was \$4,405. Staff has adjusted payroll tax expense by \$1,960 to reflect a pro forma level of \$6,365.⁷ This proposed adjustment is based upon the current FICA and Medicare tax rates multiplied by the recommended level of salaries and wages expense.

⁷ \$83,200 (Pro Forma Payroll) x 7.65% (FICA Rate) = \$6,365.

ATTACHMENT D
STAFF REPORT CASE NO. 2000-086
STAFF'S REVENUE REQUIREMENT
DETERMINATION

Annual Debt Service:

| | | |
|---|----|----------------------|
| Water Revenue Bonds - Series A of 1993 | \$ | 16,600 |
| Water Revenue Bonds - Series B of 1993 | | 927 |
| Water Revenue Bonds - Series of 1995 | | 20,777 |
| KADD 1996 Loan | | 2,297 |
| Loan 203 Extension | | <u>4,076</u> |
| Annual Debt Service | \$ | 44,677 |
| Multiplied by: | | |
| Debt Service Coverage | | <u>1.2</u> |
| Income From Operations | \$ | 53,612 |
| Add: | | |
| Operating Expenses | | 219,248 |
| Depreciation | | 14,197 |
| Amortization | | 0 |
| Taxes Other Than Income | | <u>6,365</u> |
| Total Revenue Requirement | \$ | 293,422 |
| Less: | | |
| Interest Income | | <u>1,255</u> |
| Revenue Requirement from Operations | \$ | 292,167 |
| Less: | | |
| Other Water Revenues | | <u>11,055</u> |
| Revenue Requirement from Water Sales | \$ | 281,112 |
| Less: | | |
| Pro Forma Revenue - Water Sales | | <u>231,291</u> |
| Recommended Increase – Revenue from Water Sales | \$ | <u><u>49,821</u></u> |

ATTACHMENT E
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
COST OF SERVICE STUDY

In calculating the cost of service study for Morgan County, Commission Staff used the commodity demand methodology as set out in the American Water Works Association's ("AWWA") Manual M-1 in determining fair, just, and reasonable rates for the customers of Morgan County.

Commission Staff first performed a billing analysis that verified the revenues collected from water sales, and provided a summarization or tabulation of customer bills which provided a useful basis for identifying and analyzing customer usage patterns, selecting water-usage rate blocks, and determining revenue under any rate schedule. The difference between the amount listed in the 1998 Annual Report and the amount calculated in the Billing Analysis was less than one percent, thus making the amount of in the annual report acceptable to Commission Staff.

Following completion of the Billing Analysis, a sound analysis of the adequacy of charges required allocation of costs among the customers commensurate with their service requirements in order to recognize differences in costs of furnishing service to different types of customers. For example, a customer with a high peak rate of use as compared with an average rate of use requires larger capacity pumps, pipes, and certain other system facilities than a customer that has an equal total volume of use but takes water at a uniform rate. Accordingly, cost allocation procedures should recognize the particular service requirements of the customers for total volume of water, peak rates of use, along with other factors.

The expenses of the utility were allocated according to the three different classifications: Commodity, Demand, and Customer.

ATTACHMENT E
STAFF REPORT CASE NO. 2000-086
STAFF'S DISCUSSIONS ON THE
COST OF SERVICE STUDY

Commodity costs are those costs that vary directly with the quantity of water produced and/or purchased by the utility. These costs include chemicals, purchased water, and purchased power. Demand costs are associated with providing facilities to meet the peak demands placed on the system. These costs include transmission and distribution costs. Customer costs are those costs attributable to serving the customers, regardless of the amount of water used. These costs include billing, collecting, and meter reading.

The analysis showed that of the \$281,112 in revenues required from rates, \$92,644 should be collected from the commodity category, \$127,120 should be collected from the demand category, and \$61,348 should be collected from the customer category. These amounts were then divided by their respective divisors to determine the proposed rates.

In order to verify the proposed rates will produce the revenue requirement, Morgan County's proposed rates were combined with the information obtained in the billing analysis to project revenues. The verification showed that the proposed rates produce revenues to within 0.22% of the revenue requirement, which is an acceptable difference. Therefore, Commission Staff recommends the proposed rates as shown in the application submitted by Morgan County.

Attachment F lists Commission Staff's recommended rates.

ATTACHMENT F
 STAFF REPORT CASE NO. 2000-086
 STAFF'S DISCUSSIONS ON THE
 COST OF SERVICE STUDY

The following rates are recommended for customers of the Morgan County Water

District:

5/8" X 3/4" Meter

| | | | | |
|-------|--------|---------|---------|-------------------|
| First | 2,000 | Gallons | \$18.95 | Minimum Bill |
| Next | 3,000 | Gallons | 6.80 | per 1,000 Gallons |
| Next | 5,000 | Gallons | 6.20 | per 1,000 Gallons |
| Next | 5,000 | Gallons | 5.60 | per 1,000 Gallons |
| Over | 15,000 | Gallons | 5.00 | per 1,000 Gallons |

1 Inch Meter

| | | | | |
|-------|--------|---------|---------|-------------------|
| First | 5,000 | Gallons | \$39.35 | Minimum Bill |
| Next | 5,000 | Gallons | 6.20 | per 1,000 Gallons |
| Next | 5,000 | Gallons | 5.60 | per 1,000 Gallons |
| Over | 15,000 | Gallons | 5.00 | per 1,000 Gallons |

2 Inch Meter

| | | | | |
|-------|--------|---------|---------|-------------------|
| First | 15,000 | Gallons | \$98.35 | Minimum Bill |
| Over | 15,000 | Gallons | 5.00 | per 1,000 Gallons |