

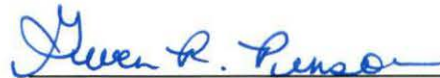
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTH HOPKINS WATER)	
DISTRICT FOR RATE ADJUSTMENT FOR)	CASE NO.
SMALL UTILITIES PURSUANT TO 807 KAR)	2018-00118
5:076)	

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 24, 2018, 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 April 24, 2018 Order, North Hopkins Water District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report.



Gwen R. Pinson
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATE JUL 16 2018

cc: Parties of Record

STAFF REPORT
ON
NORTH HOPKINS WATER DISTRICT
CASE NO. 2018-00118

North Hopkins Water District (North Hopkins District) is a water utility district, organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 1,285 customers residing in Hopkins County, Kentucky.¹ On April 2, 2018, North Hopkins District tendered an application (Application) to the Commission requesting to increase its water service rates pursuant to 807 KAR 5:076. Finding no deficiencies, North Hopkins District's Application was deemed filed on April 2, 2018. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated April 24, 2018.

North Hopkins 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, 2016, as required by 807 KAR 5:076, Section 9. North Hopkins District presented financial exhibits in its Application demonstrating a rate increase that increases annual water sales revenues by \$208,384, a 25.73 percent increase to test-year water sales revenues of \$809,983. The rates requested by North Hopkins District would increase the

¹ *Annual Report of North Hopkins Water District to the Public Service Commission for the Calendar Year Ended December 31, 2016* (Annual Report) at 12 and 48.

monthly bill of a typical residential customer² by \$12.76, from \$49.64 to \$62.40, or approximately 25.71 percent. North Hopkins District presented financial exhibits in the Application that show how it calculated the amount of increase it could have justified. The exhibits are summarized below in condensed form.

Pro Forma Operating Expenses	\$ 868,982
Plus: Average Annual Debt Payments	125,942
Additional Working Capital	<u>25,188</u>
Overall Revenue Requirement	1,020,112
Less: Other Operating Revenue	(976)
Nonutility Income	(673)
Interest & Rental Income	<u>(96)</u>
Revenue Required From Rates	1,018,367
Less: Pro Forma Present Rate Revenues	<u>(809,983)</u>
Required Revenue Increase	<u>\$ 208,384</u>
Percent Increase	<u>25.73%</u>

To determine the reasonableness of the rates requested by North Hopkins District, Staff performed a limited financial review of North Hopkins 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 were made when their effects were deemed to be material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

² A typical residential customer purchases 4,000 gallons of water per month through a 5/8-inch x 3/4-inch meter.

Staff's findings are summarized in this report. David P. Foster reviewed the calculation of North Hopkins District's Overall Revenue Requirement. Jason Green reviewed North Hopkins District's reported revenues and rate design.

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 North Hopkins District's Overall Revenue Requirement is \$978,154 and that a \$212,006 revenue increase, or 27.67 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. North Hopkins District proposed to increase its current water service rates by approximately 25.73 percent evenly across the board. Since North Hopkins District did not perform a cost-of-service study (COSS) nor has North Hopkins District ever prepared a COSS, Staff prepared an in-house study. A COSS allocates the expenses to customer classes in proportion with the cost of providing service to each class. The rates in the COSS study were developed following the commodity demand methodology that is recognized in the Manual M-1 that is published by the American Water Works Association. Through this method, Staff allocated North Hopkins District's overall revenue requirement to North Hopkins District's customer classes in proportion to the cost of providing service to those customer classes. This method recognizes that a utility must meet peak demand requirements as well as the customer's average water use. Staff's calculations and resulting rates are shown in Attachment B. The rates set forth in Attachment A to this report are based upon the Staff's COSS and the revenue requirement, as calculated by Staff, and will produce sufficient revenues

from water sales to recover the \$978,154 Revenue Required from Rates as determined by Staff, an approximate 27.67 percent increase. These rates will increase a typical residential customer's monthly water bill using 4,000 gallons from \$49.64 to \$57.28, an increase of \$7.64, or approximately 15.39 percent.

Pro Forma Operating Statement

North Hopkins District's Pro Forma Operating Statement for the test year ended December 31, 2016, as determined by Staff, appears below.

	<u>Test Year</u>	<u>Adjustment</u>	<u>(Ref.)</u>	<u>Pro Forma</u>
Operating Revenues				
Sales of Water	\$ 777,526	\$ (11,378)	(A)	\$ 766,148
Other Water Revenue	976			976
Total Operating Revenues	<u>778,502</u>	<u>(11,378)</u>		<u>767,124</u>
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	182,308			182,308
Salaries and Wages - Officers	10,800			10,800
Employee Pensions and Benefits	7,190	5,513	(B)	12,703
Purchased Water	386,027	(23,062)	(C)	362,965
Purchased Power	19,223			19,223
Materials and Supplies	51,156			51,156
Contractual Services	30,712	567	(D)	31,279
Transportation Expenses	16,569			16,569
Insurance - General Liability & Other	10,226			10,226
Insurance - Workers Comp	2,132			2,132
Advertising	405			405
Bad Debt Expense	4,974			4,974
Miscellaneous Expenses	1,875			1,875
Total Operation and Maintenance Expenses	723,597	(16,982)		706,615
Depreciation Expense	101,344	2,155	(E)	103,499
Amortization Expense	1,535			1,535
Taxes Other Than Income	17,119			17,119
Total Operating Expenses	<u>843,595</u>	<u>(14,827)</u>		<u>828,768</u>
Net Operating Income	(65,093)	3,449		(61,644)
Loss on Disposition of Property	(25,204)	25,204		0
Interest Income	96			96
Nonutility Income	673			673
Income Available to Service Debt	<u>\$ (89,528)</u>	<u>\$ 28,653</u>		<u>\$ (60,875)</u>

Purchase Water Adjustment Subsequent to the test year, the Commission, pursuant to 807 KAR 5:068, authorized North Hopkins District to increase its water rates in order to pass through the wholesale water rate increase of its supplier.³ During the test year, North Hopkins District experienced a decrease in its water rates due to a wholesale water rate decrease from its supplier.⁴ By applying the current retail rates authorized by the Commission to the applicable water sales shown in the billing analysis provided by North Hopkins District's Application, Staff determined that pro forma present-rate revenues from retail sales should be stated at \$766,148.

(A) Employee Contribution for Health Insurance. North Hopkins District reported \$7,190 for test-year Employee Pensions and Benefits expense. This amount was for the cost of providing health insurance benefits to two qualifying full-time employees.

North Hopkins District currently pays 100 percent of the monthly premiums for two of its four full-time employees. No other employees receive health insurance benefits. Staff notes that in recent Orders, the Commission has made ratemaking adjustments to reduce the cost of employee benefit packages paid by some utilities when certain aspects of those benefit packages were found to be unreasonable based on a review of total salaries and fringe benefits. The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs, for market and geographic competitiveness to ensure the development of a fair, just, and

³ Case No. 2017-00337, *Purchased Water Adjustment Filing of North Hopkins Water District* (Ky. PSC Sept. 14, 2017).

⁴ Case No. 2018-00133, *Purchased Water Adjustment Filing of North Hopkins Water District* (Ky. PSC April 20, 2018).

reasonable rate. It has found that in most cases, 100 percent of employer-funded health care does not meet those criteria. Factoring in for the preceding, and accounting for other pro forma adjustments, Staff determined the net adjustment to North Hopkins District's test-year health insurance expense should be an increase of \$5,513,⁵ as shown below.

North Hopkins District currently has two employees who have single coverage health insurance policies. As shown below, Staff annualized the most recent monthly premiums paid on behalf of two employees who were receiving health benefits at the time of Staff's review.

Current Premium for Full-time Employees	\$	1,340
Times: 12 Months		<u>12</u>
Annualized		16,080
Less: Test Year		<u>(7,190)</u>
Increase	\$	<u><u>8,890</u></u>

Additionally, consistent with recent orders in which the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee's health insurance coverage, Staff reduced North Hopkins District single health insurance premiums by 21 percent, the national average employee contribution rate,⁶ as shown below.

⁵		
Annualized Premium Increase	\$	8,890
Benefit Reduction		<u>(3,377)</u>
Total Increase	\$	<u><u>5,513</u></u>

⁶ 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>).

<u>Policy Type</u>	<u>Annual Expense</u>	<u>Percentage Reduction</u>	<u>Adjustment</u>
Single	16,080	21%	<u>3,377</u>
Total Decrease			<u>\$ 3,377</u>

(B) Changes to Wholesale Purchase Water Rate. Madisonville decreased its wholesale water rate sold to North Hopkins District to \$3.97 per 1,000 gallons on March 31, 2018. Staff is decreasing test-year purchased water expense by \$23,062 to account for the wholesale rate of \$3.97 per 1,000 gallons as shown below.

Test-Year Water Purchases	91,427,000
Wholesale Rate per Gallon	<u>\$ 0.00397</u>
Pro Forma Purchased Water	362,965
Less: Reported Test-Year Expense	<u>(386,027)</u>
Pro Forma Adjustment	<u>\$ (23,062)</u>

(C) Contractual Services. North Hopkins District reported \$30,712 for test-year Contractual Services Expense. This amount includes expenses for Accounting, Legal, Water Testing, Lawn, Uniform, and Pest Control Services. North Hopkins District proposed in its Application to increase the test-year expense by \$3,567 to account for a \$3,000 increase in legal fees and \$567 increases in uniform services that occurred subsequent to the test year.⁷ While Staff agrees with North Hopkins District' adjustment for uniform services, North Hopkins District was unable to provide documentation to justify

⁷ Application, Schedule of Adjusted Operations and References.

the increase in legal fees. Staff removed the \$3,000 adjustment for legal fees resulting in an overall increase to Contractual Services Expense of \$567.

(D) Depreciation. In its Application, North Hopkins District proposed to increase its test-year depreciation expense of \$101,344 by \$2,155.⁸ This adjustment was the result of North Hopkins District's proposal to adjust the lives assigned to certain assets that were outside of the life ranges found reasonable in the National Association of Regulatory Utility Commissioners' (NARUC) publication titled Depreciation Practices for Small Utilities (NARUC Study) and to include depreciation expense for additional assets that were installed subsequent to the test year.

To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the referenced NARUC Study. North Hopkins 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 mid-point of the NARUC ranges and after further review of North Hopkins District's plant ledger, Staff agrees with North Hopkins District's increase to depreciation expense of \$2,155.

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

⁸ *Id.*, References.

expense, a non-cash item, to provide working capital;⁹ 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 North Hopkins District’s and Staff’s calculations of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

	<u>North Hopkins</u>	<u>Staff</u>	<u>(Ref.)</u>
Pro Forma Operating Expenses	\$868,982	\$828,768	
Plus: Average Annual Debt Payments	125,942	125,942	(1)
Additional Working Capital	<u>25,188</u>	<u>25,188</u>	(2)
Overall Revenue Requirement	1,020,112	979,899	
Less: Other Operating Revenue	(976)	(976)	
Nonutility Income	(673)	(673)	
Interest Income	<u>(96)</u>	<u>(96)</u>	
Revenue Required From Rates	1,018,367	978,154	
Less: Pro Forma Present Rate Revenues	<u>(809,983)</u>	<u>(766,148)</u>	
Required Revenue Increase	<u>\$208,384</u>	<u>\$212,006</u>	
Percent Increase	<u>25.73%</u>	<u>27.67%</u>	

(1) Average Annual Principal and Interest Payments. North Hopkins District currently has one outstanding bond series payable to the Kentucky Rural Water Finance

⁹ 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).

Corporation (KRWFC). In its Application, North Hopkins District requested recovery of the five-year average annual principal and interest payments due in 2018, 2019, 2020, 2021, and 2022 in the amount of \$125,942. Staff agrees that the \$125,942 requested by North Hopkins District represents, in all material respects, the average annual debt payments that will be made in each year that the water rates approved by the Commission in this proceeding will remain in effect.¹⁰

(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. In addition to depreciation expense, North Hopkins District requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments.

KRWFC requires that North Hopkins District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's historical practice, Staff calculated North Hopkins District's allowance for additional working capital, based on a DSC ratio of 1.20, to be \$25,188, as shown below. Staff included this amount in the calculation of North Hopkins District's Overall Revenue Requirement.

¹⁰ Generally, the anticipated life of a utility's service rates is based on the frequency of the utility's previous rate case filings, but is no longer than five years, since rates tend to become obsolete due to changes that will likely occur to the utility's cost of service in a five-year period. This is North Hopkins District first request to adjust its monthly water service rates pursuant to 807 KAR 5:076 since the water district was created. Therefore, Staff finds that the anticipated life of the rates approved in this proceeding is five years.

Average Annual Principal and Interest	\$ 125,942
Times: DSC Coverage Ratio	<u>120%</u>
Total Net Revenues Required	151,131
Less: Average Annual Principal and Interest Payments	<u>(125,942)</u>
Additional Working Capital	<u><u>\$ 25,188</u></u>

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Signatures



Prepared by: David P. Foster
Water and Sewer Branch
Division of Financial Analysis



Prepared by: Jason Green
Water and Sewer Branch
Division of Financial Analysis

ATTACHMENT A

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00118 DATED **JUL 16 2018**

Monthly Water Rates

5/8 Inch Meter

First	2,000	Gallons	\$ 33.54	Minimum bill
Next	2,000	Gallons	11.87	per 1,000 Gallons
Next	3,000	Gallons	10.94	per 1,000 Gallons
Next	3,000	Gallons	10.05	per 1,000 Gallons
All Over	10,000	Gallons	9.08	per 1,000 Gallons

1 Inch Meter

First	5,000	Gallons	\$ 68.22	Minimum bill
Next	2,000	Gallons	10.94	per 1,000 Gallons
Next	3,000	Gallons	10.05	per 1,000 Gallons
All Over	10,000	Gallons	9.08	per 1,000 Gallons

1-1/2 Inch Meter

First	10,000	Gallons	\$ 120.25	Minimum bill
All Over	10,000	Gallons	9.08	per 1,000 Gallons

2 Inch Meter

First	15,000	Gallons	\$ 165.65	Minimum bill
All Over	15,000	Gallons	9.08	per 1,000 Gallons

3 Inch Meter

First	30,000	Gallons	\$ 301.85	Minimum bill
All Over	30,000	Gallons	9.08	per 1,000 Gallons

ATTACHMENT B

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00118 DATED JUL 16 2018

NORTH HOPKINS WATER DISTRICT

ALLOCATION OF PLANT VALUE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
Land & Land Rights	\$14,237		\$14,237	
Distribution Reservoirs & Standpipes	899,418		899,418	
Transmission & Distribution Mains	2,931,958		2,931,958	
Hydrants	2,119			\$2,119
Structures & Improvements	312,466		312,466	
Pumping Equipment	305,250		305,250	
Meters & Meter Installations	200,792			200,792
Services	288,239			288,239
SUBTOTAL	\$4,954,479	\$0	\$4,463,329	\$491,150
PERCENT	100.00%	0	90.09%	9.91%
General Plant (1)				
Communication Equipment	42,273		38,082	4,191
Tools, Shop & Garage	37,701		33,964	3,737
Transportation Equipment	8,945		8,058	887
Office Furniture & Equipment	31,881		28,721	3,160
Other Tangible Plant	11,280		10,162	1,118
TOTAL VALUE	\$5,086,559	\$0	\$4,582,316	\$504,243

(1) General Plant allocated based on overall weighted allocation of all other plant.

Note: Figures used were derived from 2016 annual report

NORTH HOPKINS WATER DISTRICT

ALLOCATION OF DEPRECIATION EXPENSE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
Distribution Reservoirs & Standpipes	\$383,767		\$383,767	
Transmission & Distribution Mains	1,405,700		1,405,700	
Hydrants	545			\$545
Structures & Improvements	50,206		50,206	
Pumping Equipment	174,629		174,629	
Meters & Meter Installations	167,829			167,829
Services	144,076			144,076
SUBTOTAL	\$2,326,752	\$0	\$2,014,302	\$312,450
PERCENT	100.00%	0	86.57%	13.43%
General Plant (1)				
Tools, Shop & Garage	13,727		11,884	1,843
Transportation Equipment	1,481		1,282	199
Communication Equipment	255		221	34
Office Furniture & Equipment	26,256		22,730	3,526
Other Tangible Plant	3,118		2,699	419
TOTAL DEPRECIATION	\$2,371,589	\$0	\$2,053,118	\$318,471

Note: Figures were derived from 2016 annual report

NORTH HOPKINS WATER DISTRICT

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	TOTAL	COMMODITY	DEMAND	CUSTOMER
Purchased Power *	\$19,223	\$19,223		
Purchased Water *	362,965	362,965		
Employee Salaries	182,308		\$98,592	\$83,715.83
Employee Pension & Benefits	12,700			12,700
Materials & Supplies	51,156		51,156	
Advertising	405			405
Contractual Services - Meter Testing	4,200			4,200
Bad Debt	4,974			4,974
SUBTOTAL	\$637,931	\$382,188	\$149,748	\$105,995
LESS COMMODITY	-\$382,188			
SUBTOTAL	\$255,743		\$149,748	\$105,995
PERCENT	100.00%		58.55%	41.45%
Commissioner Fees	10,800		6,324	4,476
Contractual Services - Accounting & Legal	27,079		15,856	11,223
Insurance	12,358		7,236	5,122
Amortization	1,535		899	636
Taxes Other Than Income	17,119		10,024	7,095
Miscellaneous Expense	1,875		1,098	777
Transportation	16,569		9,702	6,867
TOTAL	\$725,267	\$382,188	\$200,886	\$142,192

NORTH HOPKINS WATER DISTRICT

SUMMARY OF ALLOCATIONS

	TOTAL	COMMODITY	DEMAND	CUSTOMER
Plant Percentages	100.00%		90.09%	9.91%
Available For Debt Service	\$151,130		\$136,148	\$14,982
Depreciation Percentages	100.00%		86.57%	13.43%
Total Depreciation	103,499		89,601	13,898
Total Operation & Maintenance	725,267	382,188	200,886	142,192
REVENUE REQUIREMENT	\$979,896			
<i>Less: Other Operating Revenue</i>				-976
<i>Less: Nonutility Income</i>				-673
<i>Less: Interest Income</i>				-96
COST TO PROVIDE WATER SERVICE	\$978,151	\$382,188	\$426,635	\$169,327
REVENUE REQUIRED FROM RATES	\$978,151			

NORTH HOPKINS WATER DISTRICT

CALCULATION OF WATER RATES

	TOTAL	FIRST 2,000	NEXT 2,000	NEXT 3,000	NEXT 3,000	OVER 10,000
FROM BILLING ANALYSIS:						
COMMODITY PERCENTS	100.00%	38.93%	23.63%	13.32%	5.27%	18.85%
ACTUAL COMMODITY SALES	69,805,393	27,173,850	16,493,440	9,299,083	3,679,600	13,159,420
PEAK DEMAND WEIGHTED FACTOR		2	1.75	1.5	1.25	1
PEAK DEMAND WEIGHTED SALES	114,918,765	54,347,700	28,863,520	13,948,625	4,599,500	13,159,420
DEMAND PERCENTS	100.00%	47.29%	25.12%	12.14%	4.00%	11.45%
COMMODITY COSTS	\$382,188	\$148,778	\$90,302	\$50,913	\$20,146	\$72,048
DEMAND COSTS	\$426,635	\$201,765	\$107,156	\$51,784	\$17,076	\$48,854
CUSTOMER COSTS	\$169,327	\$169,327				
TOTAL COSTS	\$978,150	\$519,871	\$197,458	\$102,697	\$37,222	\$120,903
DIVIDE BY BILLS/GALLONS		15,451	16,493,440	9,299,083	3,679,600	13,159,420
CALCULATED RATES		\$33.65	\$11.97	\$11.04	\$10.12	\$9.19
		FIRST 2,000	NEXT 8,000	NEXT 20,000	NEXT 20,000	OVER 50,000
RECOMMENDED RATES		\$33.54	\$11.87	\$10.94	\$10.05	\$9.08
		FIRST 2,000	NEXT 8,000	NEXT 20,000	NEXT 20,000	OVER 50,000

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