



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF NORTH)	CASE NO.
MARSHALL WATER DISTRICT FOR A RATE)	2025-00102
ADJUSTMENT PURSUANT TO 807 KAR 5:076)	

NOTICE OF FILING OF COMMISSION STAFF'S REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 30, 2025, the attached report containing the recommendations of Commission Staff (Staff) regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's April 30, 2025 Order, North Marshall Water District (North Marshall District) is required to file written comments regarding the recommendations of Staff no later than 14 days from the date of service of this report. The Commission directs North Marshall District to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission.

Linda C. Bridwell, PE
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED **AUG 26 2025**

cc: Parties of Record

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF NORTH)	CASE NO.
MARSHALL WATER DISTRICT FOR A RATE)	2025-00102
ADJUSTMENT PURSUANT TO 807 KAR 5:076)	

COMMISSION STAFF'S REPORT
ON NORTH MARSHALL WATER DISTRICT

North Marshall Water District (North Marshall District) is a water utility organized pursuant to KRS Chapter KRS 74 that owns and operates a distribution system through which it provides retail water service to approximately 5,416 residential customers, 291 commercial customers, and four multiple family dwellings that reside in Livingston and Marshall counties, Kentucky.¹

On April 10, 2025,² North Marshall District filed its application with the Commission requesting an adjustment to its water service rates pursuant to 807 KAR 5:076. An application filed on or after March 31 of 2025, would generally use a 2024 test year; however on March 3, 2025, North Marshall District requested an extension to late file its 2024 annual report and an extension was granted.³ To comply with the requirements of

¹ *Annual Report of North Marshall District to the Public Service Commission for the Calendar Year Ended December 31, 2023* (2023 Annual Report) at 12 and 49.

² On April 15, 2025, North Marshall District filed notice that the newspaper failed to publish notice properly for one week. North Marshall District requested the notice run for an additional week. The district did not request a deviation.

³ *Annual Report of North Marshall District to the Public Service Commission for the Calendar Year Ended December 31, 2024*. This report has been filed with the Commission but is under review and has not yet been published on the Commission's website.

807 KAR 5:076, Section 9,⁴ North Marshall District used the calendar year ended December 31, 2023, as the basis for its application. North Marshall District's last base rate increase pursuant to the alternative rate filing procedure was in Case No. 2023-00134.⁵ Since that matter, North Marshall District has not adjusted its rates. To ensure the orderly review of the application, the Commission established a procedural schedule by Order dated April 30, 2025. North Marshall District responded to two requests for information from Commission Staff (Staff).⁶

UNACCOUNTED-FOR WATER LOSS

North Marshall District produces 100 percent of its water.⁷ The Commission notes that in its 2021 Annual Report, North Marshall District reported a water loss of 25.8658 percent,⁸ and 22.6164 percent for 2022.⁹ In its 2023 Annual Report, North Marshall District reported a water loss of 18.8691 percent.¹⁰ Commission regulation 807 KAR 5:066, Section 6(3), states that for ratemaking purposes, a utility's water loss shall not exceed 15 percent of total water produced and purchased, excluding water consumed

⁴ The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measurable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

⁵ Case No. 2023-00134, *Electronic Application of North Marshall Water District for a Rate Adjustment Pursuant to 807 KAR 5:076*.

⁶ North Marshall District's Response to Commission Staff's First Request for Information (Staff's First Request) (filed June 17, 2025). North Marshall District's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed July 22, 2025).

⁷ 2023 Annual Report at 57.

⁸ *Annual Report of North Marshall District to the Public Service Commission for the Calendar Year Ended December 31, 2021* (2021 Annual Report) at 57–58.

⁹ *Annual Report of North Marshall District to the Public Service Commission for the Calendar Year Ended December 31, 2022* (2022 Annual Report) at 57–58.

¹⁰ 2023 Annual Report at 58.

by a utility in its own operations. The table below shows that the 2023 total annual cost of water loss to North Marshall District is \$37,357, while the annual cost of water loss in excess of 15 percent is \$7,660.

Total Water Loss	Purchased Power	Chemicals	Total
Total Adjusted Expenses	\$ 166,835	\$ 31,147	\$ 197,982
Water Loss Percent	18.8691%	18.8691%	18.8691%
Total Water Loss	<u>\$ 31,480</u>	<u>\$ 5,877</u>	<u>\$ 37,357</u>

Disallowed Water Loss	Purchased Power	Chemicals	Total
Total Adjusted Expenses	\$ 166,835	\$ 31,147	\$ 197,982
Water Loss in Excess of 15%	3.8691%	3.8691%	3.8691%
Disallowed Water Loss	<u>\$ 6,455</u>	<u>\$ 1,205</u>	<u>\$ 7,660</u>

DISCUSSION

Using its pro forma test-year operations, North Marshall District determined that a base rate revenue increase of \$240,590, or 10.09 percent, was necessary to achieve the revenue requirement as shown in the table below.¹¹

¹¹ Application, Attachment 4, Revenue Requirement Using Operating Ratio Method Table.

Description	North Marshall District Proposed
Pro Forma Operating Expenses	\$ 2,251,671
Divided by: Operating Ratio	88%
Subtotal	2,558,717
Annual Interest Expense	109,148
Total Revenue Requirement	2,667,865
Other Operating Revenue ()	(31,926)
Interest Income ()	(10,761)
Revenue Required From Sale of Water	2,625,178
Revenue From Sales With Present Rates ()	(2,384,588)
Required Revenue Increase	\$ 240,590
Percentage Increase / (Decrease)	10.09%

To determine the reasonableness of the rates requested by North Marshall District, Staff performed a limited review of North Marshall District's test-year operations. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable¹² changes to test-year operations were identified, and adjustments were made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

¹² Commission regulation 807 KAR 5:076, Section 9, sets the standard for the determination of the reasonableness of proposed rates and states, in pertinent part, that the test period shall be "adjusted for known and measurable changes." See also Case No. 2001-00211, *Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness Therefore; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); and Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018).

Staff's recommendations are summarized in this report. William Foley reviewed the calculation of North Marshall District's Overall Revenue Requirement, and Manuel Jerez Tamayo reviewed North Marshall District's reported revenues and rate design.

SUMMARY OF RECOMMENDATIONS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio (OR) method, which was requested by North Marshall District and has been previously accepted by the Commission, Staff calculated North Marshall District's required revenue from water sales is \$2,620,621 to meet the Overall Revenue Requirement of \$2,659,834, and that a \$236,033 revenue increase, or 9.90 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Monthly Water Service Rates. In its application, North Marshall District proposed to increase all of its monthly retail water service rates evenly across the board by approximately 10.00 percent.¹³ North Marshall District stated that it contracted with Kentucky Rural Water Association (KRWA) to develop rates based on a COSS for the preparation of this case. However, after a review, North Marshall District's Board of Commissioners determined that the rates developed from the COSS would create an overly burdensome impact on North Marshall District's customers, and thus, they decided to submit the application with a request for an across-the-board increase.¹⁴ North Marshall District provided a copy of its most recent COSS performed for its system.¹⁵

¹³ Application, Attachment #2, Reasons for Application.

¹⁴ North Marshall District's Response to Staff's First Request, Item 12a at 10.

¹⁵ North Marshall District's Response to Staff's First Request, Item 12d, 12_d_NMWD COSS rate study.xlsx.

When a utility performs a COSS, and the study does not vary significantly from an across the board increase, the commission recommends using the COSS as it reflects the actual allocation of costs towards customer classes. North Marshall District stated that the COSS would be overly burdensome impact on the residential customer but based on the average bill calculation between the COSS rates and across the board rates, the difference does not demonstrate a significant shift of responsibility towards the residential customers.

The development of a COSS to establish utility rates is the most fair, just and reasonable method to ensure each customer category is charged for services based on the cost to serve that particular cost of service. While some deviation may be appropriate if the cost to serve has changed across the customer classes, or for other specific community or customer needs, North Marshall District has the burden of proof to demonstrate that a rate design significantly different than the COSS is appropriate. Staff recognizes there is a larger increase on the average customer impact when employing the KRWA's COSS to establish the rates compared to an across-the-board increase; however, utilizing the COSS to calculate the rates is the appropriate manner to establish fair, just, and reasonable rates at sufficient revenues. North Marshall District did not provide justification that the Commission has previously found acceptable for proposing a rate design that deviated from the COSS Staff allocated the \$236,033 revenue increase employing the same method as the COSS provided by North Marshall District resulting in a higher increase in minimum bill for 5/8 x 3/4-, 1-, 1 1/2-, and 2-Inch Meter users and a decrease in minimum bill for 3-, 4- and 6-Inch Meter users. The rates recommended in Appendix B to this report are based upon the revenue requirement, as calculated by Staff,

and will produce sufficient revenues from water sales to recover the \$2,620,621 revenue required from rates, an approximate 9.90 percent increase. The monthly water bill for a typical residential customer using approximately 4,000 gallons per month¹⁶ will increase by \$6.08 from \$42.82 to \$48.90 or approximately 14.20 percent. Refer to the following table for more information on how the allocation of the cost of service affects each of the customers categories individually.

Meter Size	Average Gallons per Month	Existing Bill	Proposed Bill	Amount Change	Percentage Increase
Average Water Bills					
5/8"	4,000	\$ 42.82	\$ 48.90	\$ 6.08	14.20%
1"	30,000	153.28	161.44	8.16	5.32%
1 1/2"	50,000	248.04	256.84	8.80	3.55%
2"	75,000	365.62	388.39	22.77	6.23%
3"	100,000	512.24	519.94	7.70	1.50%
4"	200,000	967.94	980.54	12.60	1.30%
6"	500,000	2,298.65	2,329.54	30.89	1.34%

3. Nonrecurring Charges. Staff reviewed North Marshall District's Nonrecurring Charges. Previously, the Commission has found that, because district personnel are currently paid during normal business hours, estimated normal business hour labor costs previously included in determining the amount of Nonrecurring Charges should be eliminated from the charges.¹⁷ North Marshall District provided updated cost

¹⁶ Application, Attachment 1, Customer Notice (The average retail customer uses 4,000 gallons per month.).

¹⁷ Case No. 2023-00299, *Electronic Application of Magoffin County Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 24, 2024); Case No. 2023-00284, *Electronic Application of Montgomery County Water District No. 1 for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC Mar. 5, 2024); Case No. 2023-00258, *Electronic Application of Kirksville Water Association, Inc. for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 3, 2024); and Case No. 2023-00220, *Electronic Application of East Casey County Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 21, 2024).

justification information for the Nonrecurring Charges¹⁸ as well as a list of the number of occurrences for each of its Nonrecurring Charges.¹⁹ Staff reviewed the cost justification information provided by North Marshall District and adjusted these charges by removing the Field Labor Costs and the Office/Clerical Labor Costs from those charges that occur during normal business hours. Staff also removed the Office/Clerical Labor Costs from the After-Hours Reconnection Charge, as office labor is typically performed during normal business hours. Connection/Turn-on Charge (Transfer/Reading Fees), Field Collection Charge, and Meter Reread all increased \$0.75, from \$5.25 to \$6.00, Meter Re-Installation Charge (Meter Install Fee) increased \$1.50, from \$10.50 to \$12.00, Meter Test Charge increased \$1.00, from \$13.00 to \$14.00, and Reconnection Charge (Turn Off Fee) increased \$2.00, from \$21.00 to \$23.00; Staff notes these increases are due to increased transportation costs as shown in the cost justification provided.²⁰ Connection/Turn-on Charge (After Hours) increased \$1.50, from \$92.50 to \$94.00, and Reconnection Charge (After Hours) increased \$1.00, from \$98.00 to \$99.00, both due to increasing cost of labor and transportation. Returned Check Charge increased \$0.40, from \$15.60 to \$16.00, due to increasing cost of some miscellaneous expenses.

Staff recommends that the Commission accept the respective adjustments for the charges mentioned above, as these were supported by North Marshall District in the cost

¹⁸ North Marshall District's Response to Staff's First Request, Item 17, 17_NMWD_Nonrecurring_Cost_Justification.pdf.

¹⁹ North Marshall District's Response to Staff's Second Request, Item 6, 6_(a)_2023_NMWD_Non_Recurring_Charges.xlsx.

²⁰ North Marshall District's Response to Staff's First Request, Item 17, 17_NMWD_Nonrecurring_Cost_Justification.pdf.

justification provided,²¹ and the amounts meet the ratemaking criteria of being known and measurable. The cost justification information, shown in Appendix A, was provided by North Marshall District and supports Staff's adjustments to the Nonrecurring Charges. The adjustments discussed above result in the following revised Nonrecurring Charges:

Nonrecurring Charges	Current Charge	Revised Charge
Connection/Turn-on Charge (Transfer/Reading Fees)	\$ 5.25	\$ 6.00
Connection/Turn-on Charge (After Hours)	\$ 92.50	\$ 94.00
Field Collection Charge	\$ 5.25	\$ 6.00
Meter Box or Lid Replacement Charge	Actual Cost	Actual Cost
Meter Re-Installation Charge (Meter Install Fee)	\$ 10.50	\$ 12.00
Meter Relocation Charge	Actual Cost	Actual Cost
Meter Reread	\$ 5.25	\$ 6.00
Meter Test Charge	\$ 13.00	\$ 14.00
Reconnection Charge (Turn Off Fee)	\$ 21.00	\$ 23.00
Reconnection Charge (After Hours)	\$ 98.00	\$ 99.00
Returned Check Charge	\$ 15.60	\$ 16.00

The adjustments to the Nonrecurring Charges result in a decrease in Miscellaneous Services Revenues of \$13,170 as shown below. Staff notes the test year Nonrecurring Revenue listed on the table below is based on previous Nonrecurring Charges values listed in the 2023 Annual Report, the current charges were not yet established during the test year 2023.

²¹ North Marshall District's Response to Staff's First Request, Item 17, 17_NMWD_Nonrecurring_Cost_Justification.pdf.

Charge	Occurrences	Current Charge	Revised Charge	Pro Forma
Connection/Turn-on Charge (Transfer/Reading Fees)	414	\$5.25	\$6.00	\$ 2,484
Connection/Turn-on Charge (After Hours)	0	\$92.50	\$94.00	-
Field Collection Charge	0	\$5.25	\$6.00	-
Meter Box or Lid Replacement Charge	3	Actual Cost	Actual Cost	119
Meter Re-Installation Charge (Meter Install Fee)	8	\$10.50	\$12.00	96
Meter Relocation Charge	0	Actual Cost	Actual Cost	-
Meter Reread	0	\$5.25	\$6.00	-
Meter Test Charge	2	\$13.00	\$14.00	28
Reconnection Charge (Turn Off Fee)	256	\$21.00	\$23.00	5,888
Reconnection Charge (After Hours)	2	\$98.00	\$99.00	198
Returned Check Charge	41	\$15.60	\$16.00	656
Pro Forma Test Year NRC Revenue				9,469
Test Year NRC Revenue ()				(22,639)
Adjustment				(13,170)
North Marshall District's Adjustment ()				14,419
Difference				<u>\$ 1,249</u>

North Marshall District provided an updated cost justification for its 5/8-Inch x 3/4-Inch Meter Connection/Tap-On Charge.²² Staff reviewed the cost justification information provided by North Marshall District and notes it supports an increase in the 5/8-Inch x 3/4-Inch Meter Connection/Tap-On Charge. Staff recommends that the Commission accept North Marshall District's supported increase for its 5/8-Inch x 3/4-Inch Meter Connection/Tap-On Charge from \$1,400 to \$1,526, as this value represent the actual costs associated with performing this service.

PRO FORMA OPERATING STATEMENT

North Marshall District's Pro Forma Operating Statement for the test year ended December 31, 2023, as determined by Staff appears in the table below.

²² North Marshall District's Response to Staff's First Request, Item 18, 18_NMWD_meter_Cost_Justification.pdf.

Description	Test Year	North Marshall Water District Adjustments	Staff Adjustments	Total Adjustments	(Ref)	Pro Forma
Operating Revenues						
Sales to Residential Customers	\$ 1,614,963			\$ -		\$ 1,614,963
Sales to Commercial Customers	311,634			-		311,634
Sales to Municipal Family Dwellings	2,892			-		2,892
Sales for Resale	60,318			-		60,318
		\$ 394,781	\$ -	394,781	(A)	394,781
Other Revenues				-		
Forfeited Discounts	23,106			-		23,106
Misc. Services Revenues	22,639	(14,419)	1,249	(13,170)	(B)	9,469
Other	600			-		600
Total Operating Revenues	2,036,152	380,362	1,249	381,611		2,417,763
Operation and Maintenance						
Salaries and Wages - Employees	670,301	136,404	24,234	160,638	(C)	
		(19,750)		(19,750)	(D)	811,189
Salaries and Wages - Officers	30,200			-		30,200
Employee Benefits	151,905		57,066	57,066	(E1)	
		(4,702)	(57,914)	(62,616)	(E2)	146,355
Employee Pensions - (CERS)	88,431		90,433	90,433	(F1)	
		(24,259)	(15,255)	(39,514)	(F2)	
			19,941	19,941	(F3)	159,291
Purchased Power	166,835	(6,455)		(6,455)	(G)	160,380
Chemicals	31,147	(1,205)		(1,205)	(G)	29,942
Materials and Supplies	236,278	(46,084)		(46,084)	(D)	
			(33,258)	(33,258)	(I)	156,936
Contractual Services - Management Fees	6,000			-		6,000
Contractual Services - Acct	17,250			-		17,250
Contractual Services - Legal	1,670			-		1,670
Contractual Services - Water testing	25,862			-		25,862
Contractual Services - Other	82,525			-		82,525
Rental of equipment	1,316			-		1,316
Transportation Expenses	41,542			-		41,542
Insurance - Gen. Liab. & Workers Comp.	64,045			-		64,045
Insurance - Other	790			-		790
Advertising Expense	630			-		630
Miscellaneous	26,062			-		26,062
Total	1,642,789	33,949	85,247	119,196		1,761,985
Amortization		7,768	(1,768)	6,000	(J)	6,000
Depreciation Expense	412,737		1,099	1,099	(I)	
		(28)	(6,357)	(6,385)	(H)	
			3,291.00	3,291	(K)	410,742
Taxes Other Than Income	55,179	8,844	1,854	10,698	(L)	65,877
Total Operating Expenses	2,110,705	50,533	83,366	133,899		2,244,604
Net Operating Income	(74,553)	329,829	(82,117)	247,712		173,159
Interest Income	6,038			-		6,038
Income Available to Service Debt	\$ (68,515)	\$ 329,829	\$ (82,117)	\$ 247,712		\$ 179,197

(A) Billing Analysis - Adjustment for Rate Increase. North Marshall District provided a billing analysis listing the water usage and water sales revenue for the 12-

month test year in its application.²³ North Marshall District reported total metered water sales revenue of \$1,989,807 for the test year in its Schedule of Adjusted Operations.²⁴ North Marshall District provided a billing analysis to calculate a normalized revenue amount based on the usage during the test year using the rates authorized in its current tariff to be \$2,384,588 and proposed an adjustment to decrease test-year water sales revenue by \$394,781 to reflect the revenues from water rates generated by the billing analysis.²⁵ North Marshall District stated this adjustment is due as a result of the Rate Adjustment filed pursuant to 807 KAR 5:076, designated as Case No. 2023-00134, which increased North Marshall District's metered sales revenues significantly. North Marshall District proposed to adjust its Operating Revenues by \$394,781 to normalize the test year sales to the amount generated by the billing analysis. Staff recommends the Commission accept the adjustment because the amount meet the rate making criteria of being known and measurable.

(B) Miscellaneous Service Revenues – Nonrecurring Charges. In the application, North Marshall District reported \$22,639 for Miscellaneous Service Revenues.²⁶ North Marshall District proposed a decrease of \$14,419 to account for the

²³ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 5, Current Billing Analysis.

²⁴ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations.

²⁵ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 5, Current Billing Analysis, Adjustment A.

²⁶ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations.

new Nonrecurring Charges established in Case No. 2023-00134.²⁷ As discussed in the Nonrecurring Charge section of the Summary of Recommendations, Staff removed normal business hour field labor and office/clerical labor costs²⁸ and determined that pro forma nonrecurring charges should be \$9,469. To achieve the Staff's recommended pro forma amount of nonrecurring charges, Staff further decreased North Marshall District's nonrecurring charges proposed adjustment of \$14,419 by \$1,249 for a total decrease of \$13,170. Staff recommends the Commission accept Staff's adjustment to Miscellaneous Service Revenues because the amount meets the ratemaking criteria of being known and measurable.

(C) Salaries and Wages – Employees. In its application, North Marshall District proposed an adjustment to increase Salaries and Wages – Employees by \$136,404,²⁹ due to changes in the individual wage rates and employee turnover.³⁰ Subsequent to the test year, North Marshall District lost four employees due to resignations and

²⁷ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment B.

²⁸ Case No. 2023-00299, *Electronic Application of Magoffin County Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 24, 2024); Case No. 2023-00284, *Electronic Application of Montgomery County Water District No. 1 for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC Mar. 5, 2024); Case No. 2023-00258, *Electronic Application of Kirksville Water Association, Inc. for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 3, 2024); and Case No. 2023-00220, *Electronic Application of East Casey County Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC May 21, 2024).

²⁹ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment C.

³⁰ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment C.

retirements,³¹ and hired seven new employees,³² resulting in a net increase of three employees. North Marshall District provided the test year employee list,³³ test year normal³⁴ and overtime³⁵ hours worked, current wage rates,³⁶ and a current employee list.³⁷

Staff calculated Total Salaries and Wages – Employees of \$830,939, which is \$160,638 more than the test year Salaries and Wages – Employee of \$670,301. Staff's increase is \$24,234 more than North Marshall District's proposed \$136,404 increase, as shown in the table below.

³¹ North Marshall District's Response to Staff's First Request, Item 4, 4_NMWD_Employee_Data.xlsx, 2023 Tab.

³² North Marshall District's Response to Staff's Second Request, Item 3, 3_NMWD_Employee_Data.xlsx, 2025 Tab, Column L.

³³ North Marshall District's Response to Staff's First Request, Item 4, 4_NMWD_Employee_Data.xlsx, 2023 Tab, Column A and B.

³⁴ North Marshall District's Response to Staff's First Request, Item 4, 4_NMWD_Employee_Data.xlsx, 2023 Tab, Column D.

³⁵ North Marshall District's Response to Staff's First Request, Item 4, 4_NMWD_Employee_Data.xlsx, 2023 Tab, Column E.

³⁶ North Marshall District's Response to Staff's Second Request, Item 3, 3_NMWD_Employee_Data.xlsx, 2025 Tab, Column G.

³⁷ North Marshall District's Response to Staff's Second Request, Item 3, 3_NMWD_Employee_Data.xlsx, 2025 Tab, Column A and B.

Position	Job Titles	Normalized Hours	Current Pay Rate	Total Regular Wages	Test Year Overtime Hours	Overtime Pay Rate	Total Overtime Wages	Total Pro Forma Wages
Position 1	General Manager	2,080	Salary	\$ 10,000	-	-	-	\$ 10,000
Position 2	Class III Operator	2,080	\$ 32.00	66,560	186.00	\$ 48.00	\$ 8,928	75,488
Position 3	Class II Operator	2,080	24.00	49,920	-	36.00	-	49,920
Position 4	Class III Operator	2,080	31.00	64,480	308.50	46.50	14,345	78,825
Position 5	Billing Clerk	2,080	25.50	53,040	-	38.25	-	53,040
Position 6	Class I Operator	2,080	23.75	49,400	-	35.63	-	49,400
Position 7	Field Manager	2,080	39.00	81,120	148.50	58.50	8,687	89,807
Position 8	Office Manager	2,080	37.00	76,960	-	55.50	-	76,960
Position 9	Customer Service	2,080	22.50	46,800	-	33.75	-	46,800
Position 10	Finance Officer	2,080	29.25	60,840	-	43.88	-	60,840
Position 11	GIS/GPS (part time)	2,080	20.00	41,600	-	30.00	-	41,600
Position 12	Class III Operator	2,080	31.00	64,480	126.00	46.50	5,859	70,339
Position 13	Operator in Training	2,080	20.00	41,600	-	30.00	-	41,600
Position 14	Operator in Training	2,080	20.00	41,600	-	30.00	-	41,600
Position 15	Operator in Training	2,080	21.50	44,720	-	32.25	-	44,720
Total		31,200		\$ 793,120	769		\$ 37,819	830,939
Test Year Salaries and Wages - Employees								(670,301)
Commission Staffs Adjustment								160,638
North Marshall District's Adjustment								(136,404)
Difference								\$ 24,234

Staff recommends the Commission accept Staff's adjustment of a \$160,638 increase to Salaries and Wages – Employees, as it is a known and measurable change because it reflects the normalized and test year hours at current wage rates with current employees.

(D) Expenses Related to Meter Installations. In its application, North Marshall District proposed an adjustment to decrease Salaries and Wages – Employees by \$19,750,³⁸ and Materials and Supplies by \$46,084,³⁹ to account for tap fee expenses that were included as part of these expenses during the test year.⁴⁰ The USoA requires that costs, such as tap fee expenses, be capitalized as Utility Plant in Service and depreciated

³⁸ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment D.

³⁹ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment D.

⁴⁰ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment D.

over their estimated useful lives.⁴¹ During the test year, North Marshall District installed 42 new water connections,⁴² and reported collecting \$65,834,⁴³ As shown in the following table.

Meter	Connections	Unit Cost	Revenue
5/8 X 3/4"	37	\$ 1,400	\$ 51,800
1"	3	Actual cost	5,250
1 1/2"	1	Actual cost	5,557
2"	1	Actual cost	3,227
Total	<u>42</u>		<u>\$ 65,834</u>

Therefore, Staff agrees with North Marshall District's proposed adjustments, as shown in the following table.

Description	Salaries and Wages	Materials and Supplies
Tap Fees	\$ 65,834	\$ 65,834
Allocated Percentage	30%	70%
North Marshall District's Proposed Adjustment	<u>\$ 19,750</u>	<u>\$ 46,084</u>

Staff additionally capitalized the labor and material costs and made a corresponding adjustment to test-year depreciation as shown in the Capitalization of Water Tap Labor Adjustment.

Staff recommends the Commission accept North Marshall District's proposed adjustments to decrease Salaries and Wages – Employees by \$19,750 and decrease

⁴¹ USoA, Accounting Instruction 19 and 33.

⁴² North Marshall District's Response to Staff's First Request, Item 9.

⁴³ North Marshall District's Response to Staff's First Request, item 2a, 2_(a)_NMWD_2023_Ledger_Analysis.xls, Account 47100003.

Materials and Supplies by \$46,084 because it reflects the proper accounting for water connection expenses according to the USoA.

(E) Employee Benefits – Insurance Premiums. North Marshall District pays 100 percent of the cost of the single plan for each employee and 75 percent of the cost of the family plans.⁴⁴ In its application, North Marshall District proposed to decrease Employee Benefits by \$4,702⁴⁵ due to a reduction in employer contribution to a level consistent with the Bureau of Labor Statistics' National average for an employer's share of health insurance premiums.⁴⁶

Upon review of North Marshall District's proposed adjustment, Staff agrees with North Marshall District's methodology but calculated a different amount. As discussed above, North Marshall District currently has fifteen full-time employees,⁴⁷ four of which do not to participate in the insurance provided, leaving eleven participants.⁴⁸ North Marshall District provided the most recent copies of its health, vision, dental, life, and disability insurance invoices.⁴⁹ Staff calculated the total current premiums for insurance benefits of \$193,524, which is an increase of \$57,066 (E1) from North Marshall District's test year amount, as shown further down in this section.

⁴⁴ North Marshall District's Response to Staff's Second Request, Item 4.

⁴⁵ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment E.

⁴⁶ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment E.

⁴⁷ North Marshall District's Response to Staff's Second Request, Item 3, 3_NMWD_Employee_Data.xlsx.

⁴⁸ North Marshall District's Response to Staff's First Request, Item 5a.

⁴⁹ North Marshall District's Response to Staff's First Request, Item 5a.

North Marshall District used a 78 percent contribution rate for employee-only coverage and 67 percent contribution rate for family coverage in its calculation.⁵⁰ However, given that updated Bureau of Labor Statistics' survey numbers for 2025 were published in September 2024, Staff recognized that using an updated average of 80 percent for employee-only coverage⁵¹ and 68 percent for family coverage⁵² would allow for North Marshall District's rates to reflect the most up-to-date average employer contribution amounts.⁵³ Accordingly, Staff adjusted North Marshall District's health insurance plan employer contribution expense for single and family plans to 80 and 68 percent, respectively.

Additionally, North Marshall District proposed reducing employer contribution to dental insurance by 40 percent.⁵⁴ Staff instead reduced North Marshall District's contribution to dental insurance by 60 percent to align with the national average of the employer share of dental insurance premiums as outlined in the Willis Benchmarking Survey,⁵⁵ which is shown in the calculation below. As previously addressed, North

⁵⁰ North Marshall District's Response to Staff's First Request, Item 12d, 12_d_NMWD_COSS_rate_study.xlsx, Medical Tab, Column L.

⁵¹ Bureau of Labor Statistics, Healthcare Benefits, March 2024, Table 3, private industry workers. (<https://www.bls.gov/ebs/publications/employee-benefits-in-the-united-states-march-2024.htm#Overview>).

⁵² Bureau of Labor Statistics, Healthcare Benefits, March 2024, Table 4, private industry workers. (<https://www.bls.gov/ebs/publications/employee-benefits-in-the-united-states-march-2024.htm#Overview>).

⁵³ Bureau of Labor Statistics, Healthcare Benefits, March 2024, Table 3, private industry workers. (<https://www.bls.gov/ebs/publications/employee-benefits-in-the-united-states-march-2024.htm#Overview>).

⁵⁴ North Marshall District's Response to Staff's First Request, Item 12d, 12_d_NMWD_COSS_rate_study.xlsx, Medical Tab, Column L.

⁵⁵ See Case No. 2017-00263, *Electronic Application of Kentucky Frontier Gas, LLC for Alternative Rate Adjustment* (Ky. PSC Dec. 22, 2017), at 9-10, and The Willis Benchmarking Survey, 2015, at 62-63. (<https://www.slideshare.net/annette010/2015-willis-benefits-benchmarking-survey-report>).

Marshall District provided the most recent copy of its insurance invoices.⁵⁶ Utilizing the most recent invoice amounts, Staff calculated the adjustment and decreased Employee Benefits - Insurance by \$62,616 (E2), which is \$57,914 more than the \$4,702 decrease proposed by North Marshall District, as shown below.

Type of Premium	Number of Employees	Employer Contributions	Ref.	Recommended Contribution Rate	Recommended Contribution Amount	Ref.	Pro Forma Premium
Medial							
Employee Only	6	\$ 3,385		20%	\$ (677)		\$ 2,708
Employee Spouse	1	924		32%	(296)		628
Employee Child	1	1,066		32%	(341)		725
Family	3	5,984		32%	(1,915)		4,069
Total Medical Insurance		11,359			(3,229)		8,130
Dental Insurance	11	3,315		60%	(1,989)		1,326
Administration Fee	11	66		-	-		66
Life STD/LTD Insurance	12	1,311		-	-		1,311
Vision Insurance	3	76		-	-		76
Total Monthly Pro Forma Premium		16,127			(5,218)		10,909
Multiplied by: 12 Months		12			12		12
Total Annual Insurance Premium		193,524			(62,616)		130,908
Test Year Health Insurance Premium ()		(136,458)					(136,458)
Commission Staff's Net Adjustment		57,066	(E1)		(62,616)	(E2)	(5,550)
Less: North Marshall District's Adjustment ()		-			4,702		4,702
Difference		\$ 57,066			\$ (57,914)		\$ (848)

Staff recommends the Commission accept Staff's adjustment, a net decrease of \$848 to the test year amount as North Marshall District provided insufficient evidence that employer contributions in excess of these amounts were appropriate or necessary to attract and retain employees as part of an overall benefit package.

(F) Employee Pensions (CERS). North Marshall District participates in the County Employee Retirement System (CERS),⁵⁷ which is managed by the Kentucky Public Pension Authority (KPPA). North Marshall District proposed a decrease to Employee Pensions and Benefits in the amount of \$24,259 (F1)⁵⁸ to reflect the reduced

⁵⁶ North Marshall District's Response to Staff's First Request, Item 5a.

⁵⁷ North Marshall District's Response to Staff's First Request, Item 4.

⁵⁸ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment F.

pension contribution rate that took effect on July 1, 2024, of 19.71 percent.⁵⁹ Staff calculated three adjustments based on the calculation of the pro forma Salaries and Wages – Employees as well as contribution percentage, and GASB 68 and 75 accounting.

While Staff agrees with North Marshall District's methodology, it calculated different adjustments. First, Staff calculated an increase of \$90,433 (F1) for Pension and Other Post Employment Benefits (OPEB) related to GASB 68 and GASB 75 from North Marshall District's test year amount. In Case No. 2016-00163,⁶⁰ Staff discussed how reporting requirements for GASB 68 would affect a utility's income statement and balance sheet. In that proceeding, the Commission found that the annual pension expense should be equal to the amount of a district's contributions to CERS. Consistent with Commission precedent,⁶¹ Staff added \$90,433 (F1) as an adjustment related to GASB 68 as well as GASB 75, which did not become effective until after GASB 68.

Second, Staff calculated an additional decrease of \$15,255 (F2) to North Marshall District's proposed decrease of \$24,259 to account for the reduction in the CERS contribution rate from the test year.⁶² Finally, the increase in contributable wages resulted in an increase of \$19,941 (F3) for North Marshall District's CERS expense. The adjustments result in a net increase of \$70,860, which is \$95,119 greater than North

⁵⁹ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment F.

⁶⁰ Case No. 2016-00163, *Alternative Rate Adjustment Filing of Marion County Water District* (Ky. PSC Nov. 10, 2016), Order at 11–15.

⁶¹ Case No. 2022-00044, *Electronic Application of Big Sandy Water District for an Adjustment of its Water Rates Pursuant to 807 KAR 5:076* (Ky. PSC Sept. 13, 2022), Order at 11–12.

⁶² CERS Board of Trustees December 4, 2023, Meeting, Minutes, Page 2. CERS Contribution Rate in the test year was 26.79% and 19.71% in current year.

Marshall District's proposed \$24,259 decrease, as shown in the table below. Staff recommends the Commission accept Staff's proposed adjustments as the amounts are known and measurable based on current Salaries and Wages at current contribution levels.

Description	Test Year	Pro Forma
Wages	\$ 670,301	\$ 830,939
Average Contribution Rate	25.07%	19.17%
Contributions	168,011	159,291
Test Year Employee Pensions		(88,431)
Total Increase		70,860
North Marshall District's proposed adjustment		24,259
Difference		<u>\$ 95,119</u>

<i>Reconciliation</i>	North Marshall District	Adjustment	(Ref)
Eliminate GASB 68 and 75 Adjustments	-	\$ 90,433	F1
Change in Contribution Rate	\$ (24,259)	(15,255)	F2
Change in Wages	0	19,941	F3
Total Increase	<u>\$ (24,259)</u>	<u>\$ 95,119</u>	

(G) Excess Water Loss. In the application, North Marshall District proposed adjustments to decrease Purchased Power expense by \$6,455⁶³ and Chemicals expense by \$1,205.⁶⁴ The adjustments are to reflect the expense for water loss in excess of 15 percent. During the test year North Marshall District reported a water loss of 18.8691 percent.⁶⁵ As noted earlier in the report, Commission regulations state that for

⁶³ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment G.

⁶⁴ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment G.

⁶⁵ 2023 Annual Report at 58.

ratemaking purposes, expenses for water loss in excess of 15 percent shall not be included for ratemaking purposes. Therefore, Staff calculated a decrease to Purchased Power Expense of \$6,455 and Chemicals Expense of \$1,205, as shown in the following table.

Disallowed Water Loss	Purchased Power	Chemicals	Total
Pro Forma Purchases	\$ 166,835	\$ 31,147	\$ 197,982
Water Loss in Excess of 15%	3.8691%	3.8691%	3.8691%
Disallowed Water Loss	<u>\$ (6,455)</u>	<u>\$ (1,205)</u>	<u>\$ (7,660)</u>

Staff recommends the Commission accept North Marshall District's \$6,455 decrease to Purchase Power expense and a \$1,205 decrease to Chemical expense, because of Commission regulation 807 KAR 5:066, Section 6(3), limiting water loss to 15 percent for ratemaking purposes.

(H) Amortization Expense. In its application, North Marshall District proposed an adjustment to increase Amortization Expense by \$7,768⁶⁶ to reflect the amortization of current rate case expense and \$2,651 for unamortized rate case expense for the previous rate case.⁶⁷

North Marshall District contracted with Kentucky Rural Water Association (KRWA) to assist with the application.⁶⁸ KRWA provided a quote for \$15,350 to prepare the rate

⁶⁶ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment I.

⁶⁷ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment I.

⁶⁸ North Marshall District's Response to Staff's First Request, Item 3, 3_(b)_Rate_Study.pdf.

case.⁶⁹ Staff reviewed the rate study proposal and agrees with the proposed recovery of the \$15,350 over three years, as shown below.

However, Staff disagrees with methodology proposed by North Marshall District for the recovery of Case No. 2023-00134's unamortized rate case expense. In that case, North Marshall District was authorized to recover \$2,651 annually for three years.⁷⁰ Commission precedent is to allow the recovery of remaining rate case expense to run concurrently with the current rate case expense.⁷¹ Otherwise North Marshall District would recover six-year worth of rate case expense instead of three on the previous rate case. Staff calculated an annual rate case expense of \$6,000, which is \$1,768 less than proposed by North Marshall District.

Description	Amount
Current Rate Case Expense	\$ 15,350
Unamortized Rate Case Expense from 2023-00134	2,651
Total Rate Case Expense	18,001
Amortization Years	3
Total Rate Case Amortization Expense	6,000
Proposed Amortization Adjustment	(7,768)
Difference between Commission Staff's and North Marshall District's Adjustments	<u>\$ (1,768)</u>

Staff recommends the Commission accept Staff's \$6,000 increase to Amortization Expense to reflect the recovery of the current Rate Case Expense as well as the remainder of the previous unamortized rate case expense within a three-year period.

⁶⁹ North Marshall District's Response to Staff's First Request, Item 3, 3_(b)_Rate_Study.pdf.

⁷⁰ Case No. 2023-00134 , (Ky. PSC Dec. 22, 2023), Order at 33–34.

⁷¹ Case No. 2022-00372, *Electronic Application of Duke Energy Kentucky, Inc. for (1) An Adjustment of Electric Rates; (2) Approval of New Tariffs; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and (4) All Other Required Approvals and Relief*, (KY. PSC July 1, 2024), Order at 18.

(I) Materials and Supplies. North Marshall District reported test year Materials and Supplies of \$236,278.⁷² During Staff's review of North Marshall District's general ledger accounts for Materials and Supplies, it also identified several expenditures that should have been capitalized. North Marshall District agreed some of the items purchased should have been capitalized.⁷³ Accounting Instruction 27 B(1) of the USoA for Class A/B Water Systems states that the cost of retirement units added to utility plant shall be accounted for as provided in Accounting Instruction 21 of the USoA, which provides methodology for capitalization of purchased assets including nonrecurring maintenance expenses that extend the useful life of an asset.⁷⁴ Staff made an adjustment to decrease Materials and Supplies by \$33,258, as shown in the following table.

Further, Staff made an adjustment to depreciate the cost of each asset over its estimated useful life as part of Depreciation Expense calculation. Staff aligned the asset's useful lives with the Depreciation Practices for Small Utilities (NARUC Study), which is included as an adjustment below. This results in an increase of \$1,099 to Depreciation Expense.

⁷² Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations.

⁷³ North Marshall District's Response to Staff's Second Request, Item 2b, 2_(b)_NMWD.xlsx, Column H.

⁷⁴ USoA, Accounting Instruction 27 B(1), at 33.

Date	Name	Capitalized Amount	Service Life	Annual Depreciation Expense
05/18/23	(AP) G & C Waterworks	\$ 2,620	62.50	\$ 42
08/09/23	(AP) CORE & MAIN	15,119	20.00	756
03/13/23	(AP) G & C Waterworks	3,630	50.00	73
03/13/23	(AP) G & C Waterworks	2,388	62.50	38
08/15/23	(AP) CORE & MAIN	9,501	50.00	190
Total		<u>\$ 33,258</u>		<u>\$ 1,099</u>

Staff recommends that the Commission accept Staff's adjustment to decrease Materials and Supplies by \$33,258, as well as an increase to Depreciation Expense of \$1,099, as the expenditures included were used to extend the life of an existing asset and should be capitalized according to the USoA instructions for utility plant accounting.

(J) Depreciation Expense. In its application, North Marshall District proposed an adjustment to reduce Depreciation Expense by \$28⁷⁵ to reflect the NARUC Study, as well as the inclusion of assets that were mistakenly not included in the test year's Depreciation Expense.⁷⁶ To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the same National Association of Regulatory Utility Commissioners (NARUC) study. When no evidence exists to support a specific life that is outside the NARUC ranges, the Commission has

⁷⁵ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment H.

⁷⁶ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment H.

historically used the midpoint of the NARUC ranges to depreciate the utility plant.⁷⁷ Upon examination, Staff agrees with North Marshall District's methodology to adjust depreciation expense. Staff's calculation differed from North Marshall District in two areas. North Marshall District proposed to depreciated water treatment equipment over a 17.5-year service life;⁷⁸ however, the NARUC Study recommends depreciating Water Treatment Equipment over a range of 20 to 35 years,⁷⁹ for a 27.5-year mid-point. Second, Staff disagreed with North Marshall District depreciating tools over a five-year service life,⁸⁰ the NARUC Study recommends a range of 15 to 20 years for a midpoint of 17.5 years.⁸¹

Staff agreed with the inclusion of two assets mistakenly not included in the test year Depreciation Expense.⁸² Staff calculated a Depreciation Expense of \$406,352, as shown in the following table, which is \$6,385 less than the reported test year amount of \$412,737 and \$6,357 less than North Marshall District's proposed \$28 decrease to Depreciation Expense.

⁷⁷ See Case No. 2020-00195, *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020), Order; Case 2023-00134, *Electronic Application of North Marshall Water District for a Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC, Dec. 22, 2023), Order at 30; Case 2023-00154, *Electronic Application of Harrison County Water Association, Inc. for an Alternative Rate Adjustment* (Ky. PSC Jan. 11, 2024), Order at 36.

⁷⁸ Application, Attachment 7, Attachment_7_2023_NMWD_Fixed_Assets_Schedule.xls, Adjusted Tab, rows 49–53.

⁷⁹ National Association of Regulatory Commissioners Depreciation Practices for Small Water Utilities, NARUC Account Number 332 Water Treatment Equipment.

⁸⁰ Application, Attachment 7, Attachment_7_2023_NMWD_Fixed_Assets_Schedule.xls, Adjusted Tab, rows 519–560.

⁸¹ National Association of Regulatory Commissioners Depreciation Practices for Small Water Utilities, NARUC Account Number 394 Tools, Shop & Garage Equipment.

⁸² Application, Attachment_7_-_2023_NMWD_Fixed_Assets_Schedule.xls, Adjusted Tab, Account 33100007 and 33100067.

Asset Class	NARUC Recommended Service Lives	Test Year Depreciation	Depreciation Adjustment	Pro Forma Depreciation
Structures and Improvements	35 - 40	\$ 69,694	\$ (2,193)	\$ 67,501
Wells and Springs	25 - 35	7,503	-	7,503
Supply Mains	50 - 75	12,964	145	13,109
Pumping Equipment	20	7,907	(20)	7,887
Water Treatment Equipment	20 - 35	396	-	396
Reservoirs & Tanks	35 - 40	21,639	-	21,639
Transmission & Distribution Mains	50 - 75	114,228	63	114,291
Services	30 - 50	37	-	37
Radio Read Meters	20	85,218	-	85,218
Radio Read Meter Installation	20	38,365	-	38,365
Hydrants	40 - 60	125	-	125
Office Furniture and Equipment	20 - 25	367	(204)	163
Transportation Equipment	7	34,749	-	34,749
Tools, Shop, & Equipment	15 - 20	5,849	(3,622)	2,227
Power Operated Equipment	10 - 15	451	(31)	420
Communication Equipment	10	13,245	(523)	12,722
Total Depreciation Expense		<u>\$ 412,737</u>	(6,385)	<u>\$ 406,352</u>
North Marshall District's Proposed Adjustment ()			28	
Difference			<u>\$ (6,357)</u>	

Staff recommends the Commission accept Staff's \$6,385 decrease to Depreciation Expense to reflect the annualization of Depreciation expense at the recommended NARUC midpoint service lives for capital assets with a remaining book value, in addition to the inclusion of the two assets mistakenly not included in the test year calculation.

(K) Capitalization of Water Tap Labor. As discussed in the Expenses Related to Meter Installations adjustment above, the expenses related to the installation of new water connections are capital expenditures that should be capitalized as Utility Plant in Service and depreciated over their estimated useful lives.⁸³ Therefore, Staff calculated the annual depreciation amount for the test year and increased depreciation expense by \$3,291 to account for the Tap Fee labor and materials as shown below:

⁸³ USoA, Accounting Instruction 19 and 33.

Description	Salaries and Wages	Materials and Supplies
Test Year Water Connections Expense	\$ 19,750	\$ 46,084
Divided by: Recommended Useful Life	20	20
Capitalized Expenses	<u>\$ 987</u>	<u>2,304</u>
Total Depreciation Adjustment		<u>\$ 3,291</u>

Staff recommends the Commission accept Staff's \$3,291 increase to Depreciation Expense, because the USoA requires the assets to be depreciated over their estimated useful lives.

(L) Taxes Other Than Income – Federal Insurance Contribution Act (FICA). In its application, North Marshall District proposed an adjustment to increase Taxes Other Than Income by \$8,844,⁸⁴ to reflect changes in salaries and wages.⁸⁵ As explained above, Staff calculated North Marshall District's total Salaries and Wages – Employees of \$830,939. Therefore, Staff calculated an increase of \$10,698 to Taxes Other Than Income, which is \$1,854 more than the \$8,844 proposed increase by North Marshall District, as shown in the following table.

⁸⁴ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, Adjustment J.

⁸⁵ Application, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Attachment 4, Schedule of Adjusted Operations, References, Adjustment J.

Description	Amount
Salaries and Wages - Employees	\$ 830,939
Salaries and Wages - Officers	30,200
Total Salaries and Wages	861,139
Times: 7.65 Percent FICA Rate	7.65%
Pro Forma Payroll Taxes	65,877
Test Year Payroll Taxes ()	(55,179)
Commission Staff's Adjustment	10,698
North Marshall District's Adjustment ()	(8,844)
Difference	\$ 1,854

Staff recommends the Commission approve Staff's adjustment to increase Taxes Other Than Income by \$10,698, because it is a known and measurable change that is a direct result of changes to Salaries and Wages – Employees.

OVERALL REVENUE REQUIREMENT

In the application, North Marshall District proposed to calculate the Revenue Requirement using the OR methodology.⁸⁶ The OR methodology⁸⁷ is used when there is no basis for a rate of return determination, the cost of the utility has fully or largely been funded through contributions, or there is little or no outstanding long-term debt. The OR methodology is a method to provide the utility with the necessary working capital to operate effectively. Staff has historically used an OR of 88 percent to calculate the additional working capital. If the Commission used the Debt Service Recovery method,

⁸⁶ Application, Attachment 4, Attachment_1_-_6_NMWD_List_of_attachments.pdf, Revenue Requirements Table.

⁸⁷ Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues. It is illustrated by the following equation:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

North Marshall District would recover \$283,576 for the Debt Service and Additional Working Capital, as shown in the following table.

Description	Amount
Average Annual Principal and Interest Payments	\$ 236,313
Additional Working Capital at 20%	47,263
Total Additional Working Capital	<u>\$ 283,576</u>

In contrast, the OR methodology provides \$306,082 additional working capital.⁸⁸ Staff believes that due to North Marshall District's calculated debt service requirement, the Additional Working Capital from the debt service recovery method would not provide North Marshall District with sufficient working capital to operate effectively to provide adequate, efficient, and reasonable service. Therefore, Staff used the OR method to calculate the revenue requirement for North Marshall District.

By applying the OR method, Staff calculated North Marshall District's Revenue Requirement from Sale of Water to be \$2,620,621. A revenue increase of \$236,033, or 9.90 percent, is necessary to generate the Overall Revenue Requirement of \$2,659,834.

⁸⁸ Pro Forma Operating Expenses \$2,244,604 / 88 Operating Ratio Percent = \$2,550,686 Sub-Total. Sub-Total \$2,550,686 – Pro Forma Operating Expenses \$2,244,604 = \$306,082 Additional Working Capital.

Description	North Marshall	
	District Proposed	Staff Calculated
Pro Forma Operating expenses	\$ 2,251,671	\$ 2,244,604
Divided by: Operating Ratio	88%	88%
Subtotal	2,558,717	2,550,686
Annual Interest Expense	109,148	109,148 (1)
Total Revenue Requirement	2,667,865	2,659,834
Other Operating Revenue ()	(31,926)	(33,175)
Interest Income ()	(10,761)	(6,038)
Revenue Required From Sale of Water	2,625,178	2,620,621
Revenue From Sales with Present rates ()	(2,384,588)	(2,384,588)
Required Revenue Increase / ()	\$ 240,590	\$ 236,033
Percentage Increase / (Decrease)	10.09%	9.90%

1. Average Annual Interest and Fees Payments. North Marshall District currently has two outstanding debts, United States Department of Agriculture's (USDA) Rural Development (RD) Bonds.⁸⁹ North Marshall District provided the amortization schedules for its outstanding debt.⁹⁰ Using the amortization tables, Staff calculated the average annual interest on a five-year average for the years 2025 through 2029. Staff calculated an average Interest Expense of \$109,148 as shown in the following table.

Loan	2025	2026	2027	2028	2029	Total
	Interest	Interest	Interest	Interest	Interest	
USDA Series 2014 Bond	\$ 75,792	\$ 74,172	\$ 72,506	\$ 70,796	\$ 69,042	\$ 362,308
USDA Series 2021 Bonds	38,239	37,474	36,698	35,911	35,111	183,433
Totals	\$ 116,056	\$ 113,672	\$ 111,231	\$ 108,735	\$ 106,182	\$ 545,741
5 Year Average						\$ 109,148

⁸⁹ Case No. 2015-00195, *Application of The North Marshall Water District for a Certificate of Public Convenience and Necessity to Construct, Finance and Increase Rates Pursuant to KRS 278.023*. Case No. 2021-00333, *Electronic Application of North Marshall Water District for a Certificate of Public Convenience and Necessity to Construct a System Improvements Project and an Order Approving a Change in Rates and Authorizing the Issuance of Securities Pursuant to KRS 278.023*.

⁹⁰ Application, 8_RD_Loan_Amort_Schs.pdf.

Staff recommends the Commission approve Staff's proposed inclusion of \$109,148 to the Revenue Requirement to account for the average annual interest payments.

Signatures

/s/ William Foley

Prepared by: William Foley
Revenue Requirement Branch
Division of Financial Analysis

/s/ Manuel Jerez Tamayo

Prepared by: Manuel Jerez Tamayo
Rate Design Branch
Division of Financial Analysis

APPENDIX

APPENDIX TO COMMISSION STAFF'S REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00102 DATED AUG 26 2025

* Denotes Rounding

Nonrecurring Charges Adjustments

Connection/Turn-on Charge (Transfer/Reading Fees)			
	Utility Revised Charge	Staff Revised Charge	
Field Materials	\$ -	\$	-
Field Labor	\$ 13.67	\$	-
Office Supplies	\$ -	\$	-
Office Labor	\$ 14.28	\$	-
Transportation	\$ 5.60	\$	5.60
Misc.	\$ -	\$	-
Total Revised Charge*	\$ 33.55	\$	6.00
Current Rate	\$ 5.25		
Connection/Turn-on Charge (After Hours)			
	Utility Revised Charge	Staff Revised Charge	
Field Materials	\$ -	\$	-
Field Labor	\$ 81.99	\$	81.99
Office Supplies	\$ -	\$	-
Office Labor	\$ 7.14	\$	-
Transportation	\$ 11.20	\$	11.20
Misc.	\$ -	\$	-
Total Revised Charge*	\$ 100.33	\$	94.00
Current Rate	\$ 92.50		
Field Collection Charge			
	Utility Revised Charge	Staff Revised Charge	
Field Materials	\$ -	\$	-
Field Labor	\$ 13.67	\$	-
Office Supplies	\$ -	\$	-
Office Labor	\$ 7.14	\$	-
Transportation	\$ 5.60	\$	5.60
Misc.	\$ -	\$	-
Total Revised Charge*	\$ 26.41	\$	6.00
Current Rate	\$ 5.25		

Meter Box or Lid Replacement Charge		
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ -	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ -	\$ -
Transportation	\$ -	\$ -
Misc.	\$ -	\$ -
Total Revised Charge*	\$ -	\$ -

Current Rate	Actual Cost	Actual Cost
--------------	-------------	-------------

Meter Re-Installation Charge (Meter Install Fee)		
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ 27.33	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ 14.28	\$ -
Transportation	\$ 11.20	\$ 11.20
Misc.	\$ -	\$ -
Total Revised Charge*	\$ 52.81	\$ 12.00

Current Rate	\$10.50
--------------	---------

Meter Relocation Charge		
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ -	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ -	\$ -
Transportation	\$ -	\$ -
Misc.	\$ -	\$ -
Total Revised Charge*	\$ -	\$ -

Current Rate	Actual Cost	Actual Cost
--------------	-------------	-------------

Meter Reread		
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ 13.67	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ 7.14	\$ -
Transportation	\$ 5.60	\$ 5.60
Misc.	\$ -	\$ -
Total Revised Charge*	\$ 26.41	\$ 6.00

Current Rate	\$ 5.25
--------------	---------

	Meter Test Charge	
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ 27.33	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ 14.28	\$ -
Transportation	\$ 14.00	\$ 14.00
Misc.	\$ -	\$ -
Total Revised Charge*	<u>\$ 55.61</u>	<u>\$ 14.00</u>
Current Rate	\$ 13.00	
	Reconnection Charge (Turn Off Fee)	
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ 27.33	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ 14.28	\$ -
Transportation	\$ 22.40	\$ 22.40
Misc.	\$ -	\$ -
Total Revised Charge*	<u>\$ 64.01</u>	<u>\$ 23.00</u>
Current Rate	\$ 21.00	
	Reconnection Charge (After Hours)	
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ 81.99	\$ 81.99
Office Supplies	\$ -	\$ -
Office Labor	\$ 14.28	\$ -
Transportation	\$ 16.80	\$ 16.80
Misc.	\$ -	\$ -
Total Revised Charge*	<u>\$ 113.07</u>	<u>\$ 99.00</u>
Current Rate	\$ 98.00	
	Returned Check Charge	
	Utility Revised Charge	Staff Revised Charge
Field Materials	\$ -	\$ -
Field Labor	\$ -	\$ -
Office Supplies	\$ -	\$ -
Office Labor	\$ 9.52	\$ -
Transportation	\$ -	\$ -
Misc.	\$ 15.73	\$ 15.73
Total Revised Charge*	<u>\$ 25.25</u>	<u>\$ 16.00</u>
Current Rate	\$ 15.60	

5/8-Inch x 3/4-Inch Meter Connection/Tap-On Charge			
	Utility Revised Charge		Staff Revised Charge
Materials Expense	\$	769.35	\$ 769.35
Service Pipe Expense	\$	24.50	\$ 24.50
Installation Labor Expense	\$	339.01	\$ 339.01
Installation Equipment Expense	\$	392.50	\$ 392.50
Installation Miscellaneous Expense	\$	-	\$ -
Overhead Expense	\$	-	\$ -
Administrative Expense	\$	-	\$ -
Total Revised Charge*	\$	1,525.36	\$ 1,526.00
Current Rate	\$	1,400.00	

APPENDIX B

APPENDIX TO COMMISSION STAFF'S REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00102 DATED AUG 26 2025

The following rates and charges are recommended by Staff based on the adjustments in Staff's Report for the customers in the area served by North Marshall District. All other rates and charges not specifically mentioned herein shall remain the same.

Bi-Monthly Water Rates

<u>5/8" x 3/4" Meter</u>	\$ 33.17	Minimum Bill
<u>1" Meter</u>	\$ 42.94	Minimum Bill
<u>1 1/2" Meter</u>	\$ 59.34	Minimum Bill
<u>2" Meter</u>	\$ 92.14	Minimum Bill
<u>3" Meter</u>	\$ 124.94	Minimum Bill
<u>4" Meter</u>	\$ 190.54	Minimum Bill
<u>6" Meter</u>	\$ 354.54	Minimum Bill
 <u>All Water Usage</u>	 \$0.00395	 Per Gallon

Nonrecurring Charges

	Revised Charge
Connection/Turn-on Charge (Transfer/Reading Fees)	\$ 6.00
Connection/Turn-on Charge (After Hours)	\$ 94.00
Field Collection Charge	\$ 6.00
Meter Re-Installation Charge (Meter Install Fee)	\$ 12.00
Meter Reread	\$ 6.00
Meter Test Charge	\$ 14.00
Reconnection Charge (Turn Off Fee)	\$ 23.00
Reconnection Charge (After Hours)	\$ 99.00
Returned Check Charge	\$ 16.00

Meter Connection/Tap-On Charge

5/8-Inch x 3/4-Inch Meter	\$ 1,526.00
---------------------------	-------------

*Kimberly Smith
North Marshall Water District
96 Carroll Road
Benton, KY 42025

*Shannon Elam
North Marshall Water District
96 Carroll Road
Benton, KY 42025

*North Marshall Water District
96 Carroll Road
Benton, KY 42025

*Sam Reid
312 N. Jackson Street
Perryville, KY 40468