COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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ELECTRONIC APPLICATION OF OHIO COUNTY)	CASE NO.
WATER DISTRICT FOR AN ALTERNATIVE)	2020-00167
RATE ADJUSTMENT)	

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Orders of June 18, 2020, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's June 18, 2020 Order, Ohio County Water District is required to file written comments regarding the findings of Staff no later than 14 days from the date of this report. Pursuant to the Commission's Orders in Case No. 2020-00085, issued March 16, 2020, and March 24, 2020, Ohio County Water District SHALL NOT FILE the original paper copy of its comments at this time, but rather shall file original paper copies within 30 days of the lifting of the current state of emergency. Due to COVID-19, Commission Staff is unable to physically sign this report. When Commission staff is able to safely sign this report, a notice of filing with the executed signature page will be made in this case docket.

¹ Case No. 2020-00085, Electronic Emergency Docket Related to the Novel Coronavirus COVID-19 (Ky. PSC Mar. 16, 2020), Order at 5–6. Case No. 2020-00085, Electronic Emergency Docket Related to the Novel Coronavirus COVID-19 (Ky. PSC Mar. 24, 2020), Order at 1–3.

Kent A. Changier

Acting Executive Director Public Service Commission P.O. Box 615

Frankfort, KY 40602

DATED SEP 24 2020

cc: Parties of Record

STAFF REPORT

ON

OHIO COUNTY WATER DISTRICT

CASE NO. 2020-00167

Ohio County Water District (Ohio District) is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 5,792 retail customers, and three wholesale customers, that reside in Breckinridge, Daviess, Grayson, and Ohio counties, Kentucky. On June 5, 2020, Ohio District tendered an application (Application) to the Commission requesting to adjust its water rates pursuant to 807 KAR 5:076, and it was accepted as filed. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated June 18, 2020. Commission Staff (Staff) issued one round of formal discovery on June 29, 2020. On September 2, 2020, the Commission found that additional time would be needed to review Ohio District's case amending its June 18, 2020 Order to allow for additional time for Staff to complete this report.

The Commission notes that in Ohio District's August 28, 2020 supplemental response to Staff's request for information, Ohio District reported a corrected water loss of 19.29 percent. Commission regulation 807 KAR 5:066(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 by a utility in its own operations.

¹ Annual Report of Ohio County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2019 (Water Annual Report), at 12 and 49.

The Commission is placing greater emphasis on monitoring utilities that consistently exceed the 15 percent water loss threshold and strongly encourages Ohio District to pursue reasonable actions to reduce its water loss. Failure by Ohio District to make significant process towards reducing water loss may cause the Commission to pursue additional action with the utility.

To comply with the requirements of 807 KAR 5:076, Section 9, Ohio District based its requested rates on a historical test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission at the time it filed the Application; the calendar year ended December 31, 2018.

Using its pro forma test-year operations, Ohio District provided evidence that it could justify a revenue increase of \$746,989 or 20.6 percent, as shown in the table below.²

Pro Forma Operating Expenses	\$	3,612,476
Plus: Average Annual Principal and Interest Payments		773,750
Additional Working Capital		154,750
Overall Pevenue Peguirement		4,540,976
Overall Revenue Requirement		
Less: Other Operating Revenue		(122,072)
Interest Income		(42,823)
Net nonutility Income		(4,498)
Revenue Required from Rates		4,371,583
Less: Pro Forma Present Rate Service Revenues		(3,624,953)
Required Revenue Increase	\$	746,989
Percentage Increase	-	20.6%

² Application, Exhibit C.

Ohio District proposes to increase its current water service rates by the required revenue percentage increase of 20.6 percent evenly across the board. The rates proposed by Ohio District, based on an average retail customer's monthly water usage of 4,417 gallons, would increase an average residential customer's bill from \$42.35 to \$51.08, or 20.6 percent.3

To determine the reasonableness of the rates requested by Ohio District, Staff performed a limited financial review of Ohio 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 measurable changes to test-year operations were identified and adjustments made when their effects were deemed material.4 Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

Staff's findings are summarized in this report. William Foley reviewed the calculation of Ohio District's Overall Revenue Requirement. Sam Reid reviewed Ohio District's reported revenues and rate design.

³ Application, Exhibit K.

⁴ These adjustments are consistent with 807 KAR 5:076, Section 9; See also Case No. 2001-00211, The 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 therefor; (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); Case No. 2017-00417, Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works (Ky. PSC July 12, 2018); and Case No. 2019-00080, Electronic Proposed Adjustment of the Wholesale Water Service Rates of the City of Pikeville to Mountain Water District (Ky. PSC Dec. 19, 2019).

SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage (DSC) method, as generally accepted by the Commission, Staff found that Ohio District's revenue required from rates of \$4,411,771 and that a \$798,756 revenue increase, or 22.11 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. <u>Water Service Rates</u>. Ohio District proposed to increase its current monthly water service rates evenly across the board by the percentage increase in revenue requirement. The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation.⁵

Ohio District provides water service to retail customers and wholesale customers for resale. Ohio District contracted with Alan Vilines of Kentucky Rural Water Association to assist with the preparation of this case and perform a cost of service study (COSS) using a method referred to as the inch-miles method. The inch-miles method of cost allocation has previously been accepted by the Commission to determine rates for water systems that provide wholesale water service. Ohio District provided a copy of the COSS in Excel spreadsheet format in response to Staff's Request for Information. Ohio District stated that the unique characteristics of Ohio District's distribution system necessitated

⁵ Case No. 2019-00310, Application of Pendleton County Water District for an Alternative Rate Adjustment (Ky. PSC Mar. 10, 2020).

⁶ Case No. 2002-00022, Proposed Adjustment of Wholesale Water Service Rates of the City of Pikeville, Kentucky (Ky. PSC Oct. 18, 2002).

⁷ Response of Ohio County Water District to Commission Staff's E-Mail Request for Information (filed Aug. 18, 2020) (Response to Staff's E-Mail Request), Item 1.

the need to transport water long distances from Ohio District's water treatment plant, causing the results of the COSS to unduly impose more costs on wholesale customers.8

Staff followed Ohio District's proposed across-the-board method to increase rates. The inch-miles COSS method uses water line diameter size and length to establish factors. These factors are used to allocate the operation and maintenance expenses between the retail and wholesale customers. Ohio District's water lines are sized to provide greater water flows than Ohio District current customers need to be served. Therefore, the COSS performed by Mr. Vilines resulted in a greater allocation of the operation and maintenance expenses to the wholesale customers than the actual costs to provide water service to the wholesale customers, and Staff believes that such cost allocation to wholesale customers is not reasonable. The rates set forth in the Appendix to this report are based upon the revenue requirement, as calculated by Staff, and will produce sufficient revenue from water sales to recover the \$4,411,771 Revenue Required from Rates, a 22.11 percent increase. These rates will increase an average retail customer's monthly bill using 4,417 gallons, from \$42.35 to \$51.72, an increase of \$9.36, or 22.11 percent.

Through discovery, Ohio District noted that it failed to increase the volumetric Leak Adjustment Rate in the Application and suggests that the Commission adjust the Leak Adjustment Rate to \$3.23 per 1,000 gallons.⁹ The proposed \$3.23 per 1,000 gallons Leak Adjustment Rate is consistent with Ohio District's proposed across-the-board increase.¹⁰

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⁸ Response of Ohio County Water District to Commission Staff's First Request for Information (filed July 27, 2020) (Response to Staff's First Request), Item 3.b.

⁹ Response to Staff's First Request, Item 3.c.

¹⁰ \$2.68 * 1.206 = \$3.23

Therefore, Staff increased the current Leak Adjustment Rate of \$2.68 per 1,000 gallons by Staff's determined 22.11 percent increase, resulting in a Leak Adjustment Rate of \$3.27 per 1,000 gallons

3. <u>Non-Recurring Charges</u>. During the test year, Ohio District earned \$58,245 in non-recurring charges. Ohio District provided a detailed breakdown of the charges as shown in the table below.

Non Recurring Revenue Sources	Amount
Returned Check Fees	\$ 1,650
Meter Exchange Unit Replacement	5,423
Meter Test Charge	130
Service Call Charge	18,410
Dissconnect/Reconnection Fee	32,632
Total	\$ 58 245

PRO FORMA OPERATING STATEMENT

Ohio District's Pro Forma Operating Statement for the test year ended December 31, 2018, as determined by Staff, appears below.

Operating Revenues	2018	Annual Report	Ac	djustment	(Ref.)	Pro Forma
Total Retail Meter Sales	\$	3,124,638	\$	(22,368)	(A)	\$ 3,102,270
Sales for Resale	Ψ	502,084	\$	8,661	(A)	510,745
Other Water Revenues		502,064	Φ	0,001	(A)	510,745
Forfeited Discounts		74 206				71 206
		71,306				71,306
Misc. Service Revenues		30,575				30,575
Other Water Revenues		20,191	-			20,191
Total Operating Revenues	\$	3,748,794	_\$_	(13,707)		\$ 3,735,087
Operating Expenses						
Operation and Maintenance Expenses						
Salaries and Wages - Employees		904,397		55,078	(B)	959,475
Salaries and Wages - Officers		24,000				24,000
Employee Pensions and Benefits		678,238	((291,167)	(C)	
				52,449	(C)	
				(5,288)	(D)	434,232
Purchased Power		358,746		(15,384)	(E)	343,362
Chemicals		77,554		(3,326)	(E)	74,228
Materials and Supplies		40,869		(-,)	(-)	40,869
Contractual Services - Acct. & Legal		39,147				39,147
Contractual Services- Water Testing		9,673				9,673
Contractual Services- Other		365,018		7,505	(F)	0,0.0
Contractadi Convicto Caron		000,010		4,825	(G)	377,348
Rental of Bldg/Property & Equipment		4,466		.,0_0	(0)	4,466
Transportation Expense		8,705				8,705
Insurance- Vehicle, Gen. Liability & Other		60,157				60,157
Insurance- Workers Comp.		18,927				18,927
Advertising		1,123				1,123
Bad Debt Expense		18,000				18,000
Miscellaneous Expense		112,607				112,607
Miscellatieous Experise		112,007	-			112,007
Total Operation and Maintenance Expenses		2,721,627	((195,308)		2,526,319
Depreciation		1,147,618	(120,726)	(H)	1,026,892
Taxes Other Than Income		83,503		4,213	(l)	87,716
Total Operating Expenses		3,952,748	((311,821)		3,640,927
Net Utility Operating Income		(203,954)		298,114		94,160
(Losses) on Disposition of Utility Property		(203,954)		31,814	(1)	34,100
(Losses) on Disposition of Office Froperty		(31,014)		31,014	(J)	-
Total Utility Operating Income	\$	(235,768)	\$	329,928		\$ 94,160

(A) <u>Billing Analysis Adjustment</u>. Ohio District provided a billing analysis for the 12-month test year in its Application. Ohio District's summary of billing analysis included net billing adjustments for misread meters, leak adjustments, and billing errors. Ohio

District provided a revised level of net billing adjustments due to the inadvertent inclusion of non-recurring charges.¹¹ Staff reviewed and approves of Ohio District's adjustments. Therefore, Staff has decreased retail water sales revenue by \$22,368 and increased wholesale water sales revenue by \$8,661.

(B) <u>Salaries and Wages</u>. In the Application, Ohio District proposed to increase its test-year salaries and wages expense by \$55,078 to reflect two yearly 3 percent cost of living increases received by all employees. ¹² During the test year Ohio District reported \$904,397 in employee's salaries, Ohio District provides a cost of living adjustment in January for employees. Taking two years of cost of living adjustments into account provides an increase of \$55,078 as shown below.

Wage Increases								
Test year	Cost of Living	Wage						
<u>Wages</u>	Increase	<u>Increase</u>						
\$904,397	3.0%	\$ 27,132						
931,529	3.0%	27,946						
Total Increase in Wages								
	Test year Wages \$904,397	Test year Cost of Living Increase \$904,397 3.0% 931,529 3.0%						

Staff recommends accepting Ohio District's adjustment as it corresponds to Salaries & Wages; the net result is an increase of \$55,078. Therefore, Staff is increasing Salaries and Wages Expense by \$55,078.

(C) <u>Retirement Expense Pursuant to GASB 68</u>. Ohio District provides pension benefits and postretirement health care benefits to its employees by participating in the

¹¹ Response to Staff's E-Mail Requests, Item 2.

¹² Application, Exhibit C, References, Item B.

County Employee Retirement System (CERS). As a participating member, Ohio District is required to contribute a percentage of its employee wages to CERS. In the fiscal year beginning July 1, 2019, the CERS contribution rate was 24.06 percent.¹³ The CERS pension expense Ohio District reported in the test year conformed to the requirements of the Governmental Accounting Standards Board Statement No. 68 (GASB 68).

In its Application, Ohio District proposed to decrease its Employee Pensions and Benefits Expense by \$291,167 to reflect the increase in employer contribution rates paid to CERS which is an increase of \$52,449, and to remove the effects of the journal entry made to conform to the requirements of GASB 68, which results in a decrease of \$343,616.

In Case No. 2016-00163,¹⁴ Staff discussed in great detail how reporting requirements for GASB 68 would affect a utility's income statement and balance sheet. In that proceeding, Staff found that the annual pension expense should be equal to the amount of a district's contributions to CERS, which "historically have been fairly constant." Consistent with Staff's previous practice, Staff agrees with the adjustment proposed by Ohio District. Therefore, Staff decreased Employee Pensions and Benefits Expense by a net amount of \$291,167.

(D) <u>Employee Pensions and Benefits- Insurance</u>. Ohio District reported testyear Employee Pensions and Benefits expense of \$678,238. Ohio District currently pays

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¹³ Kentucky Retirement Systems, Contribution Rates. (<u>https://kyret.ky.gov/Employers/Pages/Contribution-Rates.aspx</u>)

¹⁴ Case No. 2016-00163, *Alternative Rate Adjustment Filing of Marion County Water District* (Ky. PSC Aug. 11, 2016), Staff Report on Marion County Water District at 11–27.

100 percent of the monthly premiums for its 15 eligible full-time employees, with any incremental cost for other than single coverage paid for by the employee.

Staff notes that in recent Orders, ¹⁵ the Commission has made ratemaking adjustments to reduce the cost of employee benefit packages paid by some utilities when certain aspects of those benefits packages were found to be unreasonable. The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs for market and geographic competitiveness, and to ensure the development of a fair, just, and reasonable rate. The Commission found that in most cases, 100 percent of employer-funded health care does not meet those criteria. Factoring in for the preceding, Staff determined the net adjustment to Ohio District's test-year employee pensions and benefits expense by the national average employee contribution rate, ¹⁶ which results in a net decrease of \$5,288 as shown in the calculation below.

¹⁵ Case No. 2018-00414, Application of Crittenden-Livingston County Water District for an Alternative Rate Adjustment (Ky. PSC May 23, 2019), Order at 3. Case No. 2019-00268, Application of Knott County Water and Sewer District for an Alternative Rate Adjustment (Ky. PSC Jan. 31, 2020), Order at 25.

¹⁶ Bureau of Labor Statistics, Healthcare Benefits, March 2017, Table 10, private industry workers. (https://www.bls.gov/ncs/ebs/benefits/2017/ownership/private/table10a.pdf)

Type of Premium	Employer Contributions		Times: Average Employee Contribution Rate	Р	Monthly remium ljustment	Pro Forma Monthly Premium	
Health Insurance ¹⁷ Life Insurance Dental Insurance Vision Insurance	\$	9,665 248 785 94	21% 0% 60% 0%	\$	(2,030) (471)	\$	7,635 248 314 94
Total Pro Forma Monthly Premium Times: 12 Months							8,291 12
Total Annual Pro Forma Premium Less: Test Year							99,492 04,780)
Adjustment						\$	(5,288)

- (E) Excess Water Loss. Ohio District incorrectly recorded 41,355,600 gallons of meter loss into "Other Water Used" instead of "Total Water Loss" correcting this error results in a water loss of 19.29 percent. Commission regulation 807 KAR 5:066, Section 6(3), limits water loss to 15 percent for ratemaking purposes unless the Commission finds an alternative level reasonable. Unaccounted-for water "means the volumetric sum of all water purchased and produced by the utility less the volume of water:
 - (a) Sold;
- (b) Provided to customers without charge as authorized by the utility's tariff; and
- (c) Used by the utility to conduct the daily operation and maintenance of its treatment, transmission, and distribution systems."¹⁹

¹⁷ \$644.22*15 Employees

¹⁸ Response to Commission Staff's E-Mail Request, Item 3.

¹⁹ KRS 807 KAR 5:067, Section 1(7).

Thus, unaccounted-for water loss is "the difference of the total amount of water produced and purchased and the sum of water sold, water used for fire protection purposes, and water used in treatment and distribution operations (e.g., backwashing filters, line flushing). Generally speaking, the unaccounted-for water loss is the result of line breaks and leaks, inaccurate meters, tank overflows, excavation damages, and theft."

Staff is removing from Ohio District's test-year operations the cost of pumping and treating the excess water loss. As shown in the table below, Staff is making a net decrease of \$18,710.

	Test Year	Water Loss Percentage	_Ac	djustment
Purchased Power Chemicals	\$ 358,746 77,554	-4.29% -4.29%	\$ \$	(15,384) (3,326)
Total Decrease			\$	(18,710)

(F) <u>Contractual Services – Rochester Dam Regional Water Commission.</u>

Currently Ohio District is a member of the Rochester Dam Regional Water Commission (RDRWC). In February 2018, the four members of the RDRWC established an escrow fund to pay expenses associated with the Rochester Dam. Ohio District began making required payments to RDRWC based on \$0.10 per 1,000 gallons of water withdrawn from the Green River.

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²⁰ Case No. 2018-00394, *Electronic Investigation into the Measuring, Recording, and Reporting of Water Loss by Kentucky's Jurisdictional Water Utilities* (Ky. PSC Nov. 22, 2019), Order at 4–5.

In its Application, Ohio District requested to increase Contractual Services by \$7,505 to reflect an annualized year of payments to RDRWC.²¹ In the test year, Ohio District only paid 11 months of the expense. Because this is going to become a standard payment in the future, Staff agrees with Ohio District's recommendation to increase Contractual Services - Other. Therefore, Staff increased Contractual Services by \$7,505.

(G) <u>Contractual Services - Rate Case Expense</u>. In its Application,²² Ohio District proposed to increase its test-year Amortization expense by \$4,825 to reflect the five-year amortization of the estimated \$24,125 rate case expense: \$9,125 for Rate Consultant fees and \$15,000 for Attorney's fees. Accordingly, Staff increased test-year Contractual Services expense by \$4,825, as shown below.

Rate Case Expense \$ 24,125

Divide by: 5 years 5

Pro Forma Expense Adjustment \$ 4,825

(H) <u>Depreciation Expense.</u> In its Application, Ohio District proposed to decrease its test-year Depreciation Expense of \$1,147,618 by \$120,726.²³ This adjustment was the result of Ohio District's proposal to adjust the lives assigned to certain assets that were outside of the life ranges in accordance with the National Association of Regulatory Utility Commissioners' (NARUC) report titled Depreciation Practices for Small Utilities (NARUC Study) published in 1979. In addition, the

²¹ Application, Exhibit C, Adjustment d.

²² Id., Adjustment e.

²³ *Id.*, Table A.

adjustment involves annualizing Depreciation Expense for assets that were installed during the test year.

To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the NARUC Study mentioned above. Ohio District proposed to adjust the lives of assets that were outside of the NARUC ranges to the mid-point of the depreciable life ranges. In this proceeding, Staff found no evidence to support depreciable lives that vary significantly from the midpoint of the NARUC ranges and, after further review of Ohio District plant ledger, Staff agrees with Ohio District's proposed decrease to Depreciation Expense of \$120,726.

(I) <u>Taxes Other Than Income</u>. In its Application,²⁴ Ohio District proposed an increase to taxes other than Income of \$4,213. This is a result of the increase to wages and salaries proposed in Adjustment B. An increase to wages results in an increase of Taxes due. The FICA rate is 7.65 percent of wages, therefore an increase to wages results in a direct increase to FICA taxes due. The calculation used is shown below.

Associated Payroll Tax Increase

Total Increase in Wages \$55,078
FICA Rate 0.0765
Tax Increase Adjustment \$4,213

Since the adjustment is a direct result of the increase to salaries and wages, Staff is accepting the adjustment. Therefore, Staff increased Taxes other than Income by \$4,213.

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²⁴ Application, Exhibit C, Adjustment g.

(J) <u>Losses on Disposition of Property</u>. During the test year, Ohio District wrote off obsolete meters. The difference between the Book value and the Accumulated depreciation for the meters is \$31,814. Losses from the disposal of property is not a routine transaction in the normal course of business and, therefore, should be removed from the test year. Staff adjusted Losses on the Disposition of Property by \$31,814 to remove the effects of this extraordinary item.

OVERALL REVENUE REQUIREMENT AND REQUIRED REVENUE INCREASE

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;²⁵ (3) the average annual principal and interest payments on all long-term debts, and (4) working capital that is in addition to depreciation expense.

A comparison of Ohio District's and Staff's calculations of the Overall Revenue Requirement and the Required Revenue Increase using the DSC method is shown below.

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²⁵ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. *See Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	Ohio County Water District	Staff	
Pro Forma Operating Expenses Plus: Average Annual Principal and Interest Payments Additional Working Capital	\$ 3,612,476 773,750 154,750	\$ 3,640,927 783,531 156,706	(1) (2)
Overall Revenue Requirement Less: Other Operating Revenue Interest Income Net nonutility Income	4,540,976 (122,072) (42,823) (4,498)	 4,581,164 (122,072) (42,823) (4,498)	
Revenue Required from Rates Less: Pro Forma Present Rate Service Revenues	4,371,583 (3,624,953)	 4,411,771 (3,613,015)	
Required Revenue Increase Percentage Increase	\$ 746,989 20.6%	\$ 798,756 22.11%	

1. Average Annual Principal and Interest Payments. At the time of Staff's review, Ohio District had one outstanding Waterworks Revenue bond, two Kentucky Infrastructure Authority Assistance Agreements, and one Assistance Agreement with Kentucky Rural Water Finance Corporation. In its Application, Ohio District requested recovery of the average annual principal, interest and fee payments on its indebtedness based on a five-year average of the annual principal, and interest and fee payments for the years 2021 through 2025. Staff agrees with the methodology Ohio District utilized; however, Staff disagrees with Ohio District's calculation of \$773,750 for its average annual principal and interest payments. As shown below, Staff utilized the amounts provided by Ohio District,²⁶ and calculated an Average Annual Payment of \$783,531.

²⁶ Application, Exhibit D. Response to Staff's First Request Question 4.

						Annual Debi	l Payment					
Year	KIA	LoanF08-0	8	KIA	Loan F15-	69	Bond Ser	ies 2015	KRW	FC Series 202	20A	
	<u>Principal</u>	Interest	Fees	Principal	Interest	Fees	Principal	Interest	Principal	Interest	Fees	Total
2021	\$ 207,029	\$23,433	\$ 5,858	\$ 68,369	\$22,376	\$ 3,060	\$110,000	\$ 7,375	\$140,000	\$ 244,093	\$ 450	\$ 832,043
2022	209,105	21,358	5,340	69,571	21,174	2,895	115,000	5,175	150,000	236,553	450	836,620
2023	211,201	19,262	4,815	70,794	19,951	2,728	115,000	2,588	155,000	228,623	450	830,411
2024	213,318	17,144	4,286	72,038	18,707	2,558			160,000	220,433	450	708,934
2025	215,457	15,006	3,751	73,304	17,441	2,385			170,000	211,853	450	709,646
Total Divided	\$ 1,056,109 by: 5 years	\$96,204	\$24,051	\$354,077	\$99,648	\$13,626	\$340,000	\$15,138	\$775,000	\$ 1,141,553	\$2,250	\$ 3,917,655 5
Average	e Annual Princip	oal and Inter	est Payment									\$ 783,531

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2. Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. Ohio District requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments for its bond payable to the United States Department of Agriculture, Rural Development (USDA/RD), the Kentucky Infrastructure Authority Assistance Agreements, and Assistance Agreement with Kentucky Rural Water Finance Corporation at the time of its Application.

USDA/RD requires that Ohio District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's historic practice, Staff agrees with Ohio District's methodology, but disagrees with the actual calculation of additional working capital and has calculated Additional Working Capital of \$156,706 as shown below. Therefore, \$156,706 is included it in the revenue requirement.

Average Annual Principal and Interest	\$ 783,531
Times: DSC Coverage Ratio	120%
-	_
Total Net Revenues Required	940,237
Less: Average Annual Principal and Interest Payments	(783,531)
Additional Working Capital	\$ 156,706

Signatures

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

Prepared by: Sam Reid Rate Design Branch Division of Financial Analysis

APPENDIX

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00167 DATED SEP 24 2020

Monthly Water Rates*

First	2,000 Gallons	\$25.80 Minimum Bill
Next	18,000 Gallons	0.01072 Per Gallon
Next	30,000 Gallons	0.00927 Per Gallon
Next	50,000 Gallons	0.00780 Per Gallon
Over	100,000 Gallons	0.00635 Per Gallon

Wholesale Service 0.00327 Per Gallon

Leak Adjustment Rate 0.00327 Per Gallon

^{*}water rates stated on a per gallon basis

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*Ohio County Water District 124 E Washington Street P. O. Box 207 Hartford, KY 42347

*Mr. Walt Beasley General Superintendent Ohio County Water District 124 E Washington Street P. O. Box 207 Hartford, KY 42347