

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTH MANCHESTER WATER )  
ASSOCIATION FOR A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND NECESSITY, AND ) CASE NO. 93-396  
FOR ORDERS APPROVING AN ADJUSTMENT IN )  
WATER RATES AND CONSTRUCTION FINANCING )

O R D E R

On November 18, 1993, North Manchester Water Association ("North Manchester") filed its application for Commission approval of proposed water rates. Commission Staff, having performed a limited financial review of North Manchester'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 February, 1994.

ATTEST:

Don Mills  
Executive Director

PUBLIC SERVICE COMMISSION  
Don Mills  
For the Commission

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF NORTH MANCHESTER WATER )  
ASSOCIATION FOR A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY, AND FOR ORDERS ) CASE NO. 93-396  
APPROVING AN ADJUSTMENT IN WATER RATES )  
AND CONSTRUCTION FINANCING )

STAFF REPORT

Prepared By: Karen Harrod, CPA  
Public Utility Financial  
Analyst, Chief  
Water and Sewer Revenue  
Requirements Branch  
Division of Financial Analysis

Prepared By: Brent Kirtley  
Public Utility Rate Analyst  
Communications, Water and  
Sewer Rate Design Branch  
Division of Rates and Research

STAFF REPORT

ON

NORTH MANCHESTER WATER ASSOCIATION

CASE NO. 93-396

A. Preface

On October 21, 1993, North Manchester Water Association ("North Manchester") submitted an application seeking approval of its proposed water system improvements and line extensions, financing and an increase in water rates. The application was considered filed on November 18, 1993, when all deficiencies were cured. The proposed rates would generate approximately \$588,552 in annual revenues, an increase of 66 percent over normalized test-year revenues from water sales of \$354,322.

In order to evaluate the requested increase in rates, the Commission Staff ("Staff") chose to perform a limited financial review of North Manchester's operations for the test period, calendar year 1992. Karen Harrod and Jack Scott Lawless of the Commission's Division of Financial Analysis conducted the review on November 18-19, 1993 at the office of North Manchester's CPA, Mr. Charles Stivers, in Manchester, Kentucky. Brent Kirtley, of the Commission's Division of Rates and Research, performed his review of the billing analysis at the Commission's office in Frankfort, Kentucky.

The findings of the field review have been reduced to writing in this report. Mr. Kirtley is responsible for the sections

related to operating revenues and rate design. The remaining sections of the Staff Report were prepared by Ms. Harrod.

During the course of the review, North Manchester was advised that all proposed adjustments to test-year operations must be supported by some form of documentation and that all such adjustments must be known and measurable. Based upon the findings of this report, Staff recommends that North Manchester be allowed to increase its annual revenues by \$204,373, or 58 percent.

#### Scope

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

In its application, North Manchester estimated that 46 new customers would be added to the system in calendar year 1993. Based on actual 1993 figures, 36 new customers were added subsequent to the test year. North Manchester also stated that an additional 384 customers would be added to the system if the proposed construction projects were approved. Staff's recommendations made in this report reflect the additional known and measurable expenses to be incurred as a result of the construction and financing proposed in this filing and, therefore, includes expenses associated with new customers.

B. Analysis of Operating Revenues and Expenses

Operating Revenues

North Manchester reported test-period revenue from rates of \$236,464 in their 1992 annual report. The results of the billing analysis performed by Staff indicate operations should generate \$238,503 in annual revenue at current rates, a difference of \$2,039 over reported test-year revenue. The 36 new customers added to the system in 1993 do not appear in the billing analysis; therefore, an adjustment has been made to operating revenue in the amount of \$10,238. As the line extensions proposed in this case should provide service for 384 new customers, an additional adjustment of \$105,581 was made to account for this increase. For the purposes of this report, total test-period normalized operating revenue from rates shall be considered to be \$354,322.

Operating Expenses

North Manchester reported test year operating expenses of \$244,458 which it proposed to increase by \$173,380. The pro-forma adjustments to test-period expenses are discussed in the following sections of this report.

Salary and Wage Expense

In its test year operations North Manchester reported salary and wage expense of \$23,620. During 1992 the district staff consisted of two employees, one full-time and one part-time. North Manchester currently has three full-time employees with weekly salaries of \$400, \$400 and \$240. Based on the current salary

levels of North Manchester's employees, Staff has calculated the district's annual expense to be \$54,080, an increase of \$30,460 over the test year level. Since this adjustment is known and measurable Staff recommends it be allowed for rate-making purposes.

Taxes other than Income Tax Expense

North Manchester reported taxes other than income tax expense of \$2,156 for the test period. This account actually represents payroll taxes paid by the utility. Staff recommends an adjustment be made to increase payroll tax expense to allow for FICA and Medicare taxes associated with the recommended increase in salary expense. Accordingly, taxes other than income tax expense has been increased by \$2,330<sup>1</sup>, to a level of \$4,486.

Purchased Water Expense

North Manchester reported test year purchased water expense of \$134,157. An adjustment was proposed to increase this amount by \$61,053 based on the estimated usage of the proposed new customers and test year line loss of 16 percent. The maximum line loss generally allowed by the Commission is 15 percent. Based on normalized and estimated usage as calculated by Mr. Kirtley, Staff has calculated a recommended increase to purchased water expense as follows:

Normalized test year usage	70,608,772 gallons
Usage for 1993 new customers	3,002,760 gallons
Usage for proposed new customers	<u>30,303,648 gallons</u>

---

<sup>1</sup> Recommended Increase to Salary Expense	\$ 30,460
Applicable FICA and Medicare Rate	x .0765
Recommended Payroll Tax Increase	<u>\$ 2,330</u>

Total normalized usage	103,915,180 gallons
Adjustment for 15% line loss	<u>+ .85</u>
Recommended usage	122,253,153 gallons
Current purchased water rate (\$1.50 per 1,000 gallons)	<u>x .0015</u>
Recommended expense	\$ 183,380
Less: Test year expense	<u>134,157</u>
Recommended Increase	<u>\$ 49,223</u>

Therefore, Staff has included an adjustment to increase purchased water expense by \$49,223.

Purchased Power Expense

In its application North Manchester proposed to increase test year purchased power expense by \$4,773 to account for the additional power required to pump water for the new customers. The proposed adjustment was based on the per customer cost of test-year purchased power expense. Although Staff agrees that additional purchased power would be required to pump the additional water, Staff does not agree that purchased power expense would necessarily vary directly with the number of customers. Therefore, Staff is of the opinion that the increase would be more accurately estimated based on the percentage increase of water usage.

Based on an increase in water usage of 47.17<sup>2</sup> percent Staff has made an adjustment to increase purchased power expense by \$4,378.<sup>3</sup>

Contractual Services Expense

North Manchester reported contractual services expense of \$15,856 for the test year. In its application an adjustment was proposed to increase this amount by \$8,155 to account for additional expenses to be incurred as a result of the new customers being added to the system. The proposed adjustment was based on a per customer expense. As a result of Staff's review it was determined that, with the exception of billing expenses, the expenditures included in this account were not directly related to the number of customers being served. Accordingly, Staff has disallowed the proposed adjustment for rate-making purposes.

Of the \$15,856 contractual services expenses reported for the test period, \$8,400 was incurred for billing and other services provided by North Manchester's CPA, Mr. Charles Stivers. Effective December 1, 1993, North Manchester entered into a contract with Mr. Stivers to continue providing accounting, bookkeeping and billing services for the district, including the preparation of Public

---

<sup>2</sup> Recommended normalized usage	103,915,180 gallons
Normalized test year usage	<u>70,608,772 gallons</u>
Increase in normalized usage	33,306,408 gallons
Percentage increase (33,306,408 ÷ 70,608,772)	47.17 percent

<sup>3</sup> Test year purchased power expense	\$ 9,281
Percentage increase	x 47.17 percent
Recommended increase	<u>\$ 4,378</u>

Service Commission reports and tax returns. As compensation Mr. Stivers would receive \$1.00 per bill per month for the first 700 water bills processed and mailed. All other bills over and above the 700 bills would be charged at a rate of \$.75 per bill. Based on the pro-forma customer level of 1,233, this would result in a monthly fee of \$1,100, or \$13,200 annually. Staff is of the opinion that this is a reasonable fee for the services being performed and has included an increase to contractual services expense of \$4,800.

North Manchester also included invoices for meter installations in this account during the test period. Staff has determined that these expenses should be capitalized and depreciated for rate-making purposes. Therefore, an adjustment has been made to decrease this account by \$1,010.

Based on the aforementioned adjustments, Staff recommends a net increase to contractual services expense of \$3,790.

#### Materials and Supplies Expense

For the test year North Manchester reported materials and supplies expense of \$18,251. An adjustment was proposed to increase this amount by \$1,000 to reflect the estimated additional expense to be incurred as a result of the proposed construction. However, since this does not reflect a known and measurable adjustment, Staff has disallowed the increase in the calculation of North Manchester's revenue requirement.

Based on Staff's review it was determined that \$730 expensed in this account during the test period was for the purchase of meter installation supplies and should be capitalized and depreciated for rate-making purposes. Accordingly, Staff has made an adjustment to decrease materials and supplies expense by \$730 to correctly account for these items.

#### Insurance and Transportation Expenses

North Manchester included insurance and transportation expenses in test year operations of \$7,756 and \$2,273, respectively. In its application adjustments were proposed to increase these expense accounts by \$3,000 each to account for the increased costs expected to be incurred as a result of the proposed construction. Although Staff concurs that these expenses are likely to increase, the proposed adjustments are based on estimates and therefore, do not meet the rate-making criteria of being known and measurable. Accordingly, Staff has disallowed these increases in North Manchester's adjusted operations.

#### Rent Expense

During the test year North Manchester incurred rent expense of \$600. Subsequent to the test year the district relocated to another building and began paying rent expense of \$175 per month or \$2,100 annually. Since this increase of \$1,500 over the test year level meets the rate-making criteria of being known and measurable, Staff recommends it be allowed in the determination of North Manchester's revenue requirement.

Depreciation Expense

North Manchester reported test year depreciation expense of \$24,642. In its application an adjustment was included to increase depreciation expense by \$70,000 for the depreciation of the proposed construction over a period of 40 years. Pursuant to the Commission's Order in Case No. 10481,<sup>4</sup> North Manchester has proposed adjustments to update its revenues and expenses to the level anticipated upon completion of the proposed construction. Since these adjustments reflect the impact that the proposed construction and estimated 384 new customers would have on its revenues and expenses, as required by the above referenced case, Staff recommends an increase in depreciation expense of \$70,000.

Based on the capitalized expenditures discussed in the materials and supplies and the contractual services sections of this report, Staff has made an additional adjustment to depreciation expense. After consulting with the Commission's Division of Engineering it was determined that 40 years would be the appropriate service life for meter installations. Accordingly, test year depreciation expense has been increased by an additional \$44<sup>5</sup> resulting in a total increase of \$70,052.

---

<sup>4</sup> Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on February 2, 1989.

<sup>5</sup>

Meter Installations	\$ 1,740
Estimated Service Life	+ 40 years
Annual Depreciation Expense	<u>\$ 44</u>

Operations Summary

Based on the recommendations of Staff, North Manchester's operating statement would appear as set forth in Appendix B to this report.

C. Revenue Requirements Determination

As of the end of the test period North Manchester did not have any outstanding long-term debt. The new debt to be acquired for the proposed construction would result in an average annual debt service payment of \$150,726, as shown in Exhibit 2 of the application. In the event approval for any portion of the construction is not obtained, the recommendations contained herein related to financing and expenses for the construction would change accordingly. Assuming the construction is approved, Staff recommends that the proposed debt be included in revenue requirements in order to fund the proposed construction.

Based on adjusted test year operations and the proposed debt, North Manchester's debt service coverage ("DSC") is  $-.26x$ .<sup>6</sup> Staff has determined that, in accordance with the loan requirements of the Kentucky Infrastructure Authority, a DSC of  $1.1x$  is necessary to allow North Manchester to meet its operating expenses and service its debt. Therefore, Staff recommends that North Manchester be allowed to increase its annual revenues by \$204,373, calculated as follows:

---

<sup>6</sup>  $(\$38,574) + \$150,726 = (.26)$

**Staff Report**  
**CN 93-396**  
**Page 11 of 12**

Adjusted Operating Expenses	\$405,461
Average Annual Debt Service	150,726
10 Percent DSC	15,073
Other Expense	<u>526</u>
Total Revenue Requirement	\$571,786
Less: Metered Water Sales	354,322
Other Water Revenues	12,442
Other Income	<u>649</u>
Required Revenue Increase	<u>\$204,373</u>

**D. Rate Design**

North Manchester's present rate structure is composed of a declining block schedule for each of the three various sized meters offered to their customers. In its application, North Manchester proposed to charge a minimum bill for each of the three meter sizes and a flat rate for usage above the gallons included in the minimum bill. Staff agrees that the proposed rate design change should be made. The recommended rates will generate the required operating revenue from rates of \$558,695. Therefore, Staff recommends the rates in Appendix A be approved for water service.

E. Signatures

*Karen Harrod*

Prepared By: Karen Harrod, CPA  
Public Utility Financial  
Analyst, Chief  
Water and Sewer Revenue  
Requirements Branch  
Division of Financial Analysis

*Brent Wirtley*

Prepared By: Brent Wirtley  
Public Utility Rate Analyst  
Communications, Water and  
Sewer Rate Design Branch  
Division of Rates and Research

APPENDIX A  
TO STAFF REPORT CASE NO. 93-396

The Staff recommends the following rate be prescribed for customers of North Manchester Water Association.

5/8" x 3/4" Meter

First 2,000 gallons	\$15.55 Minimum Bill
Above 2,000 gallons	4.25 per 1,000 gallons

1" Meter

First 5,000 gallons	\$28.30 Minimum Bill
Above 5,000 gallons	4.25 per 1,000 gallons

2" Meter

First 15,000 gallons	\$70.80 Minimum Bill
Above 15,000 gallons	4.25 per 1,000 gallons

**APPENDIX B  
TO STAFF REPORT CASE NO. 93-396**

**North Manchester Water Association  
Statement of Adjusted Operations  
Test Year Ended 12/31/92**

	<u>Test Year per Annual Report</u>	<u>Recommended Adjustments</u>	<u>Test Year Adjusted</u>
<b>Operating Revenues:</b>			
Metered Water Sales	\$236,464	\$117,858	\$354,322
Other Water Revenues	<u>12,442</u>	<u>          </u>	<u>12,442</u>
<b>Total Operating Revenues</b>	<b>\$248,906</b>	<b>\$117,858</b>	<b>\$366,764</b>
<b>Operating Expenses:</b>			
Salaries & Wages	\$ 23,620	\$ 30,460	\$ 54,080
Purchased Water	134,157	49,223	183,380
Purchased Power	9,281	4,378	13,659
Chemicals	290		290
Materials & Supplies	18,251	( 730)	17,521
Contractual Services	15,856	3,790	19,646
Rents	600	1,500	2,100
Transportation Expense	2,273		2,273
Insurance	7,756		7,756
Reg. Commission Expense	500		500
Miscellaneous	<u>5,076</u>	<u>          </u>	<u>5,076</u>
<b>Total Operating Expenses</b>	<b>\$217,660</b>	<b>\$ 88,621</b>	<b>\$306,281</b>
Depreciation Expense	24,642	70,052	94,694
Taxes other than Income	<u>2,156</u>	<u>2,330</u>	<u>4,486</u>
<b>Utility Operating Expenses</b>	<b><u>\$244,458</u></b>	<b><u>\$161,003</u></b>	<b><u>\$405,461</u></b>
<b>Utility Operating Income</b>	<b>\$ 4,448</b>	<b>(\$ 43,145)</b>	<b>(\$ 38,697)</b>
Interest Income	649		649
Interest Expense	<u>526</u>	<u>          </u>	<u>526</u>
<b>Net Income/(Loss)</b>	<b><u>\$ 4,571</u></b>	<b><u>(\$ 43,145)</u></b>	<b><u>(\$ 38,574)</u></b>