

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF NORTH MARSHALL)
WATER DISTRICT FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND)
NECESSITY TO CONSTRUCT A SYSTEM) Case No. 2021 - 00333
IMPROVEMENTS PROJECT AND AN ORDER)
APPROVING A CHANGE IN RATES AND)
AUTHORIZING THE ISSUANCE OF SECURITIES)
PURSUANT TO KRS 278.023)

** *** **** ***** **** *** **

RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

The Applicant, North Marshall Water District ("North Marshall District"), by Counsel, files this Response to the September 17, 2021 Commission Staff's First Request for Information as follows:

Responding Witness to all Requests: Roger Colburn, North Marshall District Manager.

Request No. 1. Provide a schedule in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible showing that North Marshall District will meet the debt service coverage requirements of its lenders (existing and proposed long-term debt) for the three years following completion of its proposed construction project. Include all calculations, assumptions (customer growth and increases in operating expenses), and workpapers used by North Marshall District in its response.

Response No. 1. See Excel file APP_B_ITEM_1_&_ITEM_2.XLS which is being filed separately with this Response.

Request No. 2. Provide a schedule in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible showing North Marshall District's debt service coverage (existing and proposed long-term debt), including full recovery of its depreciation expense (existing plant and the completed project) for the three years following completion of its proposed construction project. Include all calculations, assumptions (customer growth and increases in operating expenses), and workpapers used by North Marshall District in its response.

Response No. 2. See Excel file APP_B_ITEM_1_&_ITEM_2.XLS which is being filed separately with this Response. This file includes a worksheet that ends in Item 2 that addresses said Item. Maintaining a debt service coverage and fully covering depreciation and amortization does not appear to be practical. USDA, Rural Development (RD) only requires a debt service reserve account. North Marshall District will fully fund this account, cover debt service and retain additional revenues which will be used to cashflow replacements and placed into accounts reserved for larger scheduled maintenance projects such as tank repainting, meter replacement, etc.

Request No. 3. Provide copies of the following and, when appropriate, provide in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible: The general ledger and trial balance for the calendar years 2020 and 2021 to date.

Response No. 3. The information requested is being filed separately with this Response and is set forth in spreadsheets entitled DT_TB_2021 (EXHIBIT B-3.1), SUM_TB_2020 (EXHIBIT B-3.2) and SUM_TB_2021_9_2021 (EXHIBIT B-3.3). The budget worksheet used to develop the current year budget provides a summary of data in the format of the general ledger.

Request No. 4. Provide a three-year projected average debt service coverage calculation including all current debt of North Marshall District, including the financing approved in this case using the table below.

Response No. 4. Reference is made to Excel file APP_B_ITEM_1_&_ITEM_2.XLS. The debt service coverages computed without depreciation are: (i) 2022 - 2.70; (ii) 2023 - 2.10; and (iii) 2024 - 2.00. The average debt service coverage for these 3 years is 2.267.

Request No. 5. Commission Regulation 807 KAR 5:069, Section 2(6)(c), provides that the proposed rates, if any, shall produce the total revenue requirements recommended in the engineering reports. Provide a copy of the Billing Analysis in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible, showing revenue at current rates and at proposed rates based on actual and forecasted water usage for the existing system for 12 months as contained in the Kentucky Guide 7 Summary Addendum that was provided to the United States Department of Agriculture Rural Development (RD).

Response No. 5. The final Letter of Conditions issued by RD on July 15, 2020 for the loan to obtained by North Marshall District included a rate schedule for North Marshall District adoption to meet the revenue requirements associated with the loan. Reference is made to Exhibit B filed with the original Application (Condition No. 32). The billing analysis submitted in the referenced Summary Addendum document does not breakdown the usage for the various meter sizes. A significant proportion of the revenue derived by North Marshall District comes from the meter charge. A new billing analysis was prepared based using more recent data from July 1, 2020 through June 30, 2020. Usage was analyzed and summarized for each meter size category. The revised billing analysis was tested through comparison with the revenue derived from actual operating revenues for the test period. The billing analysis was used to project the revenue that would be generated if the rates required in the RD Letter of Conditions were approved and placed into effect. The projected revenues applying the recommended rates with the revised billing analysis is 24% greater than the revenues generated during the test period. The rate structure recommended

by RD adjusted primarily the uniform rate. The North Marshall District Board of Commissioners reviewed the proposed rate increase and directed the Superintendent to file an alternate rate structure for consideration with RD. The alternate rate as proposed would increase the minimum charge and uniform charge equally to generate an equal amount of revenue as the rates proposed by RD. Excel spreadsheets with the revised billing analysis, test revenue with original RD rates and test revenue with the RD approved alternate rates are being filed separately with this Response.

Request No. 6. Refer to North Marshall District's Annual Report, page 57, line 21, Total Water Loss percentage is stated as 33.5267 percent.

(a) Provide a comprehensive description of North Marshall District's efforts to reduce water loss.

Response No. 6(a). North Marshall District will implement the following to address the excessive system water loss:

Either replace or test the customer meters remaining in the system due for testing under PSC regulations. Accurate metering is essential for water loss computations.

1. Replace or calibrate all plant and production meters.
2. Improve accounting for non-metered water use. Work with our local fire departments to improve their record keeping, improving the way we are tracking system flushing and improving our measurements of use within our treatment plants and distribution system when we have main breaks.
3. Develop and measure water use in zoned areas. Water loss will be calculated on a zoned basis. Trending will be initiated by tracking water sales versus water pumped into metered zones. The data points will be used to prioritize leak detection study areas.
4. Recover District's monitoring meters previously installed in zoned areas. Prepare for monitoring during low water use periods to identify and prioritize areas with leaks.
5. Clean valve boxes and operate all valves. Further isolation of areas by valving off a portion of the system will be used to further isolate problem areas during off period monitoring.
6. Continuously monitor SCADA system tank elevation reports daily to verify proper cycling and absence of overflows. Incorporate alarm level for high water in tank reaching or exceeding the overflow elevation.
7. Check, inspect and document all inactive meter settings in asset management data set.

8. Perform night-time observation of monitoring meters identifying zones with potential leaks being careful to log observations in asset management database.
9. Use monitoring and zoned metering data to prioritize area for further identifying the location of leaks. Visual inspection and acoustic listening devices will be used to further identify leak sources. Map sources when found.
10. Prepare work orders and repair leaks when discovered.
11. Use asset management database to prioritize main replacement and service line replacement along areas with repair a significant repair history. Include deteriorated areas in recommended 10-year capital plan for adjustment.
12. Populate asset management database with data for infrastructure that is replaced.
13. Incorporate water loss reporting and implementation plan progress in staff meetings to communicate success and shifting priorities.

(b) Provide the anticipated reduction to water loss that will occur due to the proposed project.

Response No. 6(b). The effectiveness of the program will be tracked by our work order system and monitoring billing cycle water loss reports. We anticipate that through implementation of the program we can reduce our water loss to a range somewhere between 15% to 20% within the initial year. Much of the water mains and service lines within North Marshall District are beyond their useful life. The system is prone to numerous leaks due to cracked pipe or service tubing. The deterioration of the pipe line materials is noticeable and the plastic pipe in particular is brittle and subject to cracking associated with laying conditions or transient pressures.

Request No. 7. North Marshall District's 2021 periodic inspection noted that 5/8 x 3/4 meters have been in service for greater than ten years without being tested. The project description includes the upgrade of meters with new remote read water meters.

(a) Provide the size and number of meters that are not in compliance with the regulation.

Response No. 7(a) . See attached **Exhibit "A"**.

(b) Provide the size and number of meters that will be replaced as part of the project.

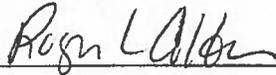
Response No. 7(b) . See attached Exhibit "A".

(c) Provide North Marshall District's plan to remain in compliance going forward with 807 KAR 5:066, Section 16(1).

Response No. 7(c) . See attached Exhibit "A".

Certification of Responses to Commission Staff's First Request for Information

I, the undersigned, hereby certify that I have supervised the preparation of North Marshall District's Response to the Commission Staff's First Request for Information. This Response is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Roger Colburn, Manager

Respectfully Submitted,
Rubin & Hays

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CERTIFICATE OF SERVICE

The undersigned, in accordance with 807 KAR 5:001, Section 8, hereby certifies that North Marshall Water District's electronic filing of the foregoing Response is a true and accurate copy of the document being electronically filed and transmitted to the Kentucky Public Service Commission on November 3, 2021; that there are currently no parties that the Kentucky Public Service Commission has excused from participation by electronic means in this proceeding.


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EXHIBIT A

Request No. 7

Appendix B – Item 7

A. Meters Not in Compliance

| Meter Size (inch) | Number of Meters |
|-------------------|------------------|
| 5/8 x 3/4 | 1886 |
| 1 | 36 |
| 1 ½ | 4 |
| 2 | 16 |
| 3 | 4 |
| 4 | 2 |
| TOTAL | 1,948 |

- B. NMWD completed a procurement for new 5/8" X 3/4" meters and 1" meters. If we proceed with replacement, the District plans on purchasing and estimated 1,900 new meters to replace electronic meters that are not currently transmitting properly. The total number of projected meters to be replaced is 1,880. Alternatively, NMWD is in negotiations with the original meter vendor concerning warranty replacement of the registers on the meters. If the latter path is chosen, NMWD will test each meter as the register is replaced and place the meters that are within accuracy requirements back into service. Meters that do not meet accuracy requirements will be either repaired, retested and placed into service or replaced. This work will be underway concurrently with the action described below to enhance tracking of meter testing.
- C. North Marshall Water District utilizes a customer service software package developed by Ampstun that includes a module to track meter testing results and testing scheduling. The meter database module needs additional work to fully populate the information for each meter in the system. Staff is working on transferring information from an earlier database into the Ampstun database. Once the data is fully populated, customer service clerks will be able to run reports that will list the meters scheduled for testing within the next year as per the requirements of 807 KAR 5:066, Section 16 (1). Work orders will be scheduled for those meters that are scheduled for testing.